# Agenda Proceedings The 21st Annual Research Conference

A System of Care for Children's Mental Health: Expanding the Research Base

> February 24–27, 2008 Tampa, Florida

The Research and Training Center for Children's Mental Health



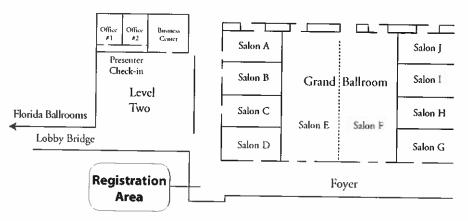


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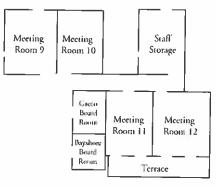
## 21st Annual Research Conference

A System of Care for Children's Mental Health: Expanding the Research Base Tampa Marriott Waterside

## Second Floor



## Third Floor



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## **Conference** Notes

#### Presenters, please check in!

Please see us at the Presenter Check-in Station Sund afternoon or evening. Bring your presentation in electronic format (e.g., CD-Rom, flash-drive, etc.). We will test your files, and pre-load them in your presentation room.

#### Staying in Touch

Should someone need to contact you, they should call the Marriott front desk, where the call can be transferred to the 21st Annual Research Conferer Also, check the message board located near the Information Table. During conference hours, the will be internet access so that you may check you e-mail.

#### Numbers to Know

Marriott Waterside Hotel & Marina 813-221-4900

Hotel Guest Fax 813-204-6342

## **Conference** Locations

**Intensive Workshops** Sun., 2:00 pm, Salons A-B, C-D, G-Wed., 9:00 am, Salons A-B, C-D, G-

Poster Presentation Sessions Sunday 6:00 pm, Salons E & F Tuesday 5:30 pm, Salons E & F

Plenary Session, Monday 8:30 am, Salons E & F Tuesday 8:30 am, Salons E & F

21st Annual Research Luncheon, Monday 12:00 - 1:15 pm, Salons E &

Concurrent Sessions Monday Meeting Rooms 11 & 12, Salon C, E G, H, I, J

Concurrent Sessions Tuesday Salon A, B, C, D, G, H, I, J

Sign-Up Meeting Rooms Meeting Room 10

# Welcome

Welcome to our 21<sup>st</sup> Annual Conference on "System of Care Research in Children's Mental Health." We are delighted to have you join us and hope that you find the conference to be stimulating, valuable, and at the same time refreshing.

We are very excited with the group of presenters for this year's conference. Each year seems to get better than the one before! We have many interesting symposia, topical discussions, paper presentations, and posters, and we also have several outstanding plenary sessions.

Our first plenary session will begin with Dr. Terry Cline, Administrator of the Substance Abuse and Mental Health Services Administration (SAMHSA). Dr. Cline has been a person of great vision and leadership, and we are honored that he is joining us. Dr. Cline's presentation will be followed by our Gwen Iding Brogden Distinguished Lecture by Dr. Michael Quinn Patton. Dr. Patton is an outstanding leader in the field of evaluation, who has broken new ground recently through his research and writings on social innovation and complexity theory. His presentation will challenge us to think in new ways about the role of evaluation in either supporting or interfering with innovative social change in complex systems. As our collective efforts to establish effective systems of care for children with mental health challenges and their families move well into their third decade, it is important for us to be open to new ideas and frameworks that may help us in our important efforts.

One of the challenges that we face in our work to establish systems of care is how to create comprehensive systems that genuinely integrate each of the important parts. We all recognize that an effective system has many components but sometimes we fail to pay enough attention to how those components connect to each other to support our work. In recent years, there has been increased focus on the implementation of evidence-based practices. One challenge is to examine how such practices can best be integrated with system of care values, principles, and components so that the whole is truly greater than the sum of its parts.

We are thrilled to have two outstanding plenary panels to discuss specifically the issue of the integration of evidence-based practices and systems of care. Our panelists bring extensive and diverse experience, and should offer great insights on how to achieve this integrative task, and best align the practice and systemic features so that the end product is better outcomes for the youth and families who we care about. Our panelists will be Eric Bruns, Barbara Burns, Janice Cooper, Charles Glisson, Darcy Gruttadaro, and Scott Henggeler

One change that we have made this year that we believe you will like very much is to replace our regular conference program with an expanded version that includes lengthier descriptions of the presentations. Many of you have told us over the years how valuable you find our Conference Proceedings to be – this year you will essentially receive the Conference Proceedings as you arrive at the conference rather than having to wait until the next year! Please let us know how you like this change.

On a sad note, we will greatly miss two people who have passed away during the past year who have made great contributions to our conference and to our field. Gwen Iding Brogden, a long-time advocate for improved mental health services who served on our Research and Training Center Board of Advisors, and was Chair Emeritus of our Louis de la Parte Florida Mental Health Institute Advisory Board, passed away in November, 2007, after an extended and courageous battle with Parkinson's Disease. Each year for the past 15 years we have dedicated a plenary session in Gwen's honor and we will continue that practice into the future. Gwen will be remembered and honored in a special ceremony at our university in coming months.

Dr. Steve Banks, a premier researcher and methodologist, a tremendous colleague and supporter, a regular contributor at our conference, and a brilliant, kind, and down-to-earth person, passed away in August, 2007. On Monday evening, February 25<sup>th</sup>, at 6:30 we will co-host a tribute to Steve along with Steve's colleagues at the University of Massachusetts Medical School, and we invite all who would like to attend to join us. We are very pleased that Steve's wife, Cheryl McCathran Banks will join us for this tribute.

We appreciate the enormous contributions that Gwen and Steve have made, and we honor these contributions by our continued dedication to improving the health and well-being of children and families, and particularly those children with serious mental health challenges. We hope that this conference will provide you with information and ideas that will help you be more effective in your efforts, and we also hope that you will have ample time to renew relationships with friends, as well as meet new colleagues.

6 Triedman



Robert M. Friedman, PhD Director, Research and Training Center for Children's Mental Health

## THE 21ST ANNUAL RESEARCH CONFERENCE A System of Care for Children's Mental Health: Expanding the Research Base OVERVIEW

Sunday, February 24, 2008				
12:00 рм	Registration Opens			
2:00 - 5:00 рм	Intensive Workshops			
6:00 - 7:30 рм	Poster Sessions and Networking Reception			
Monday, February 25	5, 2008			
7:30 ам	Registration & Networking Breakfast			
8:30 am	Opening Plenary: Terry Cline, Michael Q Patton			
10:15 – 11:45 ам	Concurrent Sessions			
11:45 ам	Research Luncheon			
1:15 – 6:00 рм	Concurrent Sessions			
6:30 – 9:00 рм	<ul><li> Implementation Interest Group</li><li> Steve Banks Memorial</li></ul>			
Tuesday, February 26	, 2008			
7:30 ам	Registration & Networking Breakfast			
8:30 ам – 12:00 рм	Plenary Sessions I & II			
12:00 рм	Lunch on Your Own			
12:00 – 1:30 рм 1:30 – 2:30 рм	<ul> <li>Brown Bag Discussion: LGBT Youth</li> <li>Involving Stakeholders in Data Interpretation</li> </ul>			
1:30 – 5:00 рм	Concurrent Sessions			
5:30 PM – 7:00 рм	Poster Sessions and Networking Reception			
Wednesday, February 27, 2008				
8:00 AM	Registration and Networking Breakfast			
9:00 ам – 12:00 рм	Intensive Workshops			

## Notes

## Acknowledgements

Our Center, which has been in operation since 1984, is based in the Department of Child and Family Studies of the Louis de la Parte Florida Mental Health Institute, University of South Florida. The success of our Center, and of our conference, is due in part to the great support of many people at our host organization, and especially our dedicated and talented team that organizes the conference every year. Join us in thanking them. Playing major roles in producing the annual conference are our Center Co-Principal Investigators, Al Duchnowski and Krista Kutash, our communications director, Cindy Liberton, our conference coordinator, Catherine Newman, and our event planner, Dan Casella. Others from the Department of Child and Family Studies making incredible contributions to the conference, and to the Center's work include Kenyatta Daniel, Sandra Dwinell, Michael Greeson, Dawn Khalil, Marty Kledzik, Storie Miller, and Jonathan Wilson, along with our Center Investigators: Mary Armstrong, Mary Evans, Paul Greenbaum, Mario Hernandez, Sharon Hodges, Kathy Lazear, Teresa Nesman, and Carol Mackinnon-Lewis. Thanks also to our very supportive and helpful Board of Advisors, Co-Chaired currently by Eric Bruns and Christina Kloker Young, and to our federal project officers, Gary Blau, Bonnie Gracer, and Diane Sondheimer.

## SUNDAY FEBRUARY 24, 2008

Registration Opens —	Noon			
Presenters and volunteers, please check in!	Conference Foyer			
Intensive Workshops — 2:00 PM – 5:00 PM				
Title	Presenters	Room		
Workshop 1 — Family-Driven Care: An Intensive Workshop on Implementation	Spencer, Slaton, MacKinnon Lewis	A/B		
Workshop 2 — Supporting Implementation of EBPS: A Policy Discussion Among Providers, Administrators, Researchers, and Purveyors	Bernstein, Wotring, Hayes, Blase, Brown, Carter, Bruns	C/D		
Workshop 3 — Concept Mapping: A Next Generation Strategy for Planning and Evaluating Systems Change	Behar, Hydaker, Aderton, Baxter, Gauthier, Reiss	G/H		
Special Session for Family Members — 5	:00 – 6:00 PM Roo	m 12		
Research I: A Primer on Research Terminology and Methods for Family Members	Duchnowski & Becker	RM 12		

#### Attention Family Members! Session on Research for Families Sunday, March 4, 2007 5:00 PM – 6:00 PM Salon C-D

Interested family members are encouraged to meet and network throughout the conference. On Sunday, at 5:00 pm in Salon C-D, we are offering Research I, a familyfriendly session where we can get to know each other as research terminology common to conference sessions is explained. At 6:00 pm, the conference's opening Poster Session begins; look for the Family Table to continue your conversations.

Your Host: Albert Duchnowski, PhD, Deputy Director, Research and Training Center for Children's Mental Health, Louis de la Parte Florida Mental Health Institute, University of South Florida

Ро	Poster Presentations & Networking — 6:00 – 7:30 PM — Salon E/F			
Tit	le	Presenters		
1.	Using Concept Mapping to Develop a Logic Model for a System of Care	Baxter, Gauthier, Nelson, DeBerry		
2.	Mississippi Youth Programs around the Clock (MYPAC)	Young, Plotner, Damon, Hight		
3.	Culturally Competent Service Provision in System of Care Communities	Fisher		
4.	State and Tribal Infrastructure to Reduce Youth Suicide: Capacity, Service Selection and Systems Integration to Serve Youth At Risk	Montgomery		
5.	Flexible Funds Expenditures in System of Care Communities	Krivelyova, Freeman		
6.	Considerations for Implementing a Randomized Clinical Trial in Community Mental Health	Vetter, Strech, Foote		
7.	Examining Collaboration in Children and Youth Mental Health Systems using Social Network Analysis	Sukumar, Light		
8.	Withdrawn			
9.	Predictors of Missed Appointments Over The Course Of Child Mental Health Treatment	Gordon, Lewandowski		
10.	The Wraparound Fidelity Assessment System: Measures, Methods, and Data from National Pilot Sites	Sather, Bruns, Hyde		
11.	Substance Use Patterns and Mental Health Diagnosis among Youth in Mental Health Treatment: A Latent Class Analysis	Riehman		
12.	Development and Assessment of the Collaborative Care for Attention Deficit Disorders Scale	Guevara, Greenbaum		
13.	Organizational Social Context and Attitudes Towards Using EBPs for Children's Trauma Treatment	Radigan, Frimpong		
14.	Behavioral Health Model Development to Promote EBPs in a Statewide Sysem of Care: Extended Dat Treatment and Emergency Mobile Psychiatric Services	Vanderploeg, Schroeder, Franks		
15.	Assessing the Implementation of Residential Care: Development and Psychometrics of a Staff Observation Instrument	Griffith		
16.	Depression and Antisocial Behavior Outcomes Among Comorbid Youth in Juvenile Justice	McCulloch		

Title	Presenters
<ol> <li>Public–Private Collaborative Efforts toward a Coercion- free System of Care</li> </ol>	Slavin, Wong
18. The Transition to Adulthood among Former Wraparound Milwaukee Clients	Bernett, Gilbertson
19. A Systematic Review of Employment Programs for Transition-age Youth with SED	Loker
20. Transition Aged Youth in Therapeutic Foster Care: Risks, Resources, and Service Use	Southerland
21. New Measures for Youth Empowerment and Participation in Planning	Walker, Powers
22. Unpacking the Role of Parent Advocates within a Systems of Care Model	Munson, Hussey, Stormann, King
23. Family Driven, Youth Guided Facilitation for Monterey County System of Care Development	Edgull, Robles
24. Facilitating Family Driven Processes: Training Therapists to Provide Outcomes Feedback to Caregivers	Lyon, Wale, Hodges, Pearson
25. The Power of Parents: Preliminary Outcomes from the Family Peer Support Program	Grubbs, Barnes, Brinkmann, Crosby, Davis
26. Youth Involvement in Research and Evaluation of Systems of Care	Chapman, Friedman
27. Predictors of Perceived Control Over Treatment Decisions and its Influence on Subsequent Service For Youth in Systems of Care	Pinheiro
28. Mental Health Services Utilization of Youth Screened for Suicide Risk and Mental Disorders During School	Husky
29. Decreasing Adolescent Suicidality through a Multiple Component Suicide Prevention Program	Tarquini
30. Special Education for Emotional Disturbance: Needs, Outcomes for Children In Child Welfare	Lee
31. Individual and Organizational Predictors of Readiness for School-based Bullying Prevention Program Implementation	Cunningham
32. Reducing Waiting Times for Children's Mental Health Services: A Qualitative Analysis of Parental Preferences	Cunningham

## MONDAY FEBRUARY 25, 2008

	Monday General Session – 8:3	0 – 10:00 AM	
Federal	Priorities for Children's Mental Health	Terry Cline	E/F
	<i>ling Brogden Distinguished Lecture:</i> Getting to Evaluation, Systems Thinking, and Complexity	Michael Quinn Patton	
	Monday Morning Concurrent Sessions	— 10:15 – 11:45 A	М
Session	Title	Presenters	RM
SS1	<i>conversation hour:</i> Follow-up to Keynote Address and Book signing	Michael Quinn Patton	RM 9
1	<i>symposium:</i> Michigan's Statewide Implementation of an Evaluation Based Program (EBP): Building Capacity and Sustainability	Hodges, Blase	RM 11
	<i>element of symposium:</i> Transferring Evidence- Based Practice to the Community: A Dynamic Collaborative Process	Forgatch	
	<i>element of symposium:</i> A Statewide View of Transferring Capacity to Sustain Implementation of an Evaluation Based Program (EBP)	Wotring	
	<i>element of symposium:</i> Building Capacity for Implementing PMTO at the State and Local Level	Gray	
	element of symposium: Outcome Indicators for Youth's Functioning and Parent's Child Management Skills: Results from PMTO Training	Hodges	
2	<i>symposium:</i> Educational Outcomes in Systems of Care: Emerging Evidence?	Anderson, Fisher	RM 12
	<i>element of symposium:</i> Educational Profiles at Enrollment in Systems of Care: A National Perspective	Anderson, Brannan, Manteuffel	
	<i>element of symposium:</i> Using Local Data to Evaluate Educational Outcomes	Allen	
	<i>element of symposium:</i> Comparing Academic Progress Over Time In Systems of Care And Usual Services	Anderson, Houser, Stephens, Walrath	
	<i>element of symposium:</i> Schools and Systems of Care: Challenges and Models for Collaboration from the National Evaluation	Seagle, Brashears	
	<i>topical discussion:</i> A Model for Effective Partnering of Mental Health and Public Education K-12	Paras, Wright	
3	<i>symposium</i> : Waiting Lists in Canadian Children's Mental Health: Current Status and Potential Solutions	Cunningham	С
	<i>element of symposium:</i> Approaches to Managing Child Mental Health Waitlists in Canada: A Qualitative Investigation	McLennan	
	element of symposium: Modeling Children's Mental Health Waiting List Reduction Strategies Using Discrete Choice Conjoint Experiments: Parent versus Professional Preferences	Cunningham	
	<i>element of symposium:</i> Family Help: Distance Treatment for Child Mental Health Problems	McGrath	
4	<i>symposium:</i> Unregulated Residential Services: The Challenge to Ensure Quality Services and Protections–Part I	Behar, Friedman	D
	<i>element of symposium:</i> Risks to Children and Pressures on Parents	Young, Clark Harvey, Lewis	
	<i>element of symposium:</i> Steps to Stimulate Policy Changes: Gathering Data	Merriam, Pinto	

element of symposium: Evidence-Based Practices: Advances in the Models for Change StatesCocozzaelement of symposium: Expanding Evidence-Based Community Services: The Louisiana ExperienceDePratoelement of symposium: Culturally-competent, Evidenced-based Practices for the Latino CommunityTrupinelement of symposium: Family Advocacy and Evidence-Based PracticesGruttadaropaper presentation: Youth Group Participation: A Potential Component of Clinical Care for Behavioral DifficultiesBannon, McKay6symposium: Using the System of Care Practice Review (SOCPR) for Needs Assessment and Quality Assurance: Experiences of Several CommunitiesHernandez, Mayoelement of symposium: System of Care Practice Review (SOCPR): A Qualitative Evaluation of the Children's Mental Health System in Ottawa CanadaTatartcheff-Quesnelelement of symposium: System of Care Practice Review (SOCPR): A Qualitative Evaluation of the Children's Mental Health System in Ottawa CanadaVergon7symposium: Use of the System of Care Practice Review (SOCPR) for quality improvement, training, Improving cultural competence.Mayo, Johnson7symposium: Creating the Evidence Based Practice was the Easy PartWho Knew?Alexander, Frazier, RobbinsI	
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Evidenced-based Practices for the Latino       Gruttadaro         Community       element of symposium: Family Advocacy and       Gruttadaro         Paper presentation: Youth Group Participation: A Potential Component of Clinical Care for Behavioral Difficulties       Bannon, McKay         6       symposium: Using the System of Care Practice Review (SOCPR) for Needs Assessment and Quality Assurance: Experiences of Several Communities       Hernandez, Mayo         element of symposium: System of Care Practice Review (SOCPR): A Qualitative Evaluation of the Children's Mental Health System in Ottawa Canada       Tatartcheff-Quesnel         element of symposium: System of Care Practice Review: A Multi-Year Evaluation in Broward County, Florida       Vergon         7       symposium: Creating the Evidence Based Practice was the Easy PartWho Knew?       Alexander, Frazier, Robbins       I	
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7       symposium: Creating the Evidence Based Practice Review (SOCPR) for Needs Assessment and Quality Assurance: Experiences of Several Communities       Tatartcheff-Quesnel         element of symposium: System of Care Practice Review (SOCPR): A Qualitative Evaluation of the Children's Mental Health System in Ottawa Canada       Tatartcheff-Quesnel         element of symposium: System of Care Practice Review: A Multi-Year Evaluation in Broward County, Florida       Vergon         element of symposium: Use of the System of Care Practice Review (SOCPR) for quality improvement, training, Improving cultural competence.       Mayo, Johnson         7       symposium: Creating the Evidence Based Practice was the Easy PartWho Knew?       Alexander, Frazier, Robbins       I	
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Review: À Multi-Year Evaluation in Broward County, Florida       Image: County, Florida         element of symposium: Use of the System of Care Practice Review (SOCPR) for quality improvement, training, Improving cultural competence.       Mayo, Johnson         7       symposium: Creating the Evidence Based Practice was the Easy PartWho Knew?       Alexander, Frazier, Robbins         element of symposium: Integrating and Sustaining       Midouhas, Kopp	
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was the Easy PartWho Knew?     Robbins       element of symposium: Integrating and Sustaining     Midouhas, Kopp	
Larger Systems	
element of symposium: Quality Assurance & Patnode, Mason Practice Improvement: The Washington State Functional Family Therapy Project	
element of symposium: International Replications of FFT: Transcending Issues of Culture, Language, Treatment Systems, Funding Criteria and Distance	
8 <i>topical discussion:</i> Participatory Action Research Agenda for Family-to-Family Peer Support Models Stormann, Hobstetter, Robbins	

## MONDAY EVENING SPECIAL EVENTS

#### In Memory of Steve Banks 6:15 PM

Join your colleagues to share memories of the work and life of Steve Banks. RM 9 In addition to a slideshow of important moments in Steve's life, we will offer a 15-minute film of Steve describing application of research methods. All are invited to attend and share special memories. The film will be repeated prior to the Tuesday morning plenary session, at 8:15 AM.

Hosted by the Research and Training Center for Children's Mental Health and the Center for Mental Health Services Research, UMASS Medical

Implementation Research Interest Group 6:15 - 7:15 PM

Е

Come meet and network with colleagues who are interested in the science and practice of implementation. Connect around research topics, measures of implementation, financing of implementation activities, policy issues, cultural and linguistic issues, disparities, and effective implementation strategies at the practice, program, and system level.

Hosted by the Child & Family Evidence-based Practices Consortium, a national community of practice

## MONDAY FEBRUARY 25, 2008

Join yoı	<b>Research Luncheon</b> — 12:00 – 1:1 <i>ur colleagues for a networking luncheon</i>		
	Monday Afternoon Concurrent Sessio	ns — 1:15 – 2:15 P	М
Session	Title	Presenters	RM
9	<i>paper presentation:</i> Exploring the Impact of Delivering Mental Health Services in NYC After- School Programs	Landsberg, Smith- Waterman, Adhoot	RM 11
	<i>paper presentation:</i> The Community Youth Development Study: Testing the Communities that Care Prevention System	E Brown	
10	<i>symposium:</i> Academic Functioning and Youth Involved in Residential Care	Trout, Farmer	RM 12
	<i>element of symposium:</i> Academic Status of Youth in Out-of-Home Care: A Review of the Literature	Trout, Hagaman, Casey, Reid, Epstein	
	<i>element of symposium:</i> The Academic Functioning of Youth Admitted To Residential Care	Hagaman	
	<i>element of symposium:</i> Academic Functioning of Youth In Residential Care: Changes Over Time	Griffith	
11	<i>symposium:</i> Methods for Understanding Parent Preferences, Patient Utilization and Outcomes	Reid, Barwick	С
	<i>element of symposium:</i> How to Examine Patterns of Service Utilization within Children's Mental Health Agencies	Reid, Tobon	
	<i>element of symposium:</i> Using Family and Patient Input to Improve Consumer Health Information in Child & Youth Mental Health	Buchanan	
	<i>element of symposium:</i> How can Data Collection and Analysis Choices Aid Outcome Evaluations?	St. Pierre	
12	symposium: Unregulated Residential Services: The Challenge to Ensure Quality Services and Protections–Part II	Behar, Friedman	D
	<i>element of symposium:</i> The Challenges of Changing Public Policy	Davidson, Steverman, Lombrowski, Szalavitz	
13	<i>paper presentation:</i> Findings from the Multi-Site Evaluation of Independent Living Programs for Youth in Foster Care	Woolverton	G
	<i>paper presentation:</i> "It's Scary Out There": Youth with Mental Health Needs Speak about Transitioning to Adulthood	Faraldi, Geddes	
14	<i>symposium:</i> Natural Helpers in Behavioral Health Care	Isaacs	Н
	<i>element of symposium:</i> Community Health Workers: Bridges to Well-being for Communities	Treadwell	
	element of symposium: De Blanco Y Negro A Colores: Meeting the Mental Health Need of Underserved Latinos	Rio-Ellis	
	<i>element of symposium:</i> Family and School Support Team Supervisor (FASST)	Sanchez	
15	<i>paper presentation:</i> The Art and Science of Fidelity Assessment: Priming the Canvas	Levison-Johnson, Berent, Jewell	Ι
	<i>paper presentation:</i> The Art and Science of Fidelity Assessment: Paint by Number - Completing the Picture	Kernan, Morilus- Black, Fish	
16	<i>topical discussion:</i> Using Data from the Children's Mental Health Initiative	Leaf, Walrath, Gyamfi, Stephens, Azur	J

	Monday Afternoon Concurrent Sessio	ns — 2:30 – 3:30	РМ
Session	Title	Presenters	RM
17	<i>paper presentation:</i> The CMHI 14 Years Later: Who has been Served and How have their Characteristics Changed?	Walrath, Garazza, Stephens	RM 11
	<i>paper presentation:</i> Engaging and Recruiting Counties in an Experiment on Implementing Evidence Based Practice	Marsenich	
18	<i>paper presentation:</i> The National Behavior Research and Coordination Center: Overview and year 2 findings.	Sumi, Woodbridge	RM 12
	<i>paper presentation:</i> School-Based Mental Health in Underserved Communities	Owens	
19	<i>symposium:</i> From Paper To Performance: Implementation Research and the Wraparound Process	Fixsen	С
	element of symposium: Assessing System-wide Conditions for Wraparound Implementation: The Community Supports for Wraparound Inventory	J Walker, Sanders	
	<i>element of symposium:</i> Core Implementation Components and the Wraparound Literature: Building a Research Agenda	Bertram, Farr, Cox	
	<i>element of symposium:</i> The State Wraparound Survey, 2007: An Update on Wraparound Implementation Across the United States	Sather, Bruns, Stambaugh	
20	<i>symposium:</i> The Role of Residential Care in the Evolving Mental Health Service Systems	K. Allen, Blau	D
	<i>element of symposium:</i> Trends in Outcomes for Youth Served in Residential Treatment: 1996-2006	Hurley	
	<i>element of symposium:</i> Perspectives on the Changing Role of Residential Treatment in the System of Care	J Brown	
	<i>element of symposium:</i> State Regulation of Residential Facilities for Children	Ireys	
21	<i>symposium:</i> The Massachusetts Transition Age Youth Arrest Study	M. Davis	G
	<i>element of symposium:</i> MTAYA Study Introduction	M. Davis	
	element of symposium: MTAYA Study Methods	Gershenson	
	<i>element of symposium:</i> Gender Differences in Transition Age Arrests	M. Davis	
	<i>element of symposium:</i> Transition-Aged Mental Health Services and Risk of Adult Arrest	Pullmann	
22	<i>topical discussion:</i> Developing a Culturally and Linguistically Competent Workforce	Aristy, Cooper	Н
23	<i>symposium:</i> Evidence-Based Practice Implementation in a Child-Welfare System of Care: Examination of a Statewide System Change	Aarons, Chambers	Ι
	<i>element of symposium:</i> Researching Implementation of Evidence-Based Practice: Intervention, Context, and Study Design	Aarons	
	<i>element of symposium:</i> Using Mixed-Methods for Studying Evidence-Based Practice Implementation	Fettes	
	<i>element of symposium:</i> Statewide Implementation of Evidence-Based Practice for Child Neglect: Comparison of Clinical and Administrative Perspectives on Implementation Criteria	Palinkas	
24	topical discussion: Intermediary Purveyor Organizations: Their Role in EBP Capacity Building and System of Care Development	Kanary, Carter, Bernstein, Feller	J

## MONDAY FEBRUARY 27, 2008

- ·	Monday Afternoon Concurrent Sessions		DA
Session	Title	Presenters	RM
25	<i>symposium:</i> Creating the Capacity to Continuously Improve a System of Care	Wojack	RM 11
	<i>element of symposium:</i> The Cycle of Continuous Quality Improvement	Wojack	
	<i>element of symposium:</i> How Did Impact Create its Continuous Cycle of Improvement?	Miel-Uken	
	<i>element of symposium:</i> What Does It Take To Make A Knowledge Management Process Like This Work?	Pearson	
26	<i>symposium:</i> Strategies and Resources for Assessing and Improving Quality in School Mental Health	Stephan, Fixsen	RM 12
	<i>element of symposium:</i> The National Assembly on School-Based Health Care: Mental Health Quality Improvement Efforts	Hurwitz, Stephan	
	<i>element of symposium:</i> Strategies to Enhance the Dissemination and Adoption of Innovation in School Mental Health	Flaspohler, Paternite	
27	symposium: Outcomes Studies of Wraparound in the Mental Health, Child Welfare, and Educational Systems	Walker, Bruns	С
	element of symposium: Wraparound in Oklahoma for Children in Child Welfare Custody: Results of a Randomized Study	Rast, Vetter, Poplin	
	<i>element of symposium:</i> Impact of Wraparound within a School-wide System of Positive Behavior Supports	Eber, Hyde	
	<i>element of symposium:</i> Who, What, and How of Wraparound: Factors Associated with Positive Outcomes	Cox, Baker	
28	<i>paper presentation:</i> Screening within Juvenile Justice to Identify Service Needs Across the System of Care	Hodges, Smith, Johnson	D
	<i>paper presentation:</i> Pathways to Serious Criminal Activity for Multi-System Youth	Romney, Sherwood, Chan-Sew	
29	<i>symposium:</i> Community Programs for Transition-Age Youth: Process, Fidelity, and Outcome Findings	H Clark, Koroloff	G
	<i>element of symposium:</i> Predictors of Progress among Youth in the Partnerships for Youth Transition Demonstration	Haber	
	<i>element of symposium:</i> Stars Transitional Age Youth Program: Youth Demographics, Utilization and Outcomes	Dresser	
	<i>element of symposium:</i> Evaluating Fidelity of Community Programs for Transition-Aged Youth	Deschênes	
30	<i>symposium:</i> Applying the Knowledge on Effective Practices for African-American Children, Youth and their Families: Implications for Preventive, Early and Intensive Intervention Strategies	Vivian Jackson, Regina Hicks	Н
	<i>element of symposium:</i> School Experiences Among African-American Adolescents: Implications for Ethnic Identity Development and School Adjustment	Erika Van Buren	
	<i>element of symposium:</i> Addressing Disparities in Access for African-American children with Attention-Deficit Hyperactivity Disorder (ADHD)	Janice Cooper	
	<i>element of symposium:</i> Africentrism and Kinship Care: A Study of Implementation and Meaning	Jackson	
31	<i>symposium:</i> Missing Data and Multiple Imputation: an Overview and Application of Techniques	Stuart	Ι
	<i>element of symposium:</i> Handling Missing Data: The Motivation and Method of Multiple Imputation	Stuart	
	<i>element of symposium:</i> Guidelines and Suggestions on How to Multiply Impute Missing Data	Azur	
	<i>element of symposium:</i> Employing Multiply Imputed Data to Examine Disparities in Service Use Among Children	Barksdale	
32	<i>topical discussion:</i> Participatory Research in an Urban American Indian Community	Bartgis	J

	Monday Afternoon Concurrent Sessions	с — 5:00 – 6:00 РМ	
Session	Title	Presenters	RM
33	symposium: Out of the Lab and Onto Our Streets: Findings from Three National Evaluation Efforts on the Use and Implementation of Evidence-based Practices in Community-based Service Settings	Walrath, Fluke	RM 11
	<i>element of symposium:</i> Implementation Factors for Evidence-based Practices within Children's Mental Health Systems of Care	Moore	
	<i>element of symposium:</i> Evidence-based, Trauma- informed Practices and Resources: Adoption, Use and Implementation in the National Child Traumatic Stress Network	Douglas	
	<i>element of symposium:</i> Training Retention and Utilization: The Impact of Suicide Prevention Training Activities on Youth-serving Professionals and Their Communities	Jones	
34	<i>symposium:</i> Creating a Research Agenda to Promote Effective School-Based Mental Health Research	M. Epstein, Kutash, Duchnowski	RM 12
35	<i>paper presentation:</i> No Wrong Door – Implementation Plan for Montgomery County, MD	Dixit, Bajwa, Anthony, Effland	С
	<i>paper presentation:</i> Documented Treatment Among Children Receiving Care in California's Publicly- funded Oupatient Programs	Zima	
36	<i>symposium:</i> Child and Adolescent Psychiatric Crisis Stabilization within a Comprehensive System of Care	Jordan	D
	<i>element of symposium:</i> Community Population Characteristics Mediate Racial Disparities in Child Psychiatric Crisis Stabilization Decisions	R. Epstein	
	<i>element of symposium:</i> Direct Treatment Costs of Child Psychiatric Crisis Stabilization Services	Rhee	
	<i>element of symposium:</i> Factors Associated with Psychiatric Hospital Length of Stay Among Children and Adolescents	Leon	
	<i>element of symposium:</i> Predicting Recurrent Psychiatric Crisis among Children and Adolescents in State Custody	Park	
37	symposium: Functioning in Transition	Koroloff, Heflinger	G
	<i>element of symposium:</i> The Effects of Age Defined Eligibility Criteria on Access to Services	M. Davis, Koroloff	
	<i>element of symposium:</i> Transitioning Youth with Mental Health Needs to Meaningful Employment and Independent Living	Katz-Leavy	
	<i>element of symposium:</i> Access to Care and Mental Health in Early Adulthood	Slade	
38	<i>symposium:</i> Unlocking Disparities: Provider and Community Perspectives	Fluke, Fisher	н
	<i>element of symposium:</i> Exploring Cultural Biases in Child Welfare Decision Making	Baumann, Pecora, Hedderson, Capouch	
	<i>element of symposium:</i> A Study of Systems of Care Cultural and Linguistic Competence: Focus on Disparities	Gyamfi, G. Moore	
	<i>element of symposium:</i> Culturally Competent Service Provision in System of Care Communities	K. Freeman, Gyamfi	
39	<i>symposium:</i> Retention in a Longitudinal Outcome Study: Modeling Techniques and Practical Implications	Stephens, Greenbaum	Ι
	<i>element of symposium:</i> Modeling Retention over Time in the CMHS Longitudinal Outcome Study	Brooks, Geng	
	<i>element of symposium:</i> A Latent Class Analysis of Patterns of Respondent Participation in a Longitudinal Outcome Study	Хи	
	<i>element of symposium:</i> Determinants of Retention in a Longitudinal Study using a Multilevel Modeling Approach	Gebreselassie	
40	<i>topical discussion:</i> The National Network to Eliminate Disparities (NNED) to Eliminate Disparities: A New Structure to Address the "Wicked" Problem of Disparities	Huang, Isaacs, Bazron, Carter, Echo- Hawk	J

## **TUESDAY FEBRUARY 26, 2008**

	Tuesday Morning Plenary Session I —	8:30 – 10:00 AM	
PL	SOC and Evidence Based Practices:	Moderator: Blau	E/F
	Elevating the Discussion	Friedman, Burns,	
	Tree day Manning Olan and Cassian U	Henggeler, Cooper	
		10:15 – 11:45 AM	
PL	SOC and Evidence Based Practices:	Moderator: Huang Glisson, Gruttadaro,	E/F
	Elevating the Discussion	Bruns	
	Lunch on Your Own — 11:45 AM	– 1:30 PM	
Take a	break to explore local restaurants, network, or just relax.		
	Tuesday Afferras on Consumment Cossion	1.20 2.20 DM	
Session	Tuesday Afternoon Concurrent Sessions		RM
41	symposium: Implementing and Evaluating Evidence Based Programs Targeting Conduct Problems in Children and Youth in Norway	Ogden	A
	<i>element of symposium:</i> Large Scale Implementation Model of Evidence Based Programs	Ogden	
	<i>element of symposium:</i> Evaluation of Program Effectiveness and Sustainability	Amlund-Hagen	
	<i>element of symposium:</i> Implementing the PALS School-Wide Intervention Model	Sorlie	-
42	<i>paper presentation:</i> Characteristics of Youth and Families Receiving Informal Support Services	Montgomery	В
	paper presentation: Youth and Family Perspectives: Mental Health Needs and Access	McIntosh, Geiler	
43	paper presentation: Evaluation of a Family Organization Integrating Local and National Evaluation Data	Cook, Kothandapany, Weber	С
	<i>paper presentation:</i> Utilizing Research Process to Implement Effective Parent to Parent Services	Byrnes, Corrigan, Frehe, McCave	
44	<i>paper presentation:</i> Rural Residence and Unmet Need in Two Service Systems	Brannan	D
	<i>paper presentation:</i> Small Town Systems of Care: Perceptions of Innovative Children's Mental Health Services in a Rural Setting	Pullmann, Hoffman, Heflinger	
45	<i>symposium:</i> Community Defined Evidence Models to Measure Practice Effectiveness in Diverse Communities	Martinez, Marsenich	G
	element of symposium: Community Defined Evidence: A New Paradigm to Measure "What Works" in Communities of Color	Martinez	
	element of symposium: Supporting and Developing Evidence for Community Defined Practices in Diverse Communities: A Multi Site Model in Seattle, WA	Ja	
46	<i>symposium:</i> Risk Factors among Young Children Served in Early Childhood Systems of Care	Berson, Blau	Н
	element of symposium: Creating a System of Care Tailored to Meet the Unique Needs of the Early Childhood Population	Masten, Orlando	
	<i>element of symposium:</i> The Reciprocal Relationship between Young Children with Severe Emotional and Behavioral Difficulties and Parenting Stress and Strain	Kaufman, Shepardson Watson	
	<i>element of symposium:</i> Trauma Experiences of Children Served by Early Childhood Systems of Care	Crusto, Finley	
	<i>element of symposium:</i> An Exploration of Factors Mediating Disruptions in Young Children's Relationships with Primary Caregivers	Berson, Garcia- Casellas	
47	<i>paper presentation:</i> Reducing Seclusion and Restraint Use with Children with Serious Emotional Disturbances	Frost	Ι
	<i>paper presentation:</i> Effectiveness of MST for Youth who Sexually Offend: Preliminary Findings	Letourneau, Henggeler	
48	<i>topical discussion:</i> Further Discussion on the Public Health Approach to Mental Health	Espiritu, Sebian, Horen	J

Session	Title	Presenters	RM
49	<i>paper presentation:</i> Implementation and Outcomes of Evidence-Based Practice: Results of Connecticut's MST Progress Report	Franks, Schroeder, Connell, Fixsen	A
	<i>paper presentation:</i> Predictors of Medication Status and Perceived Benefits: Analysis of Phase 4 Data	Walrath, Pavkov	
50	<i>paper presentation:</i> Building Capacity of Community- Based Preschool Programs: The Process and Outcomes of an Organizational-Level Intervention	Malsch, Hood	В
	<i>paper presentation:</i> The Impact of School-Based Systems of Care on Youth, Families and Schools	Kaufman, Bernard	
51	<i>paper presentation:</i> Tattered Safety Net: Evidence- Based Practices in Children's Mental Health	Cooper, Aratani	С
	<i>paper presentation:</i> Impact of Training and Coaching on Wraparound Fidelity: Results of Field Evaluations and Practice Research	Rast	
52	<i>paper presentation:</i> Meeting the Mental Health Needs of Children in the Child Welfare System	Prince Inniss, Paulson	D
	<i>paper presentation:</i> Establishing Case Rates, then Managing within them	Van Deman, Rotto	
53	<i>symposium:</i> Utilizing Administrative/Existing State Data for Policy, Planning and Service Delivery to Address Disparities	Huang	G
	<i>element of symposium:</i> Using Administrative and Other Data Sources to Address Disparities in Care for Ethnically and Racially Diverse Populations	K. Allen	
	<i>element of symposium:</i> An Overview of the CBMCS Multicultural Training Program: Implications for Community Mental Health	Gamst	
54	<i>paper presentation:</i> Creating the Organizational Capacity to Serve Families with Parental Mental Illness: The Implementation of Family Options	Biebel, Woolsey	Н
	<i>paper presentation:</i> Mental Health Communication Training for Pediatric Primary Care Providers: Impact on Disparities	J. Brown, Wissow	
55	<i>paper presentation:</i> A Large Scale Needs Analysis Based on Statewide Quantitative and Qualitative Data	Quist	Ι
	<i>paper presentation:</i> The Rule or the Exception: A Framework for Addressing Co-occurring MH and Substance Use Disorders to Effectively Respond to What Families Say They Want in Treatment	Graves, Shelton, Witherspoon	
56	<i>topical discussion:</i> Cultural Adaptation of Evidence- Based Practices: State, Tribal and Private Foundation Experiences	Echo-Hawk, Poitra, Ybarra	J

## TUESDAY AFTERNOON SPECIAL SESSIONS

#### Brown Bag Discussion: Research Collaborative for LGBT Youth and Families 12:00 - 1:30 PM

You are cordially invited to participate in an important first step toward the development of the Research Collaborative for LGBT Families and Youth. The overall outcome of the collaborative is to improve the access, appropriateness, availability and utilization of mental health and related services for lesbian, gay, bisexual, and transgender (LGBT) parents and their children and LGBT youth in need of such services. Bag lunches will be available for purchase prior to this session; stop by the information desk prior to 10:00 AM to order your lunch. *Panel: Lazear, Gamache, & Fisher* 

# Topical Discussion: Involving Community Stakeholders in Data Interpretation & Dissemination 1:30 - 2:30 PM The purpose of this session is to share information and insight on the importance of and strategies for engaging and involving multiple stakeholders in the interpretation and dissemination of system of care evaluation data. As a result of this discussion, evaluators and community stakeholders, including families and youth, will learn how to collaborate together as partners for interpreting and disseminating evaluation data in the most meaningful way. Community panelists will share how they have successfully involved community partners in the interpretation and dissemination of data. RM 9 Panel: Bledsoe, Chapelle, Truxillo & Sanders Sanders

## **TUESDAY FEBRUARY 26, 2008**

	Tuesday Afternoon Concurrent Sessions		
57	<i>paper presentation:</i> The Progression of MST Adaptations: Pilot Studies to Large Scale Dissemination	Henggeler	A
58	<i>paper presentation:</i> Longitudinal Impact of Family Functioning on Children Served in Systems of Care	Anderson	В
	<i>paper presentation:</i> An Empirical Investigation of a Parent Support Program: Parent Connectors	Duchnowski, Kutash	
59	<i>paper presentation:</i> An Evaluation of a Wraparound Service Program using Real-time Methods	Pagkos, Milch, Kazi	С
	<i>paper presentation:</i> Findings in Support of "Communities of Practice" for Practice Change	Barwick, Peters	
60	<i>symposium:</i> Effective Financing Strategies for Systems of Care: Examples from the Field	Armstrong	D
	<i>element of symposium:</i> Financing Strategies Related to Cultural and Linguistic Competence, Workforce Capacity, and Accountability	Wood	
	<i>element of symposium:</i> Financing Strategies Related to Realignment and Re-Direction of Resources	Stroul, Armstrong	
	<i>element of symposium:</i> Financing Strategies Related to Comprehensive, Customized Service Arrays and Family and Youth Partnership	Pires, McCarthy	
61	<i>symposium:</i> Integration of Primary Care and Behavioral Health Care for Diverse Communities	Hernandez	G
	<i>element of symposium:</i> The Bridge Project: Integrating Care for the Asian Population	Chen	
	<i>element of symposium:</i> Richmond's East End Partnership with Families Parent Support Program: An Integration of Mental Health and Coordinated Human Services	Newbille	
62	<i>paper presentation:</i> Characteristics of Children who Deteriorate or Improve in Systems of Care Communities	Stephens, Fisher	Н
	<i>paper presentation:</i> Predictors of Adjustment for Children and Adolescents Served in a Behavioral Health System of Care	Kaufman	
63	<i>symposium:</i> Technology for Research, Evaluation, and Measure Development with Complex, Multisite Community Initiatives	H Clark	Ι
	<i>element of symposium:</i> Responding to Evolving Evaluation Needs in a Comprehensive Early Childhood Initiative	Bates	
	<i>element of symposium:</i> Strategies for Rapid Development of a Transition to Adulthood Program Information System	Haber	
64	topical discussion: Leadership: It's Everyone's Business!	Dodge, Le	J

Poster Presentations & Networking — 5:30 – 7:00 PM — Salon E/F					
Tit	le	Presenters			
1.	The National Network to Eliminate Disparities (NNED) in Behavioral Health: A New Structure to Address the "Wicked" Problem of Disparities	Espiritu, Rivera, Kraft			
2.	Moving Toward Equity: Addressing Disproportionality at the Local Level through the Local Equity Action Development Process	Ritter			
3.	Exploring Differences In Rural and Urban Children: CBCL and Risk Factors at Service Delivery Entrance	Legerski			
4.	Building on Community Strengths: Mapping Housing and Transport Assets for Youths in Transition	Ward			
5.	Unmet Need and Juvenile Justice: Cost and Consequences	Rogers, Akintan			
6.	Cross Systems System of CARE/Child and Family Teams in North Carolina	Crowley			
7.	A Longitudinal Analysis of the Effects of Adult Mentoring on Children's Well-being	Lipman			
		·			

		1
o R	What are the Demographic and Psychiatric Characteristics f Children with Severe Emotional Disturbances (SED) Referred for Home and Community Based Medicaid Waiver Services (HCBS-W) in New York City?	Andrews, Gomez, Teploukhova, Then, Acosta
	valuation of Florida's Child Welfare Prepaid Mental Health lan: Rationale, Implementation, and Initial Findings	Vargo, Sharrock, Boothroyd
	The Trauma Recovery for Youth Center (TRY): Helping Youth in Foster Care	Vergon, Metcalf, Blacklaw
	Development of a Trauma-Informed System of Care Assessment Tool and Methodology	Yoe, Tiernan
	tate Agency Role in Transforming Children's Mental Health Services in a Non-Transformation State	Parks, Alger, Lippe
	The Massachusetts Family Networks Implementation tudy	Nicholson, Maciolek
	mplications of Cross-System Findings from Cuyahoga County System of Care Research	Hussey, Stormann, Dague, Ols
	vidence-Based Approaches to Treatment Evaluation: essons from Vermont	Omland
	vidence Based Practices Outcome Measures: Cultural Considerations and Youth and Family Input	Zubritsky
	Iighlights of TEAMMATES: Wraparound Population, Dutcomes, and Quality Initiatives	Dresser, Placide, Rauso
	Aultiple Approaches to Analyzing and Reporting CANS Data within Systems of Care	Effland, Klein
19. C	Organizational Culture in Systems of Care	Mazza, Ferreira
	echnological Solutions for Integrating and Managing Evaluation and Program Performance Data	Laygo, Moss, Higa- McMillan
	Systematic Approach to Revising California's State-wide ystem for Performance Measurement	Quist
	trength in Numbers: Using Concurrent Measurement to Guide Quality	Grimes, Hodges, Mullin
23. B	Building a "Neighborhood" SOC in the South Bronx	Pessin, Fear
C	ixamining the Role of a Statewide Family-Run Drganization Utilizing a Case Study Approach and Jetwork Analyses	Lazear, Conlan, Ciano, Beckstead, Evans
25. U 0	Jtilizing an Accountability Database to Assess the Impact f Interagency Collaboration	Lazear, Everett, Matos
	Aedication Use among Children Entering the Albany County, NY System of Care	McCormick, Robin
	ervice Utilization of Children with Mood Disorders: Effects of a Multi-Family Psychoeducation Program	Mendenhall
28. P C	redictors of Youth and Family Satisfaction with Dutcomes of Mental Health Services	Mehta, Mycek, Frimpong, Radigan
	Aental Health Assessment of Infants and Toddlers in Early ntervention Services	Dore, Ayers
	ocial and Emotional Skills in Prediction of School Readiness	Underwood, Thomlinson
	eachers' Self-Efficacy and Attributions of Student Behavioral	Dowell, Onchwari

## WEDNESDAY FEBRUARY 27, 2008

Intensive Workshops — 9:00 AM – 12:00 PM						
Title	Presenters	Room				
Workshop 4 — SAMHSA's Implementation Resource Kit: A Tool for Selecting Evidence-Based Interventions for Youth with Disruptive Behavior Disorders	Fisher, Rivard	A/B				
Workshop 5 — Assessing the Emotional and Behavioral Strengths of Children and Youth	Epstein	C/D				
Workshop 6 — Creating Community Created System of Care Strategies: Applying a Theories of Change Approach to Support Implementation, Evaluation and Strategic Planning	Morilus-Black, Foss, Wenz-Gross, Kernan, McCarthy, Hernandez	G/H				

## Sunday Intensive Workshops, February 24 – 2:00 pm

Intensive 1—Salon A/B

#### Family-Driven Care: An Intensive Workshop on Implementation

Sandra Spencer, Executive Director, and Elaine Slaton, Director of Training and Evaluation, Federation of Families for Children's Mental Health, Rockville, MD; Carol MacKinnon Lewis, Professor, Dept of Child and Family Studies, Louis de la Parte Florida Mental Health Institute, Tampa FL

This workshop will introduce participants to On the Road to Family-Driven Care, a training curricula developed by the Federation of Families for Children's Mental Health. This curriculum, intended for all stakeholders in the children's mental health arena, is designed to provoke thought and dialogue regarding the family movement's progress and provide tools to promote true empowerment. Modules address the historical context of family-driven care in mental health reform, the continuum of family involvement and accompanying barriers, concepts of systems change, and how they relate to family-driven care, and indicators of readiness for change at the community, provider, policy and personal levels.

#### Intensive 2—Salon C/D

#### Supporting Implementation of EBPS: A Policy Discussion Among Providers, Administrators, Researchers, and Purveyors

David Bernstein, Director, Center for Effective Interventions, Denver, CO; Jim Wotring, Director, National Technical Assistance Center for Children's Mental Health, Georgetown University, Washington DC; Myers Hayes, Chief Executive Officer, Cayuga Home for Children, Auburn, NY; Karen Blase, Research Professor, Department of Child and Family Studies, USF Louis de la Parte Florida Mental Health Institute, Tampa, FL; Jacquie Brown, Director, Programme Services, Kinark Child and Family Services, Markham, ON Canada; Bill Carter, Deputy Director, California Institute for Mental Health, Sacramento CA; Gary M. Blau, Chief, Child Adolescent and Family Branch, Center for Mental Health Services/SAMHSA, Rockville MD; and **Eric Bruns**, Division of Public Behaviorial Health and Justice Policy, University of Washington School of Medicine, Seattle WA

Implementing evidence-based practices (EBPs) holds the promise of improving outcomes for children, youth, and families. But doing so consistently will require significant collaboration among providers; local, state and federal administrators; EBP developers; and local purveyors. In this session, individuals representing these key roles will present their view of what each partner needs to do to support implementation of EBPs and improve the quality of care received by children and families.

#### Intensive 3—Salon G/H

#### Concept Mapping: A Next Generation Strategy for Planning and Evaluating Systems Change

Lenore Behar, Director, Child & Family Program Strategies, Durham, NC; and Marty Hydaker, Hydaker Community Counseling, Cullowhee, NC; Andrea Aderton, Director, Circle of Hope Project; St. Joseph, MO; Cathy Baxter, Evaluator, Community Cares; Hattisburg, MS; Conni Wells, Director; Statewide Family Networks Technical Assistance Center; Sacramento, CA

Workshop participants will learn about concept mapping, which is a statistically-based strategy for engaging community partners in planning for change and for evaluating the progress of the change process. The participants will experience the steps in concept mapping and learn how each step shapes the products of concept mapping. They will learn how the products can be used for (1) community inspired planning, (2) the development of the logic model, and (3) evaluation. Lenore Behar and Marty Hydaker will describe the concept mapping process, the statistical analyses, and lead the participants in the experiential aspects of the workshop. Andrea Aderton, Cathy Baxter, and Conni Wells will discuss how their communities used concept mapping for planning, logic model development, and evaluation.

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## Sunday Poster Session, February 24 – 6:00 pm

oster		Fuge
1	Using Concept Mapping to Develop a Logic Model for a System of Care	11
	Presenting: Cathy Baxter; Mona Gauthier; Heidi Nelson & Sharon DeBerry	
2	Mississippi Youth Programs around the Clock (MYPAC)	12
	Presenting: John Young, Kristi R. Plotner, John D. Damon & Terry L. Hight	
3	Culturally Competent Service Provision in System of Care Communities	13
	Presenting: Sylvia K. Fisher	
4	State and Tribal Infrastructure to Reduce Youth Suicide: Capacity, Service Selection and Systems Integration to Serve Youth At Risk	14
	Presenting: Ebony R. Montgomery	
5	Flexible Funds Expenditures in System of Care Communities	15
	Presenting: Anna Krivelyova & Kendralin Freeman	
6	Considerations for Implementing a Randomized Clinical Trial in Community Mental Health	17
	Presenting: John Vetter, Geneva Strech & Christopher Foote	
7	Examining Collaboration in Children and Youth Mental Health Systems using Social Network	18
	Analysis	
	Presenting: Bhuvana Sukumar & Elana Light	
9	Predictors of Missed Appointments Over the Course of Child Mental Health Treatment	20
	Presenting: Michael Gordon & Lawrence Lewandowski	
10	The Wraparound Fidelity Assessment System: Measures, Methods, and Data	21
	from National Pilot Sites	
	Presenting: April Sather. Eric Bruns & Kellv Hyde	

Poster		Page
11	Substance Use Patterns and Mental Health Diagnosis Among Youth in Mental Health Treatment: A Latent Class Analysis	22
	Presenting: Kara S. Riehman	
12	Development and Assessment of the Collaborative Care for Attention Deficit Disorders Scale Presenting: James P. Guevara & Paul E. Greenbaum	24
13	<b>Organizational Social Context and Attitudes Towards Using EBPs for Children's Trauma Treatment</b> Presenting: Marleen Radigan	25
14	Behavioral Health Model Development to Promote Evidence-Based Practice in a Statewide System of Care: Extended Day Treatment and Emergency Mobile Psychiatric Services Presenting: Jeffrey J. Vanderploeg, Jennifer A. Schroeder & Robert P. Franks	26
15	Assessing the Implementation of Residential Care: Development and Psychometrics of a Staff Observation Instrument	27
	Presenting: Annette K. Griffith	
16	<b>Depression and Antisocial Behavior Outcomes Among Comorbid Youth in Juvenile Justice</b> Presenting: Jill McCulloch	28
17	Public-Private Collaborative Efforts toward a Coercion-Free System of Care Presenting: Lesley A. Slavin, & Jennifer Wong	29
18	The Transition to Adulthood Among Former Wraparound Milwaukee Clients Presenting: Abigail A. Bernett & Stephen A. Gilbertson	31
19	A Systematic Review of Employment Programs for Transition-age Youth with SED Presenting: Troy Loker	32
20	<b>Transition Aged Youth in Therapeutic Foster Care: Risks, Resources, and Service Use</b> Presenting: Dannia G. Southerland	33
21	New Measures for Youth Empowerment and Participation in Planning Presenting: Janet S. Walker & Laurie Powers	34
22	<b>Unpacking the Role of Parent Advocates within a Systems of Care Model</b> Presenting: Michelle R. Munson, David L. Hussey, Chris Stormann & Teresa King	35
23	Family Driven, Youth Guided Facilitation for Monterey County System of Care Development Presenting: Dana Edgull & Mike Robles	36
24	Facilitating Family Driven Processes: Training Therapists to Provide Outcomes Feedback to Caregivers	37
	Presenting: Ashley Lyon, Heidi Wale, Kay Hodges & Malisa Pearson	
25	<b>The Power of Parents: Preliminary Outcomes from the Family Peer Support Program</b> <i>Presenting: Monica Mitchell</i>	38
26	Youth Involvement in Research and Evaluation of Systems of Care Presenting: Richard Chapman	40
27	Predictors of Perceived Control over Treatment Decisions and its Influence on Subsequent Service for Youth in Systems of Care	40
	Presenting: Diogo L Pinheiro	
28	Mental Health Services Utilization of Youth Screened for Suicide Risk and Mental Disorders During School Presenting: Mathilde M. Husky	42
29	Decreasing Adolescent Suicidality through a Multiple Component Suicide Prevention Program	43
29	Presenting: Sarah Tarquini	45
30	Special Education for Emotional Disturbance: Needs, Outcomes for Children in Child Welfare Presenting: Madeline Y. Lee	44
31	Individual and Organizational Predictors of Readiness for School-Based Bullying Prevention Program Implementation	45
	Presenting: Charles Cunningham	
32	Reducing Waiting Times for Children's Mental Health Services: A Qualitative Analysis of Parental Preferences Presenting: Charles E. Cunningham	47

## Poster 1 Using Concept Mapping to Develop a Logic Model for a System of Care

Presenting: Cathy Baxter; Mona Gauthier; Heidi Nelson & Sharon DeBerry

#### Introduction

Logic Models help Systems of Care put their ideas and planning into action (Hernandez & Hodges, 2003), providing a community-driven system of accountability while helping visualize collaboration among stakeholders (Hernandez, 2000). Many communities struggle to find a way to successfully engage their stakeholders in the planning and evaluation process, including the creation of the Logic Model. Concept Mapping has proven to be a useful tool in various aspects of the mental healthcare field (Johnson, Biegel & Shafran, 2000). Concept Mapping allows for the collection of data in a clear, concise, and scientific way. (Trochim & Kane, 2005). This poster will demonstrate how Concept Mapping was used as a data-gathering and community engagement tool to help create a Logic Model for a System of Care. Additionally, collected data were used to draft a Logic Model using a series of planned steps and critical thinking. The information presented in this poster will be useful to those who need to develop a Logic Model and are looking for a way to incorporate data from a wide variety of stakeholders such as a System of Care.

#### Methodology

*CommUNITY cares*' Logic Model was created in two phases. Phase One included the gathering of data through concept mapping. Phase Two included the development of the community's logic model. The draft model was then presented to the stakeholder body for approval and editing.

#### Phase One: Concept Mapping

Concept Mapping was conducted by Lenore Behar and Marty Hydaker January 9-10, 2007 in Hattiesburg, MS (Behar & Hydaker, 2007). The group (N = 24) consisted of various *commUNITY cares* stakeholders including mental healthcare professionals, educators, representatives from juvenile justice, youth, and families. A total of 86 statements were generated in response to the question, "What specific actions/steps need to be taken for the system of care to be successful?" A total of 86 unduplicated answers were produced. Participants then participated in the sorting and rating process, and the data were analyzed with the Concept System computer software, version 4.137, (Concept Systems, January 2007).

#### Phase Two: Logic Model Development

The Logic Model itself was developed through a series of tools developed by the *commUNITY cares* Administrative Team (CCAT). The CCAT reviewed Concept Mapping Results to determine the best course of action for proceeding with Logic Model development. In association with the University of South Florida under the direction of Mario Hernandez and Sharon Hodges, the group worked to identify Community, System, and Practice level issues directly from the 86 statements produced in Concept Mapping. From there, the community itself created a series of worksheets to identify Strategies, Outcomes, Values, and a Vision Statement. The first draft of the model was completed in late July of 2007 and was rolled out to the community August 29-30, 2007.

#### **Findings**

#### **Concept Mapping**

The community-specific concept map consisted of five clusters:

- Community Development
- Training/Evaluation
- Communication/Collaboration

- Quality Services
- Youth and Family Focus

#### **Development of the Logic Model**

To develop the Logic Model, the CCAT began by examining the five clusters listed above. After analysis of each of the categories, it was determined that the statements included in each one can be categorized into one of three levels: Community, System, or Practice. The CCAT along with the commUNITY cares Executive Committee were charged with classifying each of the 86 Concept Mapping statements into one of the three issue categories. Once categorized, participants again separated them into more specific issues. For example, "Quality Services" was listed as a Concept Mapping cluster. Issues listed under "Quality Services" fit into the Practice level issues for the Logic Model. The CCAT created a list of Community, System and Practice Issues by Category. In addition, CCAT compiled a list of Concept Mapping statements that embodied values or principles rather than actions or steps. These statements were refined to create the "Values" section of the Logic Model. The next step in the development of the Logic Model concerned the creation of Strategies and Outcomes. Since Concept Mapping statements were usually phrased in an "action" form (i.e. we need to...), it was relatively simple to extrapolate a list of activities to be carried out by the System of Care. From these activities, the CCAT compiled a list of Strategies that would be necessary to complete each task. The final step was to develop specific Outcomes for each level of Issue and Strategy. Once again, this task was relatively simple due to the phrasing of Concept Mapping statements. CCAT examined the each statement and its corresponding Issue and Strategy Category do determine the "why" of the statement. In addition, CCAT cross-referenced Outcomes, Strategies, and specific Action Statements to ensure that they were measurable and time-specific. This step aided in the ease of transformation of Logic Model to Strategic Plan. The draft plan was presented to stakeholders, and many were pleased that they could actually "see" their Concept Mapping statements in the Logic Model.

#### Conclusion

CommUNITY cares found Concept Mapping to be an extremely useful tool to organize data for the use of System of Care development, with particularly useful applications in Logic Model development, as have other research centers and programs (Anderson et al, 2006). We determined that Concept Mapping provided us with stakeholders' opinions, but more importantly, it gave a statistical view of how important and feasible each action step should be. At the end of Concept Mapping, one is faced with a large amount of very useful data. Logic Models provide a visual representation of a community's Theory of Change (Hernandez & Hodges, 2003). As commUNITY cares expands into two other South Mississippi counties, it intends on furthering its Logic Model development through the use of additional Concept Mapping sessions. In addition, commUNITY cares intends on using Concept Mapping and Logic Modeling to explore the expansion of mental healthcare services to the Latino community in the area. Furthermore, using these two tools in conjunction aided significantly in the strategic planning process. We recommend any community in the beginning stages of collaborative efforts to research Concept Mapping and consider its use to help implement an effective System of Care through the development of a Logic Model.

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## Poster 2 Mississippi Youth Programs around the Clock (MYPAC)

#### Presenting: John Young, Kristi R. Plotner, John D. Damon & Terry L. Hight

#### Introduction

In 2006 Mississippi's Division of Medicaid (DOM) received a federal grant to study community-based alternatives to psychiatric residential treatment (one of ten issued nationally). The overall goal of this demonstration project is to enact system-level changes that result in quality of life improvements for youth with severe emotional disturbances (SED) and their families. Cost-efficiency of service delivery is also critical, with the goal of the demonstration being community-based, wraparound services delivered at the same or reduced costs in comparison to typical residential treatment. As a secondary goal of the study, we would also like to use what we learn as an early implementer of this grant to inform other systems as they prepare for a similar rollout process. This will ultimately allow the maximal impact of the fiscal resources dedicated to these projects nationwide.

#### **Community Partnership**

Achieving the goals of this project is strongly facilitated by the partnership of public sector and private agencies. Currently, these agencies and DOM are working together toward this end. Medicaid's responsibilities include identification and assessment of relevant consumers that meet particular criteria, including an age of less than 21, SED classification, and either in a PRTF wanting to transition out, or qualified for PRTF treatment and wanting to remain in the community. Over the course of the study approximately 1,640 youth will be served by the community agencies in a seamlessly integrated system of care that propels Wraparound service delivery.

#### **Background on One Community Agency**

Mississippi Children's Home Services (MCHS) is a non-profit, fully-contained system of care that has been providing services, including residential treatment, to Mississippi's children and youth for nearly 100 years. This established system of care was one feature that made MCHS desirable as a participating agency in this demonstration project. It operates under a single, centralized administration, thus reducing potential barriers between services for demonstration project participants. Additionally, ongoing research on treatment outcomes and system performance factors at MCHS suggests that the agency has consistently provided quality care. The agency's history of self-directed research and policy/program revision on the basis of these findings is commensurate with the model initially outlined in the seminal systems of care description, and constitutes a fundamental evidence-base for services rendered (given Daleiden & Chorpita's (2005) definition of local, aggregated evidence). The importance of an evidence-base to services rendered through community partner agencies cannot be overstated. Other states preparing to implement their grants would do well to carefully review historical evidence of effectiveness by potential community partner agencies. The large amount of time, money, and resources dedicated to these grants could potentially be wasted if services provided are without evidence to support their usage.

#### **Assessment Methodology**

From a purely scientific standpoint, the project aims to ensure that data produced over the 5-year span will be meaningful and yield results that can be interpreted to contribute to national wisdom concerning community placements for SED youth. Much of the scientific literature in systems of care research has informed the field that psychometrically sound, appropriate assessment strategies and descriptions of treatment techniques are lacking. Conceptually, the demonstration project seeks to remedy some shortcomings of previous literature by paying careful attention to these issues at onset.

#### Assessment Instruments

The assessment battery begins with a clinical interview and a standardized set of instruments mandated by the Division of Medicaid (DOM), including assessment of enrolled participants' strengths, family resources, caregiver stress levels, school functioning, and satisfaction with service provision and accessibility. Additional instruments added at MCHS include youth self-report measures of aggression, anxiety and depression, family functioning and cohesion, loneliness, self-esteem, traumatic experiences, and weekly treatment progress. Parental reports of family functioning and cohesion, as well as weekly progress ratings, are also be collected, as are periodic assessments of the therapeutic alliance experienced from the perspective of clinicians, youth, and parents.

Additionally, to address historical shortcomings concerning limited description of treatment practices, a monthly measure is completed by project clinicians detailing specific elements of psychotherapeutic practice. This instrument is a modification of the Monthly Treatment and Progress Summary (MTPS; Child and Adolescent Mental Health Division, 2003) and the Service Guidance Review Form (Young, Daleiden, Chorpita, Schiffman, & Mueller, 2007), both of which were developed and widely implemented in the state of Hawaii's system of care. This instrument allows description of specific targets and practice elements of psychotherapeutic services, and bears particular relevance in terms of efforts of this demonstration project to accurately, comprehensively describe clinical services provided. The conceptual basis for this instrument (Chorpita, Daleiden, & Weisz, 2005) bears national relevance not only to these demonstration projects, but also to systems of care and public mental health more generally. It is a particular aspiration that use of the MTPS will be adopted by other sites receiving these grants to more carefully inform national research regarding the content of services rendered, and thus avoid some of the shortcomings of previous systems of care research (cf., Weisz, Han, & Valeri, 1997).

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## Poster 3 Culturally Competent Service Provision in System of Care Communities

Presenting: Sylvia K. Fisher Contributing: Anna Krivelyova & Kendralin Freeman

#### Introduction

Providers serve children, youth and families from varied cultural and ethnic backgrounds different from their own, whether they are directly or indirectly involved with a system of care. An important dimension of their service delivery is awareness, sensitivity and culturally and linguistically appropriate treatment of these clients, as dictated by the philosophy of systems of care services (Davis et al 2002). Stephens, Xu, and Gyamfi (2007) have examined how caregivers perceive the cultural competence of providers, but providers have seldom been assessed directly. A survey was administered to providers who were directly connected with the system of care and other providers not directly connected to the system of care, but who provide services to children enrolled in systems of care. Results are reported regarding the responses of both groups of providers regarding the relationship between their opinions, attitudes and beliefs about sexual orientation and gender identity as cultural groups and the provision of culturally competent services.

#### Methodology

In 2006, the Culturally Competent Practices Survey (CCPS) was administered to a sample of providers serving at least one child or youth enrolled in a system of care funded initially from 2002 to 2004 by the Center for Mental Health Services. The CCPS assessed the extent to which providers in system of care communities and those who were not officially affiliated with a system of care community are familiar with and engage in culturally competent practices around the issues of sexual orientation and gender identity. In addition, the degree to which their organization supports or hinders culturally competent service provision was examined.

Providers and agencies serving children in the system of care were identified by project directors using snowball sampling. Agencies identified their provider staff. A total of 348 qualified respondents who satisfied the based requirements (provided direct services to at least one child in his community's system of care) were selected from an initial invitee pool of 975 providers and completed the survey.

The Dillman (2000) method for mail and internet surveys was used to collect CCPS data. Following pre-notification by mail, providers with email addresses received email links to the survey website and emailed reminders; those without email addresses received mailed surveys reminder cards, and follow up survey mailing to non-respondents.

#### Results

Of the 335 responses who responded to the following question: Do you agree that the following categories constitute a cultural group?", it is noteworthy that gender was identified by almost 78% of respondents as a cultural group (the 8<sup>th</sup> most frequently identified category) and sexual orientation was so identified by 76.1% of respondents. To give a sense of the range, nearly 91% agreed that "ethnicity" was a cultural group on the high end of frequency, while just over 51% agreed that political affiliation was a cultural group on the low end of frequency.

Preliminary results indicate that approximately 47% of survey respondents indicated that they serve at least one LGBT client (n = 137). Those providers who indicated that they serve LGBT clients were significantly more likely to be female (87.5% vs. 69.9%, n = 137, p = 0.01), more likely to work for juvenile justice/juvenile court agency (12.5% vs. 0%, n = 136, p = 0.002), and had significantly higher active caseloads on average (34.2 clients vs. 14.2 clients, n = 134, p = 0.003). There were no statistically significant differences in the racial composition, age, education, or primary role (e.g., case manager) between both two groups of respondents.

Over 76% of respondents agree or strongly agree that sexual orientation constitutes a cultural group. Whether the respondent believes that sexual orientation is a cultural group was found to be independent of whether a respondent indicated that s/he had served at least one LGBT client. The respondents who believed that sexual orientation was a cultural group were significantly more likely to be Hispanic (15.0% vs. 6.0%, n = 349, p = 0.03), significantly more likely to be a counselor (35.6% vs. 19.5%, n = 346, p = 0.02), significantly less likely to work for juvenile justice/ juvenile court agency (4.9% vs. 12.1%, n = 347, p = 0.02), education sector (4.9% vs. 13.3%, n = 347, p = 0.01), or family organization (6.4% vs. 15.7%, n = 347, p = 0.01). There were no statistically significant differences in the age or education of respondents.

#### Conclusion

In this survey, providers directly affiliated with systems of care benefit from program emphasis on the delivery of culturally competent care. These providers received more training on cultural competence, and had knowledge, attitudes and practices more consistent with culturally competent service delivery. The importance of organizational emphasis on cultural competence and regular and ongoing commitment to cultural competence is supported by this study. Survey findings suggest the need for additional research into organizational characteristics, and the diffusion of system of care principles within communities.

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## Poster 4 State and Tribal Infrastructure to Reduce Youth Suicide: Capacity, Service Selection and Systems Integration to Serve Youth At Risk

Presenting: Ebony R. Montgomery Contributing: Jennifer R. Wallach, Stacy F. Johnson, Elana R. Light, & Michael S. Rodi

#### Introduction

The Garrett Lee Smith (GLS) Youth Suicide Prevention and Early Intervention Program provides resources to States and Tribes to provide early identification and prevention services to youth at risk for suicide. Data for a cross-site evaluation of the GLS program, funded by the Substance Abuse and Mental Health Services Administration (SAMHSA), were collected from the 38 GLS State and Tribal sites. The evaluation examines grantees' youth suicide capacity, service selection, and systems integration as they implement their programs. This presentation covers three interrelated topics: the referral networks and database infrastructure available for youth at risk for suicide, the products and services deployed for suicide prevention, and state/tribal early identification, referral, and follow-up strategies. The data and analyses presented will contribute to a detailed and data-driven portrait of state and tribal authorities' efforts to prevent the tragedy of youth suicide with insights for additional research and lessons learned for improved implementation.

#### Methodology

The GLS cross-site evaluation includes administration of two measures that assess the existing infrastructure important for interagency collaboration and data sharing. The Referral Network Survey (RNS) assesses the development of networks encompassing child serving professionals and gatekeepers to increase suicide prevention awareness, early identification, referral mechanisms, and provision of mental health services for at-risk youth. The Existing Database Inventory (EDI) catalogs information about the type of data and data systems that exist to support State/tribal grantees' suicide prevention efforts or contain information on populations impacted by suicide prevention activities. Analysis of RNS data summarizes the nature and extent of collaboration and integration among youth support organizations. EDI data also describe the degree of integration and data sharing among state-level MIS to support information sharing across youth suicide prevention focused service systems.

The cross-site evaluation also gathers data regarding the products and services grantees select to support their initiatives. These findings are based on data collected through the Product and Services Inventory (PSI) and Training Exit Survey (TES). The PSI is completed by grantees and includes a detailed description of their investments in products and services they use to support their suicide prevention activities. The TES is completed by participants in GLS-supported training activities and includes information about them, their perception of the training, and their intentions to use the training.

Finally, the GLS cross-site evaluation collects information about the systems, procedures, and services in place and under development that state and tribal mental health service organizations use to identify, refer and serve at-risk youth. These are the tracking mechanisms and other structures that

trained gatekeepers and screeners tap to ensure that youth are receiving the services they need. Quantitative data derived from the Early Identification Referral and Follow-up Analysis (EIRF) will be presented with qualitative information about the impediments and facilitating factors associated with accurately and comprehensively tracking at-risk youth from early identification to referral through to service receipt.

#### Findings

Preliminary results regarding existing infrastructure indicate multiple agency involvement in the suicide prevention services provided through the Garrett Lee Smith Program. Agencies are focused on connecting at risk youth to the services. Additional analyses prepared for this poster will focus on existing infrastructure dynamics that encourage more integrated service delivery. Other EDI findings will include a review of the existing Management Information Systems and how data sharing is used by local agencies to support service provision of youth receiving mental health services.

Findings regarding the training, products and services supported by GLS resources indicate that many sites are selecting formally sanctioned EBTs, while others are implementing services and products that are hybrids or original creations based on local needs, political considerations, economic considerations, or individual decision-maker preferences. The standards by which grantees determine EBT status is also diverse. Furthermore, many products and services implemented by grantees are focused on training community gatekeepers and screeners. More than 40,000 members of grantee communities have undergone training supported through GLS resources. Data from the TES will describe the demographic characteristics, professional role, and institutional affiliation of trainees as well as their perception of the training and trainees' intent to use what they learned.

Finally, the poster will include preliminary demographic, referral and service receipt data including. For example, of the youth identified, 60% are female; 11.3% are Hispanic/Latino; 19% are Black or African American; 73% are White; 5.9% reported on races not included in the choices listed. American Indian or Alaskan Native, Asian, and Native Hawaiian made up less than 1% of the population respectively. Youth identified at risk are, on average, 15 years old.

Additional anecdotal evidence suggests several barriers and facilitators to tracking youth identified at-risk for suicide:

- Barriers
- Weak data infrastructure
- Finite resources
- Isolated gatekeepers and undefined service networks
- Resistant stakeholders
- Complex consent processes
- Facilitators
- Local staff invested in facilitating information flow

- Stakeholder buy-in
- Community partnerships
- Technological capabilities
- Defined referral networks and protocol

#### Conclusions

Analyses of GLS data indicate that grantee communities are enhancing their infrastructure to improve youth access to suicide prevention resources. Their suicide prevention initiatives typically

nmunities are ccess to suicide iatives typically field. Communities believe their services work but, in many cases, have not yet moved these practices from a "practice-based evidence" status to an evidence-based practice. Finally, GLS grantees often find it difficult to track youth at risk with existing infrastructure. However, referral and follow-up information indicate large numbers of youth being identified through both screening and gatekeeping activities.

## Poster 5 Flexible Funds Expenditures in System of Care Communities

Presenting: Anna Krivelyova & Kendralin Freeman Contributing: E. Foster

#### Introduction

System of care communities set aside money from their grant funds to support services for children and families receiving services through the program when other payment sources are not available. These funds commonly are referred to as flexible funds and mostly are used to subsidize nontraditional services that are not commonly covered by Medicaid or other third-party payors. In this study, we used data from selected system of care communities to describe the range of services that are purchased with flexible funds and associated expenditures. We also investigated the association of child and family baseline characteristics with the amount of flexible funds expenditures incurred.

#### Methodology

We examined the use of flexible funds in systems of care by analyzing payment information captured in management information systems and provided by four system of care communities funded by the Center for Mental Health Services (CMHS) in 1999: Families and Communities Together in Delaware; Worcester Communities of Care in Massachusetts; Orange, Person, and Chatham Counties System of Care Network (OPC SOC) in North Carolina; and Community Alliance Reform Effort (CARE) in New Hampshire. Additional data were collected through the descriptive and outcome studies of the national evaluation of sites funded in 1999 and include child's demographic information, Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 1990) score, and caregiver objective strain score as measured by Caregiver Strain Questionnaire (Brannan, Heflinger, & Bickman, 1998). To account for the nonnormal distribution of costs, we utilized a gamma regression model with a log link to estimate the effects of predictors on average monthly flexible funds expenditures.

involve multiple youth serving agencies and organizations. Grantees and cooperating agencies coordinate their efforts in order to help connect

youth at-risk with services. The services being supported through

these initiatives focus on moving evidence-based practices into the

#### Results

Table 1 describes the distribution of flexible fund expenditures across children in the four communities. Over the 4-year period, 51 children received services provided by flexible funds in Delaware, with an average cost per child of \$442.39 (SD = \$481.94) and a median cost of \$285.44. Worcester Communities of Care in Massachusetts provided services purchased by flexible funds to 44 children over a 1-year period. The average cost per child in this community was \$5,825.68 (SD = \$5,084.61), and the median cost was \$6,064.61. In North Carolina, services purchased with flexible funds were made available to 116 children over a period of nearly 4 years, with an average cost per child of \$361.83 (SD = \$281.88) and a median cost of \$322.50. In New Hampshire, 57 children benefited from flexible funds over a 3-year period. The average cost per child in this community was \$964.41 (SD = \$1,067.33), and the median cost was \$525.00.

Table 1
Flexible Funds: Allocation of Costs Across Children

	Delaware	Massachusetts	New Hampshire	North Carolina
	(n = 51)	(n = 44)	(n = 57)	(n = 116)
Period	December 2000–	July 2001–	October 2001–	August 2001–
	February 2005	June 2002	December 2004	June 2005
Total Cost	\$22,561.97	\$256,329.90	\$54,971.41	\$41,972.51
Average Cost per Child	\$442.39	\$5,825.68	\$964.41	\$361.83
	(\$481.94)	(\$5,084.61)	(\$1,067.33)	(\$281.88)
Median Cost per Child	\$285.44	\$6,064.61	\$525.00	\$322.50
Range	\$20.00-\$2,107.62	\$11.15-\$23,031.08	\$35.00-\$4,392.75	\$17.50-\$1,410.00
Average Cost of Bottom 20%	\$47.20	\$274.76	\$89.33	\$70.73
	(\$13.64)	(\$244.76)	(\$48.25)	(\$34.58)
Percent of Total Cost From Bottom 2	0% 2.1%	0.9%	1.8%	3.7%
Average Cost of Top 20%	\$1,259.91	\$13,630.33	\$2,843.01	\$820.38
	(\$397.42)	(\$5,108.17)	(\$815.24)	(\$270.58)
Percent of Total Cost From Top 20%	55.8%	42.5%	56.9%	43.0%
Annualized Average Cost per Child	\$104.72	\$5,825.68	\$296.74	\$93.87
	(\$114.08)	(\$5,084.61)	(\$328.41)	(\$73.12)

Given the variation across communities in the length of time for which data were available, we constructed the annualized average costs per child to make the data comparable across the four system of care communities. The annualized averages revealed that Massachusetts had the highest per-child flexible funds expenditures, followed by New Hampshire, Delaware, and North Carolina. Across the four communities, a relatively small number of children incurred a large proportion of total costs. Between 42.5% and 56.9% of total funds across the four systems of care were spent providing services to the 20% of children with the highest costs.

All four communities used flexible funds to pay for some traditional mental health and substance abuse treatment services (e.g., assessment and evaluation), housing assistance (including rent and utility payments), recreational activities, environmental modifications (providing service or items that made the child's and family's home life safer, such as installing a house alarm), food, and miscellaneous financial support. Other common spending categories were therapeutic camps, afterschool programs (e.g., music and art lessons), clothing, and educational support such as tutoring and tuition assistance. Less common services supported by flexible funds were equine therapy in Delaware and North Carolina, and medical services in Massachusetts and New Hampshire. The four communities differed in the proportions of total funds allocated to each service. For example, in Delaware, the highest proportion of overall flexible funds was allocated to housing support (17.7%), and in North Carolina and New Hampshire to therapeutic camp (30.8% and 22.3%, respectively). Therapeutic camp accounted for a large proportion of expenditures in Delaware as well (17.5%). In Massachusetts, afterschool and summer programs accounted for the largest percentage of the total flexible funds expended (25.8%).

Next, we combined the flexible funds expenditure data from the four communities to estimate the effects of child and family baseline characteristics on the costs incurred while receiving system of care services. Since the time periods for which flexible funds expenditure data were available differed across the four communities, average monthly flexible funds expenditures per child were constructed and used as a dependent variable in the multivariate model. The predictors included child gender, child race, total number of children in the household, family income, whether or not the family was on Medicaid, CAFAS score, caregiver objective strain score as measured by CGSQ, site indicators, and a control for child's length of time in services.<sup>1</sup> The flexible funds data and non-missing data on all of the predictors in the model were available for 112 children and youth.

Table 2 presents the descriptive statistics for the variables used in the model and the model estimates. Among significant predictors of flexible funds expenditures were child's race, total number of children in the household, whether or not the family was on Medicaid, and caregiver strain. For example, a marginal effect of one unit increase in caregiver objective strain is an increase in average monthly flexible funds expenditures per child of \$8.37. The results indicate that flexible funds expenditures are significantly lower for children who are White, who come from families with a smaller number of children, and who are on Medicaid.<sup>2</sup> Child's clinical status at baseline (as measured by CAFAS) was not a significant predictor of flexible funds expenditures.<sup>3</sup>

 Table 2

 Predictors of Average Monthly Flexible Funds Expenditures per Child (n = 112)

	Mean <sup>a</sup>	Coefficient <sup>b</sup>	p-value	Marginal Effect <sup>c</sup>
Average Monthly Expenditures	153.09 (270.96)	_	_	_
Male	0.80 (0.40)	0.02 (0.23)	0.945	\$0.70
White	0.66 (0.47)	-0.36 (0.17)	0.042	-\$16.86
Total Children in Household	2.62 (1.34)	0.13 (0.05)	0.014	\$5.59
Income Under \$15,000	0.41 (0.49)	-0.16 (0.17)	0.358	-\$6.86
Medicaid	0.86 (0.35)	-0.54 (0.21)	0.010	-\$28.95
CAFAS	132.68 (39.86)	-0.01 (0.01)	0.569	-\$0.06
Caregiver Objective Strain	3.32 (0.94)	0.19 (0.09)	0.039	\$8.37

Model also included a constant term, site indicators, and a control for child's length of time in services. The full set of results is available from the authors.

<sup>a</sup>Standard deviation in parentheses.

<sup>b</sup> Robust standard error in parentheses

<sup>c</sup>Evaluated at the mean.

#### Conclusion

The availability of noncategorical or flexible funding is among the most unique features of service delivery in system of care communities. In the context of a changing fiscal environment, strategic financing of systems of care is impossible without knowing what services are needed and for whom (Stroul & Pires, 2006). The study findings suggest that, as in other areas of healthcare, a subset of children account for a substantial share of expenditures. While several demographic variables and a measure of caregiver strain appear to predict between-youth differences in expenditures, child's baseline clinical symptomatology was not a significant predictor of future costs.

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<sup>1</sup> A control for child length of time in services was constructed as the number of days between the date each child entered system of care services and the latest date for which the flexible funds expenditure data were available for a particular community. This adjustment was necessary since the costs data in each community were available for a fixed period; however, children were entering services at varying time points.

<sup>2</sup> We reestimated the models utilizing other measures of public assistance (such as receipt of TANF or Social Security) in place of Medicaid. The findings were consistent, indicating that the receipt of public assistance is negatively associated with flexible funds expenditures.

<sup>3</sup> We reestimated the model utilizing other measures of child clinical characteristics, such as the Child Behavior Checklist (CBCL) total problems, internalizing, and externalizing scores (Achenbach, 1991) in place of the CAFAS. The clinical measures were never significant predictors of expenditures.

## Poster 6 Considerations for Implementing a Randomized Clinical Trial in Community Mental Health

#### Presenting: John Vetter, Geneva Strech & Christopher Foote

#### Introduction

The Treatment Effectiveness Study (TES) is a sub-study of the Systems of Care (SOC) National Evaluation. The Oklahoma Systems of Care is one of only two sites in the nation selected to implement TES. Brief Strategic Family Therapy (BSFT) is a brief family therapy approach that was developed and researched for children with disruptive behavior disorders. TES uses a randomized clinical trial design to assess effectiveness of BSFT within SOC on clinical outcomes by comparing outcomes among children who received the standard SOC services plus an evidence-based treatment to those among children who received only the standard SOC services.

The implementation and management of the TES evaluation presented many problems related to the therapy model and the host community mental health agency. In reaction to problems, changes were made in not only the original research design, but also within the host agency and its associated SOC program. The most substantial items that, in this instance, did steer the research implementation were the designation of pre-existing therapeutic relationships, recruitment shortfalls, and the many practical implications related to the malleability of the therapy model. This poster considers the potential for similar flaws and responses when designing a randomized trial in a community mental health center setting with the aim of providing guidelines that may result in more robust evaluation designs and increase the chance of success in measuring a model's effectiveness.

#### Methodology

The participants for TES are selected from youthful clients at North Care Center in Oklahoma City. They must score above the threshold in the areas of ADHD/ODD/CD on the Disruptive Behavior Disorder Screener (DISC), fit the appropriate age range, and have no pre-existing family therapeutic relationships.

Originally subjects were recruited only from North Care's Systems of Care site. Based on the intake volume of the SOC site, the recruitment goal was established.

The original research design was altered during the test family phase to keep the beginning of family therapy from pre-empting the wraparound plan TES is supposed to work under. This change was effectively abandoned after it became an even larger concern to possibly delay a family's more immediate needs. A few months later the age range was expanded in an attempt to gain more recruits since so many were excluded by pre-existing therapeutic relationships. Consistent communication about the recruitment problems with SOC employees led to the discovery that pre-existing therapeutic relationships, with a loose understanding from some staff of a true therapeutic relationship, often did not exist in any professional capacity. Allowing a more centralized person to gather more in-depth information about true professional relationships decreased the number of false ineligibilities for pre-existing therapeutic relationship reasons. Still, recruitment numbers continued to be small, and this, together with problems with families dropping out, led to recruitment from the general North Care population. The intake procedure was also centralized, with the North Care staff doing intake assessments. Recruitment subsequently increased, but this change did

alter the research design further, since the control group was originally SOC services as normal versus SOC services with an evidence based practice. Now, the control group was any North Care or SOC services as normal versus these services plus an evidence based practice.

Instruments for the TES evaluation include: the 8 youth and 12 caregiver instruments in the Oklahoma SOC CMHS National Evaluation Longitudinal Study at baseline and six-month intervals; youth and caregiver Ohio Scales at 0 and 3 months; youth and caregiver Therapeutic Alliance Scale at 1, 2, and 3 months; a caregiver Therapy Alliance Scale at 3 months; and caregiver forms of the Family Assessment Measure and Conflict Behavior Questionnaire at baseline and six-month intervals. In addition to the quantitative measures listed, a qualitative measure of those involved in managing the various aspects of the study and families willing to cooperate is being developed to further assess the strengths and weaknesses of implementing the BSFT model in a community mental health environment.

#### Conclusions

The many issues that have impeded recruitment goals lead to a number of changes in both the host agency and research design. Understanding the problems associated with the BSFT model in this instance may help other research avoid the same issues and the effect on one's intended research design. Aside from the recruitment shortfalls, one should also assess the practical implications of a therapy model's flexibility. Choosing a model with rigorous defense to fidelity is great from an evaluation standpoint but can cause stress on the availability and freedom of staff. Training presented a great problem with the BSFT model. While training was available from a few sources, its certification is rigorous and a high attrition rate can be expected. TES suffered with the FTE of the BSFT therapists dropping with their own life changes and the subsequent restrictions of available hours and was unable to recover, given the high cost and time involved in training.

Recent graduates tend to look toward community mental health centers as a great source of entry-level jobs to gain necessary experience to move toward a more private practice structure. The staff turnover can be high in such a situation, straining the capacity against the demand of therapy. As demand increased to capacity at the host agency for services, the trained therapists became limited because of the ethical consideration to not deny necessary services to others not involved in the study.

We believe our experiences with the Treatment Effectiveness Study are considerations that other researchers can take lessons from because:

- Clients introduced to a clinical trial will have therapeutic relationships in past or current form.
- A new therapy model very likely will interfere with, or change, an existing practice.
- Not having resources for re-establishing training can have pervasive effects.
- Practitioners need to understand whether a model is too demanding not only for research purposes, but even for implementation in a community mental health setting.

### Poster 7 **Examining Collaboration in Children and Youth Mental Health Systems using Social** Network Analysis

Presenting: Bhuvana Sukumar & Elana Light

#### Introduction

The Substance Abuse and Mental Health Administration (SAMHSA) has provided funding to two major initiatives: the National Child Traumatic Stress Initiative (NCTSI), and the Garrett Lee Smith Memorial Suicide Prevention Program to improve the mental health services system infrastructure for children and families who have experienced trauma and for youth at risk for suicide. For any interorganizational network or systems, collaboration is the most critical and essential component for exchanging knowledge and experience. Through collaboration, the two SAMHSA programs outlined above are trying to transform the mental health system infrastructure as well as the service delivery system and in turn improving access to care and services provided to children and youth. The relevance of this presentation to mental health practice and policy is that it makes a unique contribution to the knowledge base about children's mental health service delivery systems. First, this presentation will use social network analysis to inform the nature and the extent of collaboration among NCTSN centers in the NCTSI program and some of the factors that facilitate and impede collaboration. Finally, the presentation will examine the suicide prevention network characteristics and nature of their interactions.

## **NCTSI Program**

#### Method

The web based Network Survey developed for this study assesses collaboration by inquiring about the extent to which each NCTSN center (Category I centers: Coordinates the network activities, Category II centers: Develop and disseminate evidence based practices, and Category III centers: Implement evidence based practices and provide clinical services) interacts with every other center on selected key NCTSN Network activities that are highlighted in table 1. The Network Survey was administered to 85 respondents from 44 currently funded NCTSN Trauma centers. Approximately 73% (62 respondents) of the sample completed the survey. Of the 15 alumni center respondents who were identified as being appropriate to complete the Network Survey, 33% (five respondents) completed the survey.

#### Findings

Social network analysis was applied to identify levels of interorganizational communication, clusters of development activity, and leading organizations. Network activities were categorized into 7 domains (Governance, developing products, adopted products, delivered training, received training, hosting conferences, and coordinate NCTSN activities) within which social network analysis techniques were applied. Within each domain, the center personnel were asked to select from the list of all centers the centers with which they had the most contact in the previous 12 months. Univariate data on the seven domains are presented in table 1.

Social network analysis on the relationship between centers in the governance area or domain showed that every center either chose or was chosen by at least one other center (Figure 1), so that no center was isolated on this domain. As expected, the category I centers and at least 10 currently funded Category II centers played a central role in Network governance. Category III centers seemed to play a peripheral role in comparison to Category II centers on Network governance. On average, centers reported links with five other centers with which they collaborated on Network governance issues.

On product development, again category I centers were central players and this finding confirms the coordinating role played by these centers. Some Category II currently funded centers seemed to be more involved with certain Category III currently funded centers on activities related to product development. At least two Category III centers that lost funding in 2005 were very much involved and interacting actively with Category II centers that were central players. This finding indicates that centers that lost their funding were still active in the Network, especially with product development.

A major facilitator of collaboration as reported by participants was the shared interest and program focus of the NCTSN centers. Willingness of the NCTSN centers to learn and share expertise, as well as participate on workgroup committees and collaborative groups, also was reported to have greatly enhanced the potential for successful collaboration. Major challenges to collaboration as reported by the Network Survey respondents included time and resource constraints, long-distance communication between centers, and limited opportunities for face-toface meetings with staff members from other centers.

Table 1				
Metrics for the Seven Domains				

Domain	Number With Data (a)	Number of Isolates (b)	Average Center Links (c)	Network Density (d)	Clustering (e)	In-degree Centralization (f)
Governance	43	0	4.93	.116	.291	33.43
Developing products	43	0	4.96	.117	.291	24.69
Adopted products	43	8	3.31	.078	.205	25.63
Delivered training	43	4	3.41	.080	.277	8.10
Received training	43	7	3.37	.079	.151	31.35
Hosting conferences	43	11	2.61	.062	.171	19.41
Coordinated NCTSN activities	43	10	3.48	.082	.301	28.29

a The number of centers that had data.

b The number of centers that were not connected to other centers at all.

c The average number of connections or ties between centers.

d The number of connections between centers, divided by the possible number of connections or ties between centers.

e A measure of the degree that the Network consists of interconnected pockets of centers.

f A measure of the degree to which links are concentrated toward one or a few centers.

#### **Garrett Lee Smith Memorial Suicide Prevention Program**

#### Method

The RNS is a web-based survey administered to one administrator and one direct service provider in each agency/organization that comprises a referral network. Survey respondents identified the extent and quality of collaboration along series of 12 functional domains, including the referral to and provision of mental health services. Respondents identified the degree of formality in interagency procedures, such as referral mechanisms, data sharing agreements, and protocols for communicating receipt of referrals and provision of services. Facilitators and Barriers were also assessed.

#### Findings

Preliminary findings from the administration of 19 referral networks involved in providing suicide prevention services indicate that administrators and direct service providers are collaborating with other child serving agencies across several domains. The greatest amount of collaboration occurred for the administration of suicide prevention efforts and the sharing of information related to suicide prevention. Surprisingly, direct service providers reported a greater amount of collaboration than administrators for both these key activities.

Additional analyses will utilize SNA for one selected community using a gatekeeper approach to identifying youth at risk for suicide.

#### Conclusion

The data from the Network Survey indicate a well-integrated Network and that centers are more likely to report frequent communications with other centers and linkages with regard to governance. Findings from this survey suggest that although significant efforts have been made to maintain the collaborative structure of the NCTSN network, additional efforts are needed to facilitate each center's ability to actively participate and fully benefit from membership.

Preliminary analysis from the RNS survey suggests that while mental health agencies are integral to interagency collaboration, a variety of traditional and nontraditional child-serving organizations are also involved. Further analyses will demonstrate how social network analysis can highlight which agencies are integral to the collaboration process.

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Figure 1 Interaction Among Centers on Network Governance

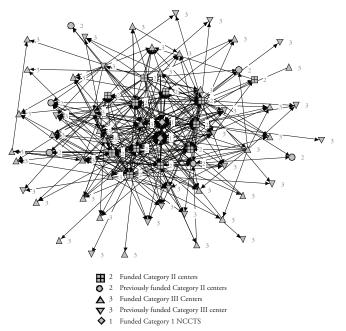


Table 2 Average Number of Linkages Identified per Key Activity

	Administrator	s (n = 18)	Direct Service Providers (n =19		
Key Activity	Average number	Median	Average number	Median	
	of linkages	rating	of linkages	rating	
Administration of suicide prevention efforts and decision making	4.0	3.9	4.5	4.0	
	2.8–5.7	3.6–4.3	3.0–6.2	3.7–4.3	
Sharing information related to suicide prevention	4.2	4.0	4.4	3.9	
	3.4–5.1	3.7–4.4	2.7–6.2	3.7–4.3	
Sharing resources to support the suicide prevention program	3.6	3.9	3.8	4.0	
	3.0–4.5	3.4–4.2	2.7–5.4	3.1–4.4	
Developing service infrastructures to support suicide prevention efforts	3.7	3.8	4.0	3.8	
	2.9–4.9	3.5–4.1	2.7–5.3	3.5–4.3	
Providing referrals for youth in need of servic	e 3.2	3.7	3.0	4.2	
as part of suicide prevention efforts	1.9–4.3	3.6–4.0	1.7-4.3	3.3–4.6	
Receiving referrals for youth in need of servic	e 2.3	3.7	2.0	4.0	
as part of suicide prevention efforts	1.2–3.6	3.5–4.3	1.7–4.2	3.8–4.3	
Coordinating suicide prevention gatekeeper training activities	2.9	4.0	2.2	4.0	
	1.9-3.5	3.5–4.7	1.0–3.8	3.9–5.0	
Coordinating suicide prevention or mental health screening activities	2.2	3.9	1.9	3.8	
	1.4–3.2	3.6–4.3	1.0–3.0	3.6–4.4	
Delivering or receiving technical assistance or	2.5	4.0	2.7	4.0	
consultation around suicide prevention	1.2–4.0	3.6–4.5	1.7–3.6	3.8–4.2	

## Poster 9 Predictors of Missed Appointments Over the Course of Child Mental Health Treatment

Presenting: Michael Gordon & Lawrence Lewandowski Contributing: Kevin Antshel & Danielle Seigers

#### Introduction

No-show rates for mental health and substance abuse clinics are commonly pegged at 15-30%. Missed appointments in service delivery systems represent a substantial impediment to effective case management, clinical efficiency, staff morale, and resource utilization. Despite the serious impact of patient noncompliance on clinic/program functioning, researchers have paid little attention to the topic, especially for pediatric populations. In one of few studies that investigated predictors of missed appointments, Kruse, Rohland, and Wu (2002) found five significant predictors: a poor family support system, not taking psychotropic medication, having health insurance, and being both young and Hispanic.

The current study presents data from a large number of patients regarding the extent to which missed appointments can be predicted by demographic variables, diagnostic status, parental psychopathology/family history of mental disorders, and staff variables. Unlike prior studies, we focused on ongoing treatment, not just the initial appointment. We hypothesized that parent factors (such a level of parental psychopathology) would be more predictive than child-related variables.

#### Method

We amassed data on consecutive referrals over a 6-year period to a general child and adolescent psychiatry clinic based in an academic medical center. We only included in this sample children who had been seen for more than the initial intake appointment. We defined a missed appointment as a scheduled session that the child failed to attend and for which no one called to cancel 24 hours prior to that scheduled time.

#### Results

#### **Demographics**

The sample consisted of 2,903 patients (1,727 males, 1,176 females) between the ages of 3 and 17 who were seen for a total of 31,941 appointments. The median number of children per family was 2. Our sample was ethnically diverse, with just over half from Caucasian parents. The remainder represented children of African American, Latino and American Indian heritage.

Sixty percent of the clinic sample was covered by private insurance. Seventy percent of the sample received only psychotherapy. The remaining 30% received pharmacotherapy or combined psychotherapy and pharmacotherapy.

A variety of DSM-IV diagnoses existed in the child clinic population; the three most prevalent diagnoses were disruptive behavior disorders (e.g., ADHD, ODD / CD) (26.9%), anxiety disorders (e.g., separation anxiety, OCD, generalized anxiety disorder) (24.1%) and mood disorders (e.g., Major Depressive Disorder, Bipolar disorder) (19.3%).

Variables that discriminated between families who missed at least one appointment from those who never missed an appointment. In our sample, 38.3% never missed an appointment without cancelling prior to 24 hours. The no-show rate for the entire sample was 12.7%. The average number of missed appointments for those who did miss them was 3.7 (*SD* = 1.1) Both groups had the same total number of appointments prior to discharge (Mean for those who never missed, 16.9 (3.8) as opposed to 18.6 (5.5) for those who missed F(1, 2901) = 3.12, p = .103, Cohen's d = .18. **Sociodemographic variables.** Ethnicity, parental marital status, and father's years of education were all associated with the number of missed appointments. Being Caucasian, having parents who were married, and having a father with a higher level of education were all associated with missing fewer total sessions.

*Clinical variables.* Children with an anxiety disorder diagnosis had fewer missed appointments. Children who had been placed in special education and had a history of psychiatric hospitalizations, violence, suicidal ideation/ attempt or trauma were all more likely to miss psychiatric appointments. Parents who themselves had a history of a psychiatric disorder were more likely to miss appointments.

*Service delivery variables.* Children who only received medication or who were being seen by MDs were more likely to miss appointments.

#### **Predictors of Missing an Appointment**

Only those 13 variables that were significant at the p < .05 level in the ANOVA analyses were entered into the backward stepwise logistic regression analysis. Three of the 13 predictors were independently associated with missing an appointment when controlling for the other variables. Maternal depression alone was a robust predictor of which pediatric patients would miss appointments (OR = 6.21). Variables which appear to attenuate risk for missing an appointment include having a child anxiety disorder diagnosis and having married parents. The combined explanatory power of these two variables, however, is significantly less than the predictive power of maternal depression.

#### Predictors of the Total Number of Missed Appointments

To predict the total number of appointments missed, we include only those families who missed  $\geq 1$  appointment. The same 13 variables that were significant at the p < .05 level in the ANOVA analyses were entered into the backward stepwise linear regression analysis. Categorical variables with two levels (e.g., history of parental psychopathology, etc.) were directly entered as predictor variables. Two of the 13 predictors were independently associated with missing an appointment when controlling for the other variables. History of maternal depression ( $R^2 = .463$ ) again emerged as the strongest predictor of the total number of appointments missed. A child anxiety disorder diagnosis again attenuated risk for missing many appointments.

#### Conclusions

These findings identified a range of factors associated with missed appointments for children in ongoing treatment. Nine of the factors were related to parent/family variables while four were tied to child attributes. Furthermore, the most robust predictor of missed appointments was whether the mother had a history of depression. That one factor dwarfed all others to such an extent that the other variables failed to improve its predictive power. This finding bolsters the notion that the level of maternal depression should be a key focus of a child's ongoing treatment, if for no other reason than to better ensure treatment adherence. It also adds to an already substantial literature that shows an impact of maternal depression on many domains: the accuracy of maternal responses on child behavior rating scales, the potential benefit of parent training and cognitive behavioral approaches, and a child's vulnerability to future psychopathology. If further studies replicate these findings, the argument could be made that maternal depression should be regarded as a critical factor in the management of child psychiatric disorders.

#### Reference

Kruse GR. Rohland BM. Wu X. (2002). Factors associated with missed first appointments at a psychiatric clinic. *Psychiatric Services*, 53(9), 1173-1176.

## Poster 10 The Wraparound Fidelity Assessment System: Measures, Methods, and Data from National Pilot Sites

Presenting: April Sather, Eric Bruns & Kelly Hyde

#### Introduction

Wraparound is a care management process that has evolved over the past 20 years through efforts to help children with the most challenging concerns function more effectively in home, school, and community settings. As wraparound has become a more widely implemented option for coordinating care for youth with serious and complex mental health issues, programs, communities, and states have been increasingly interested in measuring implementation fidelity (Bruns et al., 2004; Bruns et al., 2005).

#### The Wraparound Fidelity Assessment System

The Wraparound Fidelity Assessment System (WFAS) is a multi-method approach to assessing the quality of individualized care planning and management for children and youth with complex needs and their families. The instruments that comprise the WFAS can be used individually or, to provide a more comprehensive assessment, in combination with one another. This poster presents psychometric data collected to date for four instruments that comprise the WFAS. WFAS instruments include:

*The Wraparound Fidelity Index 4.0 (WFI-4)* is a set of four interviews that measures the nature of the wraparound process that an individual family receives. The WFI-4 is completed through telephone or face-to-face interviews with four types of respondents: caregivers, youth (11 years of age or older), wraparound facilitators, and team members. The WFI-4 includes 40 items (32 items for the youth form), with four items dedicated to each of the 10 principles of wraparound. Items are organized by the four phases of wraparound (engagement, planning, implementation, and transition), and yield scores for each of the 10 principles and four phases of wraparound, as well as a total fidelity score, all of which are expressed as a percent of total possible score.

**The Team Observation Measure (TOM)** is employed by external evaluators to assess adherence to standards of high-quality wraparound during team meeting sessions. It consists of 20 items, with two items dedicated to each of the 10 principles of wraparound. Each item consists of 3-5 indicators of high-quality wraparound practice as expressed during a child and family team meeting. Working alone or in pairs, trained raters indicate the whether or not each indicator was in evidence during the wraparound team meeting session. These ratings are translated into a score for each item as well as a total fidelity score for the session overall.

*The Documentation Review Measure (DRM)* is a 29-item instrument that is used to assess the primary documentation requirements of high fidelity wraparound. The DRM is used by a trained evaluator who uses the tool to rate conformance to the principles of wraparound in materials such as the child and family's wraparound plan, crisis and safety plans, transition plan, and meeting notes. Like the other WFAS fidelity tools, items on the DRM result in scores for individual items, the 10 principles of wraparound, and a total score for the instrument overall. *The Community Supports for Wraparound Inventory (CSWI)* is a research and quality improvement tool intended to measure how well a local system supports the implementation of the wraparound process. The CSWI presents 40 community or system variables that research has shown should be in place in order to support implementation of the wraparound process. The CSWI is somewhat unique from the other WFAS instruments in that it assesses the system context for wraparound as opposed to the fidelity to the practice model for an individual child and family and is completed on line by stakeholders in the local system.

**Supporting Technologies.** Currently, we are piloting a web-based resource called the WFI Online Data Entry and Reporting System (WONDERS) that will allow licensed users to enter their data using a web portal that will compile data from the WFAS instruments into one exportable database, regardless of how many people are collecting and entering data, and regardless of where they are located. This system will allow the user sites to automatedly create a range of reports. WONDERS will be on display at this poster session.

#### Method

Data presented was compiled from pilot sites who requested use of the instruments that comprise the WFAS. Local users were provided with the instrument(s), a User's Manual, and instructions for training data collection staff to criteria on the instrument(s). For example, for the WFI-4, data collection staff were provided with pre-recorded WFI-4 interviews and instructed to score these practice interviews per instructions and scoring rules presented in the scoring manual. For the TOM, such training to criteria was completed via videotaped team meetings presented on DVD. For the DRM, training of reviewers to criteria was conducted using redacted case file documents.

#### Results

Wraparound Fidelity Index. Results from the WFI-4 showed mean scores of 80% for the Facilitator form, 73% for the Caregiver form, 72% for the Youth form, and 77% for the Team member form. The WFI-4 demonstrated good internal consistency for all items as assessed via Cronbach *alpha* (*alpha* = .82), though internal consistency was found to be lower for the four wraparound phase subscale scores, and below .60 for many of the individual Principle scores (likely because they only include four items). Inter-rater reliability was examined by comparing scores assigned by pairs of raters for the same pre-recorded WFI-4 administration and was found to be acceptable per assessment using coefficient Kappa. WFI-4 validity was explored by comparing WFI-4 scores for three sites that self-reported to be using the instrument to determine pre-training baseline fidelity or that were using the instrument to assess adherence in the absence of implementation of a full wraparound process. Scores were found to be significantly higher for the Caregiver and Youth forms of the WFI-4 for sites implementing wraparound as compared to sites implementing an alternative service model or not supporting full wraparound implementation, though not for the Wraparound Facilitator form.

*Team Observation Measure.* Data for the TOM showed mean TOM scores of 57.9% (range = 22 - 86; *SD* = 17.3) and a normal distribution of scores. Cronbach *alpha* for the 78 individual indicators of the TOM was .86. For a subsample of two sites, data were available for pairs of observers who completed the TOM independently for N = 22 team meetings. Inter-rater reliability for these pairs was found to be 79% for individual TOM indicators and 72% for TOM items.

**Community Supports for Wraparound Inventory.** Data for the CSWI were compiled from N = 7 sites nationally via an on-line survey (N = 230 total respondents). Results showed a mean score of 77 (out of a total possible of 160; SD = 23), with site-level means ranging from 41 – 108. Evidence for construct validity was provided by high internal consistency scores as assessed by Cronbach's *alpha* combined with good discriminant validity across sites (i.e., analyses demonstrated that raters at different sites had consistent ratings of relative strengths and needs within sites that differed from other sites). In addition, qualitative analysis of pilot data showed that CSWI ratings aligned with open-ended responses and interview data provided by respondents and stakeholders at the pilot sites.

#### Discussion

The results presented at this poster demonstrate the strengths and weaknesses of the instruments of the WFAS as methods for assessing implementation fidelity for the wraparound process. For the WFI-4, strengths include its overall internal consistency and apparent ability to discriminate between wraparound communities and non-wraparound (or pre-wraparound) communities. Weaknesses include moderate to low internal consistency scores for subscales such as the 10 wraparound principle scores, likely resulting from the small number of items and heterogeneity of implementation factors being assessed. The WFI-4 also continues to show restriction in its range of scores that is typical of self-report measures.

Data from the TOM and DRM are preliminary but show promise in that scores demonstrate internal consistency, normality and, for the TOM, adequate inter-rater reliability for individual indicators. More complete validation of these measures will require discriminant validity tests such as those completed for the WFI-4, and additional inter-rater reliability testing. Finally, data from the CSWI indicate it is a promising approach for assessing the readiness or support for implementing the wraparound process. An important next step will be to assess the relationship between CSWI scores and implementation fidelity as assessed by the other measures of the WFAS. All measures of the WFAS still need to be better studied with respect to association with outcomes experienced by children, youth, and families served via the wraparound process.

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## Poster 11 Substance Use Patterns and Mental Health Diagnosis Among Youth in Mental Health Treatment: A Latent Class Analysis

Presenting: Kara S. Riehman Contributing: Robert L. Stephens & Michelle L. Schurig

#### Introduction

High rates of co-occurring disorders with substance use disorder (SUD) have been found for conduct disorder (Myers, Brown, & Mott, 1995), attention deficit/hyperactivity disorder (ADD/ADHD) (Wilens et al., 1994), and mood disorders (Hovens, Cantwell & Kiriakos, 1994). Among adolescents served in SAMHSA-funded substance abuse treatment programs, 74% with a SUD also had a co-occurring condition; rates of SUD identified among youth served in SAMHSA-funded systems of care (SOC) were 4.3% (Turner, Muck, Muck, Stephens & Sukumar, 2004). Further, the association between mental health disorders and tobacco use among youth has become a significant public health concern. Early tobacco use is associated not only with alcohol and other illicit substance use, but also with depressive symptoms (Diego, Field, & Sanders, 2003; Martini, Martin & Anthony, 2002).

This study uses latent class analysis (LCA) to examine patterns of substance use among youth served in SOCs initially funded by SAMHSA between 1997 and 2000, and how these patterns are related to diagnoses of mood disorder, ADD/ADHD, or conduct disorder, as well as other youth characteristics upon treatment entry. Identifying classes of substance users and the characteristics associated with these groups may help providers assess problem severity and identify appropriate treatment options, and may help identify and address subsequent initiation and relapse.

#### Methodology

Latent class analysis allows for examination of shared characteristics across groups of youth with different distributions on several indicators at a point in time (Muthén, 2001). LCA categorizes different patterns of characteristics into a small number of mutually exclusive classes, with each class having a distinct probability of endorsing each characteristic. LCA also allows for exploration of the effects of covariates on class membership. For this study, the indicators defining latent classes included youth-reported substance use in the six months prior to service entry for ten different substances: alcohol, tobacco, marijuana, inhalants, psychedelics, cocaine (any form), stimulants, sedatives, opioids, and overthe-counter medications.

Participants were youth 11 to 18 years old (N = 1,228) and their caregivers enrolled in a longitudinal outcome study of the SOC program. Participants were assessed at entry into services and every six months subsequently up to 36 months.

This study used baseline data from the Demographic Information Questionnaire (DIQ) completed by caregivers and the Delinquency Survey (DS) completed by the youth themselves. Covariates of latent class membership were from the DIQ which collects limited information on the characteristics of the youth (age, gender, race/ethnicity) and caregiver (family income), as well as risk factors (ran away, attempted suicide) and baseline clinical information (conduct disorder, mood disorder, or ADD/ ADHD diagnoses). Substance use indicators were from the DS which collects self-reported substance use information from the youth.

#### Results

LCA results indicated a four-class solution was best (Table 1). Figure 1 presents indicator profiles for the four groups. Class 1 showed high probabilities of endorsing alcohol, tobacco, and marijuana use but lower probabilities of endorsing other drug use. Class 2 showed moderate probabilities of endorsing alcohol, tobacco, and marijuana use but very low probabilities of endorsing other drug use. Class 3 comprised individuals who all used tobacco but had very low probabilities of using other drugs. Class 4 showed high probabilities of endorsing alcohol, tobacco, and marijuana use and the highest probabilities of any class for endorsing other drug use.

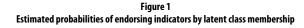
Analysis of covariate influences on latent class membership indicated membership in Class 1 (high-alcohol, tobacco, marijuana/low-other drugs) relative to Class 4 (high-all types) was significantly more likely for females than males. Those with a mood disorder diagnosis were significantly less likely to belong to Class 1 relative to Class 4. Membership in Class 2 (moderate-alcohol, tobacco, marijuana/no-other drugs) relative to Class 4 was significantly less likely for youth who were older, White, and had previously run away from home. Finally,

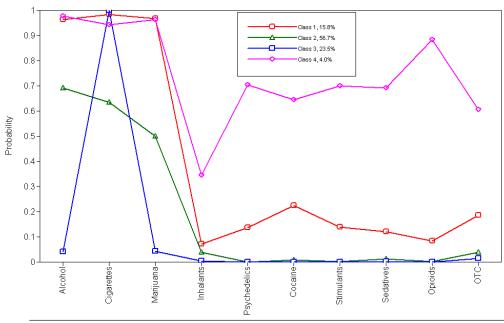
 Table 1

 Summary of Modeling Selection (N=1228)\*

No. of Classes	AIC	BIC	SSABIC	Entropy	VLMR LRT P	LMR Adj LRT P
1	25740.37	25883.53	25794.59	_		
2	7313.18	7466.57	7371.28	.894	.0000	.0000
3	7102.17	7357.82	7199.00	.825	.0000	.0000
4	7023.06	7380.98	7158.63	.743	.0325	.0334
5	7024.35	7484.53	7198.65	.756	.1056	.1067

\*BIC indicates Baysian Information Criterion; SSA BIC, sample size adjusted Bayesian Information Criterion; entropy, classification accuracy; VLMR LRT, Vuong-Lo-Mendell-Rubin likelihood ratio test; LMR adj. LRT, Lo-Mendell-Rubin adjusted likelihood ratio test.





membership in Class 3 (tobacco users) relative to Class 4 was significantly less likely for youth who were older, had previously run away from home, and had previously attempted suicide.

#### Conclusions

Consistent with previous findings, youth with a high probability of using all types of drugs (Class 4) were more likely to suffer from a mood disorder (relative to those in Class 1); but ADD/ADHD and conduct disorders were not related to membership in this class. The differences between Class 2 and Class 4 could be indicative of a developmental trajectory toward expanded use of other substances for which alcohol, tobacco, and marijuana serve as a gateway, particularly for White youth. Further, the differences between Class 3 and Class 4 highlight the importance of monitoring early tobacco use given the risk for subsequent depression and substance use reported in the literature.

These findings indicate youth presenting for mental health services exhibit difference patterns in their use of substances. These differences have implications for prevention and treatment. This information should be used to develop more targeted approaches for substance abuse prevention and treatment for youth entering mental health services.

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## Poster 12 Development and Assessment of the Collaborative Care for Attention Deficit Disorders Scale

#### Presenting: James P. Guevara & Paul E. Greenbaum Contributing: David Shera, Judy A. Shea, & Donald F. Schwarz

Acknowledgements: This research was funded by the National Institute of Mental Health (K23 MH065696).

#### Introduction

The current de facto mental health system for children is fragmented and inefficient. Children are served by various agencies with little collaboration among the agencies in the delivery of services. Few instruments exist to measure collaboration in a system of care across childserving sectors (e.g. primary care, mental health, child welfare, education). Our aim was to describe the development and assess the validity and reliability of the Collaborative Care for Attention Deficit Disorders Scale (CCADDS), a measure of collaboration across child-serving agencies for children with ADHD who attend primary care practices. If evidence suggests that scores are valid and reliable, the CCADDS may assist primary care clinicians and health care organizations to measure collaboration for quality improvement initiatives in ADHD management.

#### Methodology

Collaborative care was conceptualized as a multidimensional construct. The 41-item CCADDS was developed from an existing instrument the Interagency Collaboration Scale (Greenbaum et al., 2004), review of the published literature, focus groups, and an expert panel. The CCADDS was field tested in a national mail survey of 600 stratified and randomly selected practicing general pediatricians identified from the American Medical Association's 2004 Directory of Physicians in the United States (American Medical Association, 2004). Psychometric analysis included assessments of factor structure, construct validity, discriminant validity, and internal consistency.

#### **Findings**

The overall response rate was 51%. The majority of respondents were male (56%), age 46 years old and above (59%), and white (69%). Common factor analysis identified 3 subscales (Table 1): beliefs, collaborative activities, and connectedness. Four items without salient loadings were dropped. Internal consistency reliability (coefficient  $\alpha$ ) for the overall 37-item scale was 0.91, and subscale scores ranged from 0.80 to 0.89. Scores on the CCADDS correlated as expected (Table 2) with scores on the Physician Belief Scale (McLennan et al, 1999), a validated measure of provider psychosocial orientation (*r* =-0.36, *p* < 0.001) and with self-reported frequency of mental health referrals or consultations (*r* =-0.24 to *r* = -0.42, *p* < 0.001). CCADD scores were similar among physicians stratified by race/ethnicity, gender, age group, and practice location.

#### Conclusion

Scores on the CCADDS appear to be valid and reliable for measuring collaborative care processes in this nation-wide sample of primary care clinicians who provide treatment for children with ADHD. Future research is needed to confirm its psychometric properties and factor structure and provide guidance on score

Table 1 CCADDS Subscales and Overall Scale

Scale	N=240	# Items	Mean (SD)	Minimum Observed	Maximum Observed	% at Max	Item-Total Correlation	Coefficient Alpha
Beliefs	238	12	51.5 (5.2)	35	60	4.2	0.28-0.63	0.80
Activities	231	12	33.7 (9.3)	13	60	0.4	0.47-0.71	0.88
Connectedness	236	13	39.3 (8.8)	19	65	0.4	0.41-0.70	0.89
Total	225	37	124.7 (18.4)	73	185	0.4	0.17-0.69	0.91

Table 2
 Correlations between CCADDS and PBS and Frequency of Mental Health Activities

Scale	CCADDS					
	Beliefs	Activities	Connectedness	Total		
PBS						
Beliefs	-0.22**	-0.18	-0.28**	-0.28**		
Burden	-0.12	-0.23**	-0.32**	-0.31**		
Total	-0.20*	-0.25**	-0.35**	-0.36**		
On-site Mental Health	-0.05	-0.22**	-0.15*	-0.20**		
Mental Health Referral	-0.14*	-0.13	-0.23**	-0.20**		
Mental Health Consultation	-0.17*	-0.27**	-0.40**	-0.42**		
Receipt of Information	-0.04	-0.26**	-0.42**	-0.37**		

Note: Higher scores on the CCADDS denote better collaborative care; lower scores on the PBS denote better psychosocial orientation; frequency of mental health activities scaled from 1 (always) to 4 (never). \* p < 0.05 \*\* p < 0.01

interpretation. If confirmed, this instrument may be of assistance to quality improvement efforts targeted at ADHD treatment in primary care settings, particularly for attempts to improve collaboration between practices and schools and mental health agencies.

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## Poster 13 Organizational Social Context and Attitudes Towards Using EBPs for Children's Trauma Treatment

#### Presenting: Marleen Radigan & Eric Frimpong

#### Background

The Child and Adolescent Trauma Treatments and Services Consortium (CATS) provided a unique opportunity to examine some of the emerging questions related to the implementation of evidence based practices (EBPs) in routine outpatient clinics in New York City. CATS was created in the aftermath of the World Trade Center (WTC) attack to address the need for treatment among the most highly affected children and adolescents post-9/11 (CATS Consortium; in press). CATS trained clinicians in NYS to deliver evidence-based cognitive-behavioral treatments for trauma to youth throughout New York City within nine "real world" agency settings.

The evaluation of CATS included an examination of multiple dissemination and implementation processes and outcomes including organizational and clinical attitudes. Previous studies have found that organizational culture affects organizational climate which in turn affects individual work attitudes and behaviors (Glisson and James, 2002). Other studies have examined how practitioner attitudes, organizational factors and clinical setting influence attitudes toward adoption of evidence based practices (Aarons, 2004; Glisson and James, 2002).

The current study attempts to generalize previous findings which showed team constructive culture and climate were related to the positive work attitudes of individual team members (Glisson and James, 2002). In addition, this study extends previous work by utilizing multilevel statistical modeling approaches to examine the effects of organizational social context on clinician attitudes towards the adoption and maintenance of new evidence based treatment practice (CATS intervention). We hypothesized that constructive organizational social context would have a positive effect on clinician attitudes towards adoption of new practices.

#### Method

Participants included 61 clinicians from 9 provider organizations that participated in the CATS project in NYC. Measures included participant demographics which were collected at baseline. Clinician attitudes towards adopting EBPs were measured using an adapted version of the National Survey Questionnaire developed by David Kolko. The adapted instrument contained 28 Likert type items on clinician attitudes toward the use of treatment manuals and clinical practice specifically related to the CATS trauma treatment intervention. The Organizational Culture and Climate survey developed by Glisson and James (2002) was adapted for the CATS study to measure organizational social context. The Organizational Culture and Climate survey contained 44 Likert type items and resolved to four domains: rigidity, stress, personalization and morale. Organizational and attitude measures were collected at baseline and at two points post CATS training.

Change in individual perception of organizational social context and in individual attitudes toward adoption of EBP practices were analyzed using paired t-tests. CATS providers organizational social context raw domain scores were converted to standard t-scores using normed scale scores constructed from a national sample of 99 mental health organizations (Green & Glisson, special communication). An index of within-group consistency, rwg, was computed for each of the four constructs that describe characteristics of the organizational social context to ensure that there was justification for aggregating individual level responses to measure organizational-level constructs (Glisson & James, 2002). Multilevel regression analyses (HLM) were conducted using the SAS Mixed procedure. Three HLM models were constructed to test the hypothesized relationships between team-level constructs and the individual-level outcomes of: work attitudes (morale) (Glisson scale) and attitudes towards child and family outcomes, and attitudes towards use of treatment manuals (Kolko scale). These models controlled for the effects of individual clinician characteristics, time, as well as the group level effects of organizational social context on individual work attitudes (morale) and on clinician attitudes towards adoption of new EBPs (child outcomes, use of treatment manuals) in the CATS project.

#### Results

Clinicians were primarily white (55%) and Hispanic (35%), had graduated within the last five years (75%) with a background in social work (35%) or psychology (51%). Clinician orientation was almost evenly split between psychodynamics (44%) and cognitive behavioral therapy (40%). Clinician baseline attitudes toward CATS trauma treatment intervention were: treatment manuals, M = 3.6; training and consultation, M = 4.4; supervision, M = 3.2; outcomes, M = 3.0; therapist personal style, M = 4.2; overall, M = 3.7. Clinician attitudes towards treatment manuals (Pr < 0.096) and outcomes (Pr < 0.071) improved significantly over time. Average individual clinician scores on social context at baseline were: rigidity M = 38.29, stress M = 40.26, personalization M = 23.83 and morale M = 55.82. Clinician morale (M = 54.07, Pr < .098) and personalization (M = 22.80, Pr < .033)decreased significantly over time and clinician stress increased significantly (M = 44.47, Pr < .009). Compared to a normed national sample, CATS providers tended to have higher scores on all 4 organizational domains. Within-organization consistency of social context domains as calculated by rwg ranged from 0.85 to 0.94 (rigidity Mrwg = 0.85, stress Mrwg=0.94, personalization Mrwg = 0.93) which provided justification for aggregating individual level responses to form team-level organizational constructs. The HLM analysis predicting individual-level work attitudes showed significant individual level effects for clinician

discipline (social work versus psychology) (F = 10.39, Pr > F = 0.0020), education (MS/BS versus PhD) (F = 7.05, Pr > F = 0.0100), and minority status (white versus minority) (F = 5.62, Pr > F = 0.0209). The HLM analysis predicting individual-level attitudes towards the use of treatment manuals as the dependent variable showed significant individual level effects for age (F = 13.73, Pr > F = 0.0004), gender (F =6.85, Pr > F = 0.0111), education (F = 12.86, Pr > F = 0.0007), minority status (F = 3.41, Pr > F = 0.0693), orientation (CBT, Psychodynamic, other) (F = 11.42, Pr > F = 0.0013) and a significant organizational level effect for personalization (F = 13.07, Pr > F = 0.0153). The HLM analysis predicting individual-level attitudes towards child outcomes showed significant individual level effects for clinician discipline (F = 3.72, Pr >F = 0.0584), minority status (F = 6.35, Pr > F = 0.0143) and significant organizational level effects for personalization (F = 9.18, Pr > F = 0.0291) and stress (F = 4.62, Pr > F = 0.0842).

#### Conclusions

This study found that only individual level attributes contributed to work attitudes, whereas both individual and organizational level attributes contributed to clinician work attitudes towards adopting EBPs.

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## Poster 14

#### Behavioral Health Model Development to Promote Evidence-Based Practice in a Statewide System of Care: Extended Day Treatment and Emergency Mobile Psychiatric Services

Presenting: Jeffrey J. Vanderploeg, Jennifer A. Schroeder & Robert P. Franks Contributing: Jacob Kraemer Tebes

#### Introduction

This poster will address the efforts in Connecticut to identify and implement best and evidence-based behavioral health practices. Through an ongoing partnership with the State of Connecticut's Department of Children and Families (DCF), the Connecticut Center for Effective Practice (CCEP) of the Child Health and Development Institute (CHDI) has engaged in consultation, program review and model development for programs serving children and youth with serious emotional disturbance. Two such efforts will be highlighted and discussed in this poster: Extended Day Treatment and Emergency Mobile Psychiatric Services.

In the first example, we describe model development for The Extended Day Treatment (EDT) program in Connecticut; a milieu-based multimodal clinical intervention for children and adolescents age 5-17 years old who have moderate-severity emotional and behavioral disorders, and their families. We describe EDT's grounding in system of care principles, and describe a model that provides comprehensive clinical care in the least restrictive and most normative environment appropriate to children's clinical needs. The model of care calls for the implementation of evidence-based and best practices at all levels of intervention.

In the second example, we describe model enhancement for Emergency Mobile Psychiatric Services (EMPS); a community-based program intended to provide youth and families with immediate access to in-person mental health assessment and brief intervention, linkage to appropriate community mental health resources, and prevention of unnecessary hospital emergency department (ED) visits and placement in restrictive clinical settings. Recommendations for model enhancement emphasize increased rates of mobility, while recognizing the need for EMPS to continue to provide short-term follow-up services.

#### Methodology

Recommendations for the development of an evidence-based model of care for EDT were based upon the following methods:

- A review of existing documents describing the Connecticut EDT program
- A broad review of the scientific and best practices literature
- Observation of select EDT programs and interviews with key informants at select programs
- Consultation with key stakeholders

Recommendations for enhancement of EMPS also relied on a number of methods. Staff at CCEP:

- Conducted an analysis of existing documents and data describing the current EMPS model and performance of the service;
- Engaged in an independent review of the relevant empirical and best practices literature;
- Conducted site visits to selected Connecticut EMPS providers, and;
- Consulted with selected national providers of emergency mobile services.

#### **Findings**

#### **Extended Day Treatment**

We recommended that EDT explicitly focus on system of care values and principles, and enhance its ability to generalize treatment progress from the center-based EDT environment to home, school, and community settings. A consistent set of core EDT services was recommended. These included: comprehensive intake assessment; treatment planning; structured therapeutic milieu; psychiatric evaluation and medication management; family therapy; group therapy; individual therapy; twenty-four crisis services; therapeutic recreation and expressive therapies; positive youth development activities; discharge planning, and; community referrals. Significantly, the EDT model included recommendations for implementing evidence-based practices across all treatment modalities, including individual, group, family, and milieu interventions, and that the selected evidence-based practices be applicable to the 5-12 and 13-17 year old age groups that compose the EDT population.

Glisson C. & James L. R. (2002) The cross-level effects of culture and climate in human service teams. *J Organiz Behav.* 23, 767-794.

An innovative approach toward EDT service structure was recommended for the revised EDT model. A three-tiered service delivery structure was recommended as a means to address the need for enhanced discharge planning focused on establishing linkages between youth and families and community supports and treatment services. The three tiers included Intensive (5 days per week), Standard (3-5 days a week), and Transitional (2-3 days a week) levels of service. "Intensive EDT" emphasizes symptom stabilization, "Standard EDT" maintains treatment gains and builds youth and family connections to community-based supports and services, and "Transitional EDT" focuses on the move from center-based treatment to full community-based supports and services. In addition, we will review recommendations for screening and assessment, staff training, and program evaluation/quality assurance.

#### **Emergency Mobile Psychiatric Services**

Although DCF had expressed interest in maximizing the mobile response capability of EMPS, it was recommended that a second, yet equally important, role be recognized and supported, specifically on of emergency department diversion and short-term intervention. A maximum six-week follow-up time period was recommended. This period of time can be used to stabilize behavioral health crises, provide some short-term follow-up interventions, and link youth and families to community-based services.

Next, we recommended that Connecticut develop realistic expectations for mobility from their provider network. Although DCF had previously recommended 100% mobility to their providers, our consultation with national programs and with Connecticut's providers suggest that a goal of 100% mobility is not likely to be realistic or consistent with best practices. In the area of statewide coverage, we recommended that Connecticut establish one centralized statewide call center for incoming crisis calls, and that this call center retain the responsibility for data tracking and reporting. In addition, Connecticut was asked to consider contracting with fewer providers across the state, with each contracted provider responsible for a geographical region of the state corresponding to DCFestablished zones.

Further recommendations included establishing memorandum of understanding with local providers including emergency departments, schools, law enforcement agencies, and foster care/group homes, and that Connecticut DCF facilitate and support this process. We recommended that Connecticut utilize paraprofessionals in their service delivery model as partners in responding to initial crisis calls and linking families to community-based services. Finally, we will describe staff training recommendation focused on establishing core competencies, and a process of quality assurance and continuous quality improvement focused on data-driven decision-making.

#### Conclusions

Model development for the EMPS program in Connecticut represented a unique opportunity to work collaboratively with a state agency (DCF) and other stakeholders to develop models of care for integral programs in the statewide system of care. However, few states have engaged in such a process, and broad dissemination of such endeavors are lacking in the empirical and non-empirical research literature. The current presentation offers an opportunity to share lessons learned in this process and guide other policy makers, researchers, consultants, and other stakeholders in similar model building activities.

## Poster 15 Assessing the Implementation of Residential Care: Development and Psychometrics of a Staff Observation Instrument

Presenting: Annette K. Griffith Contributing: Kristin Duppong Hurley, Tanya Shaw, & Ronald W. Thompson

Acknowledgements: We would like to thank the staff at Girls and Boys Town that participated in the data collection process.

#### Introduction

In the United States, residential care is an essential component within the continuum of care for youth with mental health and behavioral concerns. Currently, approximately 100,000 youth are served in residential settings. Nonetheless, the area lacks a substantial research foundation regarding its effectiveness. One key element in an empirical investigation of intervention's effectiveness is to determine that the intervention was implemented with reasonable fidelity to attribute program outcomes to the presence of the intervention. Thus, it is imperative that assessment tools be developed that can be used to determine how well an intervention is implemented. To date, minimal research has been conducted to develop efficient and psychometrically sound fidelity instruments for use in residential care. This study examines the initial psychometrics of a staff observation instrument for assessing the key components of a youth residential program implementing an adaptation of the Teaching Family Model.

#### Method

#### Participants

This study used annual evaluation data on 113 residential teaching couples from January 2006 through September 2007. The majority of the couples (71%) were located on the Girls and Boys Town (GBT) campus in Omaha, Nebraska and the remaining couples were employed at one of ten different GBT sites across the United States.

#### Measures

**Staff Implementation Observation Form (SOIF).** The SOIF is a 26-item measure that was developed to reflect the four key components of the GBT residential program: (a) staff implementation of token economies, (b) conducting teaching interactions, (c) building relationships and family-style environments with youth, and (d) establishing a youth self-government system. Previous research on the SOIF indicates that it has adequate levels of inter-rater reliability, internal scale consistency, and predictive validity (Duppong Hurly, Shaw, Thompson, Griffith, Farmer, & Tierney, in press).

*Staff experience.* Staff experience was measured by determining the number of months that a couple worked as a residential couple from the date of hire to the date the SOIF was completed.

#### Procedures

Observations of residential couples in their natural interactions with youth occurred in the residential home for a 60 to 120 minute period during a time of high interaction (i.e., after school). Following the observations, trained agency evaluators completed the SOIF. Each observation was independently conducted by two evaluators to ensure reliability.

#### Results

A total of 172 observations were conducted, reflecting ratings of 113 teaching family couples. On average, the teaching family couples had 39.7 months of experience in the position.

**Item-level descriptives.** The scores on the SOIF range from 1 (no/ incorrect implementation) to 5 (excellent implementation). Across the 26 items, scores ranged from 1 to 5 with mean scores slightly above 3. Specifically, overall mean scores for the Teaching Components items were 3.19 (SD = .60), Token Economy items were 3.26 (SD = .51), Relationship Building items were 3.06 (SD = .47), and Self-Government items were 3.46 (SD = .63).

*Factor analysis.* Using a principal axis factor analysis, three factors with eigenvalues greater than 1.0 were identified. Factors were rotated using both Promax and Varimax solutions. Although the factors were highly correlated (.74 to .78), a Varimax rotation was used for ease of interpretability. Using this method, the three identified factors were Teaching Components/Token Economy (15 items), Relationship Building (7 items), and Self-Government (4 items).

**Cluster analyses.** An exploratory cluster analysis was used to differentiate implementation patterns across residential homes. Three clusters were identified that indicated high (n = 62), medium (n = 90), and low (n = 20) implementation homes. A between-groups ANOVA examining staff experience by implementation level was significant F(2, 144) = 16.60, p < .001. As expected, the highest level of implementation also had the highest level of experience (M = 64.21 months) and staff with the lowest level of implementation had the lowest level of experience (M = 14.38 months).

Poster 16 Depression and Antisocial Behavior Outcomes Among Comorbid Youth in Juvenile Justice

#### Presenting: Jill McCulloch Contributing: John Lyons, Zoran Martinovich & Dana Weiner

Acknowledgements: This research was funded by the Illinois Department of Human Services and conducted in collaboration with the Illinois Mental Health Juvenile Justice Initiative (MHJJ) and the Northwestern University Mental Health Services and Policy (MHSPP) Program.

#### Introduction

Youth with comorbid depression and conduct disorder (CD) in the juvenile justice system are a particularly vulnerable population due to the impairment and negative outcomes associated independently with this comorbidity and with juvenile justice involvement. Moreover, mental health service provision to this high-need population is especially lacking, and current evidence suggests that existing interventions do not fully meet the needs of these youth. The objectives of this study were to better understand the needs and strengths of youth with comorbid depression and CD in the juvenile justice system and to identify potential targets for future assessment and intervention. **Changes across time.** To assess changes in SOIF scores across time, a series of *t*-test analyses were conducted. Across each of the four components, overall differences indicated statistically significant growth over time from a couple's first evaluation to their second. When observations were separated by type into 6-month or 1-year evaluations, different patterns emerged. For couples who had 6-month evaluations, statistically significant growth was observed across all four SOIF areas, whereas, for couples who had 1-year evaluations the implementation of token economies was the only area that indicated statistically significant growth over time.

#### Discussion

This paper provides preliminary support for the utility and underlying psychometrics of an observation instrument to assess staff implementation of a multi-faceted residential treatment intervention. The factor analyses lend support for the theoretical factors with the creation of one factor for the technical components of the teaching interactions and motivation system, one for the youth self-government activities, and a third factor related to the adult-to-peer relationships and family-style living environment. The cluster analysis suggest that the instrument will be useful in categorizing groups of staff by implementation (i.e. high, medium, low), and that these categories will be relevant to other key staff characteristics, such as years of experience. It also appears that the instrument will be effective in detecting changes in implementation across time, as growth in implementation was found across observations, especially for the more recent staff hires. A limitation of this study is the small sample size. Future analyses will be conducted on larger samples, so more robust analyses can be obtained and larger numbers of observations can be tracked over time. Overall, this appears to be a promising approach for assessing the implementation of a complex program serving residential youth.

#### Reference

Duppong Hurly, K., Shaw, T., Thompson, R., Griffith, A. K., Farmer, E. M. Z., & Tierney, J. (in press). Assessing staff competence at implementing a multifaceted residential program for youth: Development and initial psychometrics of a staff observation form. *Residential Treatment for Children and Youth.* 

#### Methodology

Participants included 414 arrested and detained youth, who were identified as having high levels of both depression and antisocial behavior and being served through the Illinois Mental Health Juvenile Justice (MHJJ) initiative. MHJJ is a statewide program, modeled after the wrap-around philosophy, that links arrested and detained youth with identified mental health needs to community-based services and assesses outcomes. The sample was comprised of 275 males (66.4%) and 139 females (33.6%), ranging in age from 10 to 18 years (M = 15.23, SD = 1.48). More than half of the youth were white (59.4%), just under one-third were African American (29.7%), 6.8% were Hispanic, and 4.1% were multi-ethnic, of another ethnicity, or of unknown ethnicity. Youth's mental health needs and strengths at baseline, 3 months, and 6 months into MHJJ were assessed via the Child and Adolescent Needs and Strengths-Mental Health Scale (CANS-MH; Lyons, 1999) completed by MHJJ clinical liaisons. Multivariate logistic regression was used to identify potential predictors (i.e., demographic characteristics, baseline mental health needs and strengths) of improvement in depression and antisocial behavior as assessed with the CANS-MH.

#### **Findings**

Overall, baseline risk behaviors and strengths had the greatest influence on outcomes, independent of other areas of need at baseline (i.e., psychiatric symptoms other than depression and antisocial behavior, functioning, care intensity and organization, and caregiver needs/ strengths)<sup>1</sup>. Youth with greater risk behaviors were significantly less likely to show improvement in depression and/or antisocial behavior at 3 months, relative to youth with fewer risk behavior (OR = 1.88, z = 4.17, p < .001). Comparatively, youth with identified strengths, overall and in specific areas (i.e., optimism, psychological wellbeing, interpersonal and vocational skills, and community ties), were significantly more likely than youth with fewer identified strengths to show improvement in depression and/or antisocial behavior at both 3 months (OR = 1.35, z = 2.04, p < 1.35.05) and 6 months (OR = 1.48, z = 2.18, p < .05). Additionally, substance abuse problems (OR = 2.69, z = 3.40, p < .001), poor family functioning (OR = 0.46, z = 2.70, p < .01), lack of supervision (OR = 0.53, z = 2.14, p < .01)p < .05), and school behavior problems (OR = 0.55, z = 2.37, p < .05) each were significantly and uniquely associated with negative outcomes, controlling for the effects of other factors.

#### Conclusion

This research supports a multifaceted, strengths-based approach that utilizes the youth's strengths and those of his or her family, school, social environment, and community. According to this study, positive future orientation, solid coping skills, good interpersonal skills, vocational skills, and being involved in their communities may be particularly important for juvenile justice-involved youth with comorbid depression and CD. The identification of existing strengths and areas for potential growth should be integrated into the overall treatment plan and evaluated over time. In addition, the finding of significant and unique predictors of depression and antisocial behavior outcomes highlights critical areas for assessment and intervention in the juvenile justice system. For example, screening detained youth for acute risk behaviors upon initial entry into the juvenile justice system, as well as throughout the course of their involvement, could identify those youth who need multi-system services and perhaps a higher level of mental health care than is available through the juvenile justice system. Moreover, a thorough mental health assessment, with particular attention to depression, substance abuse problems, family and school functioning, as well as strengths, would help clinicians to better tailor treatment to the individual needs of juvenile justice-involved youth and help to promote a systems-of-care approach.

The present study serves as a first step toward understanding and addressing the needs of a particularly vulnerable population, that is, youth in the juvenile justice system with comorbid depression and CD. Findings support ongoing efforts to develop effective interventions for youth with mental health needs involved in the juvenile justice system.

#### **Reference List**

## Poster 17 Public-Private Collaborative Efforts toward a Coercion-Free System of Care

Presenting: Lesley A. Slavin, & Jennifer Wong Contributing: Noe Perreira, Mary Brogan, Charles St. Louis & Joan Parker

Development of this paper was supported by: the Child and Adolescent Mental Health Division of the Hawaii Department of Health, and SAMHSA Grant #5KD1SM56497, "Alternatives to Restraint and Seclusion", 2004-07.

#### Introduction

The Hawaii Child and Adolescent Mental Health Division (CAMHD) has been engaged in a statewide effort to support improvements in residential care. Funded by a grant from the federal Substance Abuse and Mental Health Services Administration (SAMHSA), CAMHD launched a project in the fall of 2005 to promote alternatives to coercive behavioral control methods and to create more engaging treatment environments. This project has drawn upon emerging ideas about trauma informed care (Hodas, 2006), maximizing the voice of youth consumers (Scheve et. al., 2006), and engaging leadership in organizational change (Huckshorn, 2004, Murphy, & Bennington-Davis, 2005). The project has involved collaboration between CAMHD staff and workers in our contracted provider agencies.

These collaborative efforts have included intensive work by project staff in a few of our treatment programs. In addition, all of the agencies that contract with CAMHD to provide any form of residential care have been invited to participate in another collaboration—a "network" group that meets several times a year to discuss common concerns and to explore promising practices.

#### Study 1. Intensive Collaboration with One Agency

Hospital-based treatment programs provide intensive intervention to youth who present a risk of harm to self or others. Traditionally, seclusion and restraint (S/R) have been used to contain potentially dangerous behavior by youth in these programs. Recently, the danger these methods pose to both the physical and emotional safety of consumers has become better understood. There is a growing evidence base supporting the idea that good care can be provided in a non-coercive manner, without the use of S/R (e.g. Lebel et. al., 2004). The current project partnered with a hospital program at the Queen's Medical Center using a model developed by the National Technical Assistance Center (NTAC) of the National Association of State Mental Health Service Directors for the reduction of seclusion and restraint in treatment facilities (Huckshorn, 2004).

#### Methodology

Queen's is a large, private non-profit teaching hospital that includes a psychiatric unit serving children and adolescents. Interventions have included:

- Hospital leaders attended NTAC's training to learn about the model (January, 2005)
- A large group of staff attended a local version of the NTAC training along with other local providers. (September, 2005)
- A staff committee was formed to implement some of specific NTAC strategies. Notably, this group implemented the idea of "Sensory Rooms." (March 2006).

<sup>&</sup>lt;sup>1</sup> For the sake of clarity, the wording of particular outcome results does not necessarily correspond to the directionality of respective *OR*s (i.e., > 1.0 versus < 1.0). For instance, an *OR* > 1 indicating an increased likelihood of a particular outcome (i.e., no improvement) may be described as "a decreased likelihood of improvement."

Lyons, J. S. (1999). *The Child and Adolescent Needs and Strengths for children with mental health challenges and their families.* Chicago, IL: Northwestern University.

Lyons, J. S., Baerger, D. R., Quigley, P., Erlich, J., & Griffin, E. (2001). Mental health service needs of juvenile offenders: A comparison of detention, incarceration, and treatment settings. *Children's Services: Social Policy, Research, & Practice, 4*, 69-85.

• Hospital invested in major physical plant improvements, including more recreational space. (March, 2006).

All CAMHD contracted agencies are required to report a range of "Sentinel Events" to the division's central office soon after each occurrence. Information on each event is entered into a database on a continuous basis.

#### Findings

Mechanical restraint, locked seclusion, and physical assaults were relatively frequent events at the start of the study, and all showed a striking and similar pattern of reduction over time. As an example, Figure 1 displays reported incidents of mechanical restraint involving CAMHD youth in the Queen's residential program, from July first 2004 (first quarter FY05) through September 30th

2007 (first quarter FY08). Physical assault incidents decreased from a high of 78 incidents (fall 2004) to a low of 2 incidents (spring 2006) suggesting that major changes have taken place in the milieu so that youth are calmer and safer. This supports the notion that S/R reduction results from a shift in treatment culture.

#### **Study 2: Network Group Collaboration**

Grant project staff members have been convening a group of private agency representatives since November 2005. There were 8 meetings of the group between 11/1/05 and 6/22/07, including 5 day-long in-person meetings, two 2-hour videoconferences, and one telephone conference. Private provider agencies compete for state contracts, and they also compete for client referrals in the Hawaii system. Because of the existing competitive relationships among provider agencies, many observers were skeptical that developing the network would be a successful intervention.

#### Methodology

An eight-item questionnaire about attitudes toward the "Best Practices in Residential Care Network" was given to network meeting participants at the end of the 11/5/05 meeting (n = 19) and at the end of the 6/22/07 meeting (n = 16). A total of 22 staff members attended the first in-person meeting, and a total of 25 staff members attended the most recent in-person meeting. Because participation in the network has fluctuated a great deal over time, very few individuals completed the questionnaire both times, and it was not possible to use a repeated measures approach.

#### **Findings**

Respondents rated each item on a four-point scale describing their agreement with a statement about the network (*disagree=0, disagree somewhat=1, agree somewhat=2, agree=3*). The mean response after the first meeting was 1.87 (SD = .44), and the mean response after the last meeting was 2.79 (SD = .31). A paired-sample *t*-test showed a significant difference between the responses at the two meetings (t = 18.98, p < .001).

Over time, responses to each of the eight items showed a much more positive view of the network and it's activities. Figure 2 is an example of these results. This suggests: (1) providers who have attended meetings have found them to be more and more useful over time, and (2) a selfselection process has taken place whereby only those staff who found the network worthwhile have continued to attend.

Figure 1 Reported Incidents of Mechanical Restraint in the Queen's Medical Center Child and Adolescent Residential Treatment Program July 2004 through September 2007

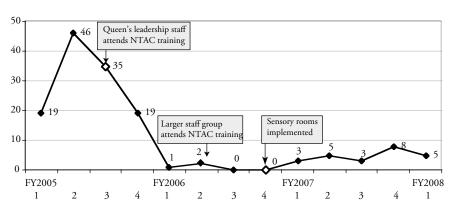
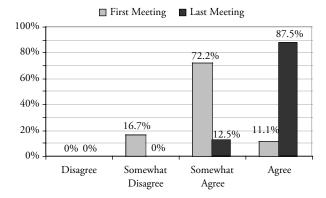


Figure 2 Members Share a Common Vision and Purpose for the Network



#### Conclusion

Collaboration between CAMHD and private providers has been a vital component of a statewide effort to improve the quality of residential treatment and to decrease the use of S/R. Sentinel event data suggest meaningful decreases in the use of S/R during an intensive collaboration between CAMHD and the Queen's medical center. At the larger system level, data from post-meeting questionnaires suggest attendees at our multi-agency network meetings have found these efforts more helpful over time. Providing a forum for residential programs to report their innovative efforts to a group of peer programs has been helpful in spreading promising practices across the system of care. For example, the use of "sensory rooms" by the Queen's program was part of their successful effort to decrease S/R events. To date three other programs have developed sensory rooms of their own, including another psychiatric hospital, a residential program, and a locked facility for sexual offenders.

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## Poster 18 The Transition to Adulthood Among Former Wraparound Milwaukee Clients

Presenting: Abigail A. Bernett & Stephen A. Gilbertson Contributing: Stacy Racine Lynch, Eric Seybold, Sarah M. Linstead & Sarah Schulz

Acknowledgements: We would like to thank the individuals who participated in the follow-up interviews; Sheryl Kelber for her editorial input and guidance; and Bruce Kamradt, Executive Director of Wraparound Milwaukee, for his support of this project.

#### Introduction

Wraparound Milwaukee is a comprehensive, community-based program that serves urban youth with serious emotional, behavioral, and mental health needs in Milwaukee, Wisconsin. Wraparound Milwaukee began in 1994, and currently serves over 1,000 children and families annually. The average age of the youth participating in this program is 13.5. These youth stay in the program for approximately 18 months. Care Coordinators facilitate the delivery of services and other supports to youth and their families using a highly individualized, strength-based, wraparound approach. While youth are engaged in programming, their progress in areas such as mental health, housing, and education, is monitored. However, after these youth leave the program, little is known about their outcomes. The purpose of this project was to determine what the transition to adulthood looks like for youth who complete the Wraparound Milwaukee program. This information will provide direction for future improvements by aiding the understanding of the long-term prospects of youth with mental health needs.

#### Methodology

A random sample of 376 youths, former Wraparound Milwaukee clients between the ages of 19 and 23 who had been out of the program one to five years, was obtained. Follow-up information regarding the criminal records of these individuals was obtained from the public records of the Consolidated Court Automation Program (CCAP), available through the Wisconsin Circuit Court Access website (http://wcca. wicourts.gov).

Telephone contact with former clients and/or their guardians was also attempted in order to administer a detailed questionnaire. It was possible to contact a total of 48 former clients from this sample. Forty individuals participated in full interviews, while eight individuals were only willing to provide basic demographic information (school history, current and past living situations, and employment history, including current work status). The age of the clients interviewed at the time of the follow-up interviews ranged from 19–24, with an average age of 20.8.

The full interviews collected information from the young adults and/ or their parent or guardian using the Standardized Achenbach System of Empirically Based Assessment (ASEBA). Both the Adult Self Report for Ages 18-59 (ASR) and the Adult Behavior Checklist for Ages 18-59 (ABC) were used. (Achenbach & Rescorla, 2003). The participating parents and guardians were read the ABC and the participating young adults were read the ASR.

## *Say Y.E.S. to youth: Youth Engagement Strategies.* Published by the Penn State College of Agricultural Sciences Cooperative Extension. Retrieved from website on October 24, 2007: http://agexted.cas.psu.edu/cyfar/PDFs/yesbookweb.pdf

Scheve, J. A., Perkins, D. F., Mincemoyer, C. C., & Welsh, J. A. (2006).

## Findinas

Approximately one third of the interviewed young adults had finished high school, earned a GED, or attended some college. Nearly a third were living independently or with a roommate, and over 40% were employed full or part-time. Unfortunately, however, 39% were incarcerated, and 44% were unemployed. More than two-thirds of the study sample (n = 376) and interview group (n = 48) had at least one criminal charge in the 3–5 years following disenrollment from the program.

In the follow-up interviews with parents or guardians, an ASEBA Adult Behavior Checklist (ABC) was administered to nineteen individuals. The results were compared to the Child Behavior Checklist (CBC) administered during enrollment in the program. "Total Problems" were found to be just above the level of Clinical Functioning in both instances.

In the follow-up interviews with former clients, an Adult Self Report (ASR) was administered to sixteen individuals, and the results were compared to the Youth Self-Report (YSR) administered years before. The scores for the YSR and ASR were in the Normal Range of Functioning, but the clients reported higher levels of problems as adults than when they were Wraparound Milwaukee clients. Whether this represents an actual increase in problems or greater self-awareness of such problems is unknown.

#### Conclusion

In addition to the fact that Wraparound Milwaukee serves youth with serious emotional and behavioral needs, most of whom have been involved in the juvenile justice and child protective services systems, our findings need to be considered in the context of urban youth and young adults in Milwaukee. This population faces low high school graduation rates, high unemployment rates, and high incarceration rates.

The findings in this study should be viewed considering the limitations imposed by sampling error. One of the main difficulties was contacting former clients. Partly as a result of this difficulty, the interview group differed from the overall Wraparound Milwaukee population in regard to race, gender, former legal custody and family income. It was easier to contact clients for whom both parents were present in the home and/or family income was higher, possibly due to greater stability in their housing situation. It was also relatively easy to contact former clients who were incarcerated, which may account for the high percentage of our interview sample who were incarcerated. The implementation of mechanisms for staying in touch with clients while they are still enrolled, by holding reunions or other special events, and providing incentives for sending in updated contact information would aid in future studies.

Most Wraparound Milwaukee clients are disenrolled from the program when their court orders expire. It is always the hope of the program that these clients and their families will have gained strength, learned to access available resources and supports within their communities, and improved in their ability to cope with the myriad problems facing them. However, it is unreasonable to expect that the clients and their families will have an easy road ahead of them, and it is not surprising that without additional supports, many youth do not fare well in their transition to adulthood. The results of this study point to a need for continuing education, job training, housing assistance, and ongoing support for the Wraparound Milwaukee population.

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## Poster 19 A Systematic Review of Employment Programs for Transition-age Youth with SED

Presenting: Troy Loker Contributing: Mason Haber

#### Introduction

One of the most challenging areas for transitioning youth and young adults with serious emotional disturbance (TAY w/SED) is obtaining stable, rewarding employment. Recent research has suggested that transitions to adult employment in this population typically require support well beyond the age of majority, as developmental trajectories for these individuals typically do not stabilize until the late 20s (Davis & Williams, 2005). Over the past twenty years, researchers have begun to document characteristics of programs to support this population during their transition from school to work in published evaluations. Prior syntheses of this literature (e.g., Clark, Unger, & Stewart, 1993), however, suffer from a number of limitations related to weaknesses of the studies reviewed. While data presented in evaluations of employment programs for TAY w/SED suggest positive results, most fail to use comparison groups and experimental research is entirely absent. Thus, inferences regarding the effectiveness of transition to work programs for this population are tentative at best. Existing literature also seldom discusses how these programs may be similar to those for other types of transitioning youth and young adults, including similarly vulnerable TAY with other disabilities. Finally, literature on employment programs for TAY w/SED has largely failed to discuss implications that the high comorbidity between substance use disorders and SED may have for these programs.

In this context, a critical analysis of prior program descriptions would be a useful contribution to the literature on employment services for TAY w/SED. Following prior methods to describing complex intervention practices such as those used to describe multi-systemic treatment (Henggeler, Schoenwald, Borduin, Rowland, & Cunningham, 1998), analyses in the present poster organizes program characteristics into two levels—a level composed of general practice guidelines, and a level composed of specific practices. To address limitations of the existing literature, we then evaluated implications from these data in the context of other related literatures.

#### Methodology

For this review, inclusion criteria required sources to (1) have a description of a specific employment support program targeted to TAY w/SED, (2) measure outcome variables related to employment or postsecondary education status and show, at minimum, pre- to post- improvements among youth enrollees on some or all of the variables measured; and (3) be published in a peer-reviewed journal. Additional materials describing programs (e.g., program manuals) were also consulted if these materials were explicitly referenced in one of the selected research articles.

Systematic strategies were used to search for articles meeting these criteria. The literature search began by using PsychInfo and Web of Science databases. Backward and forward searches were then conducted to find any other articles that had been missed during the initial database search. As a result, six specific programs described in eight articles were identified. Features of these programs on both the level of general guidelines and the level of specific practices were examined inductively to identify recurring patterns. Features on both levels were first listed in a spreadsheet, which served as the qualitative analysis database. The features were then organized into conceptual clusters based on observed thematic similarity. A summative description was then composed to describe each of these clusters. Following this, implications of these descriptions were evaluated in the context of related literatures, including literature on (1) supported employment programs for adult populations, (2) transition services for TAY with disabilities, (3) vocational rehabilitation for adults with substance abuse problems, (4) policies related to services for TAY w/SED.

#### **Findings**

The qualitative literature analysis resulted in eight clusters of guidelines and specific practices. Clusters were given the following labels based on their content: (1) Comprehensive Care Coordination; (2) Strengths-based Assessment and Person-Centered Planning; (3) Developmental-Appropriateness of Services; (4) Employment and Education Integration; (5) Community-based Support; (6) Use and Enhancement of Strengths, Competencies, Natural supports, and Resources; (7) Long-Term Outcome Orientation; and (8) Non-stigmatizing Care Provision.

Many similarities were found between guidelines and specific practices in the derived clusters and those described in related literatures, though several notable differences emerged as well. For example, supported employment models for adult populations stress rapid job search and placement into competitive employment, whereas transitional employment strategies that postpone efforts to secure competitive employment enjoy considerable support in programs targeting TAY w/ SED. A prominent theme in the literature on employment services for adults with substance abuse problems was the role of motivation to work in determining outcome of services; by contrast, in the literature on employment services for TAY w/SED, motivation to work was not as explicit an issue. Relatively few discrepancies emerged between the literatures on employment services for TAY w/SED and on employment services for TAY with disabilities more generally, suggesting the close alliance between these two literatures and possible need for greater specificity in addressing the specific employment needs of TAY w/SED.

#### Conclusion

These analyses yielded a rich description of programs designed to assist TAY w/SED in achieving their employment goals. Possible uses of these data include the development of fidelity instruments to judge whether specific programs have incorporated practices documented in the relevant literature. Comparison of these features to those associated with similar types of programs suggest possible research questions to explore to guide further refinements to employment programs for TAY w/SED.

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## Poster 20 Transition Aged Youth in Therapeutic Foster Care: Risks, Resources, and Service Use

Presenting: Dannia G. Southerland Contributing: Maureen Murray & Elizabeth Farmer

#### Introduction

The challenges associated with transitioning to young adulthood are amplified for youth with psychiatric disorders who are in residential treatment (Davis, Geller et al. 2006). In this poster we present information about a transition aged cohort in a state wide study of Therapeutic Foster Care. Therapeutic Foster Care (TFC) is broadly disseminated, evidence-based residential treatment option for youth with psychiatric disorders, which provides intensive individualized treatment within the context of a family and community setting (Chamberlain 2002; Chamberlain & Smith 2005). However, there is little information about transition aged youth in TFC.

#### Methodology

Data for this study come from baseline interviews conducted as part of a randomized trial of treatment foster care, which compares an enhanced version of TFC (Farmer, Murray, Dorsey, & Burns, 2006). The enhanced model was developed in response to a prior observational study of TFC in usual practice. That study showed that unlike the short-term focus of Chamberlain's MTFC program, nearly half (45%) of youth in our study had been in TFC for at least 2 years. With these longer lengths of stay, new issues arose, such as unmet needs related to prior trauma and preparation for adulthood. In enhanced model, we included a focus on preparing for adulthood (Clark & Davis 2000) and training/consultation for affiliated clinicians in Trauma-Focused Cognitive Behavioral Therapy (Cohen, Mannarino et al. 2000) to meet these needs.

Data for this study are from in-person interviews at baseline with treatment parents of the youth enrolled in the study. Information from the baseline data, before any intervention, provides data on youth in TFC under "usual practice" conditions. The full sample of this study consisted of 245 youth. For this study, we report on the sub-sample of 103 transition aged youth. The data are drawn from the treatment parent version of the baseline protocol.

We employ a socio-ecological model for examining patterns of service use (Andersen 1995). This model conceptualizes service use as a function of the association of person and system characteristics and categorizes individual and system level determinants of use into three domains need, predisposing, and enabling factors. Need includes measures of clinical functioning and psychosocial risk factors (Vance, Bowen et al. 2002). Predisposing factors include socio-demographic characteristics that have been shown in previous work to predict patterns of use. Enabling factors encompass protective factors from both youth and treatment parents. The patterns of service use are conceptualized as use by service type within service sectors. The sectors include specialty mental health, case management, school based, juvenile court, and vocational services.

#### Findings

First, we present descriptive statistics on all study variables. The age range for transition aged youth in this TFC setting was 15–21, (M = 16.3, SD = 1.2). The majority of the transition aged population was female (54%) and youth of color (67%). There was a wide range of lengths of stay, from less than a month to nearly 13 years. The mean length of stay is 2 years, but is skewed toward shorter stays. Emotional and behavioral functioning was measured with the Behavioral and Emotional Rating Scale (BERS). The mean for this population was higher than expected at 95.8 (22), similar to the norm for non-clinical samples, which is 100 (15). Most of these youth had been in an out-of-home placement prior to the current placement. The majority had been in either another TFC home (41%) or a group home (25%). Over 80% of the sample was reported to have been exposed to a traumatic event. The mean number of traumatic events for these youth was 3.4. Over a quarter of these youth (28%) had been in detention or jail in the past.

We then examine bivariate associations between all independent and dependent variables. Finally, we use hierarchical logistic regression to assess the relationship between key independent variables in each of the three domains—predisposing, enabling and need factors—and types of services used. Odds Ratios and overall goodness of fit statistics are reported. Overall use in each sector will be reported, along with information revealed by the multivariate analysis of significant relationships between key independent variables and patterns of service use.

#### Conclusion

The results from this study provide important information about transition age youth in therapeutic foster care, their risks and resources, and their status as they begin the transition to young adulthood from residential care. Many of our findings are consistent with previous literature on this population, in particular the high level of service use. On the other hand, we also found unexpected associations between key variables and patterns of service use. The take-home message from this study is that while transition age youth have a higher level of service use while in TFC, the types of services they are receiving may not be appropriate to their transitional needs. Likewise, the risk factors identified in this at-risk population are the sort that are likely to continue to need treatment attention, long after these youth age-out of TFC.

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## Poster 21 New Measures for Youth Empowerment and Participation in Planning

Presenting: Janet S. Walker & Laurie Powers

#### Introduction

This presentation describes the development of two new measures that are highly relevant to research and evaluation in children's mental health that is undertaken from a youth development or system of care perspective. The first measure, the Youth Empowerment Scale/Mental Health (YES), is an adaptation from the Family Empowerment Scale, and was designed to assess youth perceptions of self-efficacy with respect to managing their own mental health condition, managing their own services and supports, and using their experience and knowledge to help peers and improve service systems. The second measure, the Youth Participation in Planning scale (YPP), is also based on a scale developed for caregivers; however the changes made were significant enough that the scale cannot be considered simply as an adaptation. The YPP assesses youth perceptions of whether interdisciplinary teams that create service, care, or treatment plans support meaningful youth participation in the planning process.

The President's New Freedom Commission places at the core of its vision of a transformed mental health system the idea that every child with a serious emotional disturbance will have a comprehensive, individualized plan of care. Such plans are to be developed by youth, families, and providers working in full partnership to select treatment goals and strategies, and to monitor progress. A similar vision is expressed in the principles that guide systems of care for children's mental health. This vision of transformation stands in contrast to the existing reality in children's mental health, in which youth in particular typically have little meaningful input in the process of creating plans.

Visions of mental health systems transformation also include an emphasis on empowerment. In this context, empowerment can be seen as reflecting a young person's self-efficacy or sense of confidence at three levels: self-managing his or her own condition; service/support-managing services and supports so that they are consistent with the young person's goals and values; and system-using his or her experience to benefit others.

An assessment of the extent to which transformation is occurring thus includes the need to measure the extent to which mental health contexts promote youth empowerment and youth participation in planning. The YPP and the YES/MH were developed to meet this need.

#### Method

The research team convened several feedback groups of youth to review the items in the caregiver empowerment and participation scales, and to suggest wording for items in versions of the scales adapted for youth. This process proceeded relatively smoothly for the empowerment items; however, this was not the case for the participation items feedback emphasized that existing measures (1) did not set the bar high enough in terms of expectations for participation and (2) did not include other necessary aspects of participation such as the opportunity to be prepared in advance. Additional items were thus generated for the participation scale and further feedback was sought.

After new items were created for the participation scale, the research team created a survey that included the potential items for the YES and the YPP as well as questions about the type of planning received and goals on the plan and how important they were perceived to be. The survey also asked about youth living situation (present and past), diagnoses, income, and other demographic information. The sample sought was 180 total youth, 60 of whom would retake the survey after about six weeks, and 60 of whom would take the survey as part of a caregiver-youth dyad, with the caregiver doing a version of the survey that focused on their youth's participation in planning. Youth were eligible for the survey if they were between 14-21 and had received team planning in the last year.

Survey packets were distributed either (1) at the request of adult caregivers of eligible youth (e.g., caregivers provided contact information at conferences), or (2) through intermediaries, typically providers of team planning like wraparound programs or schools (through their IEP process).

#### Results

Surveys were collected until the desired sample was achieved (N = 188). Respondents were 57% male and had a mean age of 16.2. Seventy-four percent reported having taken medication for mental health reasons, and 85% reported receiving free or reduced lunch. Caregivers reported a mean income of \$20,800. Analyses of zip codes put the mean income of counties represented at 49% of US median household income. Based on respondents' own descriptions of their race/ethnicity, 57.8% were categorized as White, 26.6% African American, and 12.2% Asian, with the remainder providing other answers. The most common diagnoses provided by youth were ADHD (36.2%), depression (19.0%) and bipolar disorder (16.2%). Many youth listed several diagnoses. While most youth reported currently living with parents (55.8%), others were in foster care (15.0%), residential treatment (9.2%), on their own (4.6%), or in correctional facilities (4.2%). Forty percent of youth reported ever having lived in foster care, 27.2% in a group home, 22.9% in residential treatment, 22.7% in a psychiatric hospital, and 20.3% in a correctional facility.

Factor analyses for empowerment and participation items were performed separately using principal axis factoring and oblique rotation. A three-factor solution emerged for each measure. The YPP has 16 items on three subscales. Items have high loadings, low cross loadings, and good to excellent internal reliability. The subscales are "plan and planning process reflect my perspective" (Cronbach's alpha = .898); "accountability," (alpha = .750); and "preparation to participate" (alpha = .784). The YES has 19 items on three well-defined subscales which parallel the subscales for the

Vance, J. E., N. K. Bowen, et al. (2002). Risk and protective factors as predictors of outcome in adolescents with psychiatric disorder and aggression. *Journal of the American Academy of Child and Adolescent Psychiatry* 41(1): 36-43.

caregiver version and reflect empowerment at three levels, self (confidence and optimism about coping with/managing one's condition; alpha = .852), services (confidence and capacity to work with service providers to select and optimize services and supports; (alpha = .833), and system (confidence and capacity to help providers improve services and to help other youth understand the service system; alpha = .882). Mean scores for the total participation and total empowerment scales were significantly different between youth with low, medium, and high satisfaction with their plan (a variable created from six survey items—YPP: F(2, 156) = 13.0, p < .001; YSS: F(2, 155) = 18.7, p < .001). Post-hoc analyses showed all differences between means were significant. Total empowerment and participation scales were correlated (.623, p < .001) and subscales were correlated

## Poster 22 Unpacking the Role of Parent Advocates within a Systems of Care Model

Presenting: Michelle R. Munson, David L. Hussey, Chris Stormann & Teresa King

## Introduction

The Cuyahoga County SOC Initiative, entitled Tapestry, is one of the largest wraparound training and service delivery initiatives in the country. Parent advocates working with families involved in Tapestry are working within the "High Fidelity" wraparound model. Parent advocates contribute to family-driven services within the wraparound model by providing supports and encouraging parents to partner with professionals in making decisions about the services that their children receive.

Some studies have focused on outcomes of sites implementing SOC methods. Yet, we know next to nothing about the role of parent advocates. Some studies discuss empowerment as an important process in working with families and children (See Hoagwood, 2005). However, the present mixed methods study is one of the first to listen to parent advocates themselves to get their perspective on the role they play within SOC.

## Methodology

Four focus groups were conducted (N = 16) with parent advocates from Cuyahoga County. Focus groups were professionally transcribed. Grounded theory coding techniques were utilized. A complimentary monthly reporting tool, the Parent Advocate Activity Form (PAAF) was utilized to monitor parent advocate activities.

## **Findings**

## **Unique Role of Parent Advocates**

*Translator.* Passages such as "a lot of the language or some of the wording might be a little confusing to them and to be able to let them know 'this is what they really mean' and to help them define what is going on and what has been said" suggest that advocates help to *translate the content* of meetings. With regard to *translating the process*, one advocate stated, "I had a client who needed to ask for money from the District...I said...'Let's talk about how we want to communicate...?" These data reveal that advocates act as translators.

*Navigator.* Similarly, advocates reported acting as a navigator by providing direction during and between meetings. "I was the main information person. I had to manage all the information. I had to make sure everybody was on the same page...and everybody knew what was going on."

*Empowerment.* Previous research suggests that advocates empower families as they struggle with serious emotional disturbances (Gavazzi et al., 2006). In the present study, advocates echoed this finding. "...we're

according to prediction, with highest correlation between participation (planning) and empowerment (services and supports) (.724, p < .001), and lowest correlations between empowerment (system) and the three participation subscales. Caregiver and youth total participation scores were highly correlated (.633, p < .001), as were test-retest for the YPP (.749, p < .001) and the YES (.635, p < .001).

## Conclusion

Results from this initial study show evidence of a clear factor structure and good reliability for the two measures, as well as initial information about the validity of the YPP.

supposed to make sure the parents' voices are heard..." "You empower the parents to speak themselves..."

**Networking Agents.** Advocates reported, "Linking them with one another is a big part of our role, too, if that's something they desire" and "...we always do try to help them hook up with other supports besides us to meet those needs...we're always trying to make sure that our families will have something in place for when we're not in their lives." Networking is particularly important as one worker noted, "We're [Tapestry] a short-term intervention."

#### Similarities and Differences between Parent Advocates and Care Managers

*Medicaid Billing.* Advocates voiced differences with regard to Medicaid and billing. "We're not so fixated on the Medicaid piece..." "... we don't have to worry about whose being billed..." One advocate stated, "I hope we don't get to a point where we become a billable service" suggesting that some advocates prefer to remain distinctive from care managers with regard to billing.

*Flexibility and range in work.* Advocates comments suggested that they have more flexibility in their work. "They're under the gun more often about where their time is divided...we're a little more comfortable in what we do for the family and how long it takes, but theirs has to be broken down into hourly increments and who and where it's directed in order to be paid..."

*Non-traditional services.* Parent advocates reported that they are engaged in developing solutions with families that involve non-medical services. One advocate stated, "A big barrier in the mental health field... is the belief that...clinical treatment is the answer and they don't put a lot of stock in the non-clinical stuff that families need to survive and remain intact and stay resilient." Examples of more non-traditional strategies were discussed, such as extra curricular activities.

**Perception of similarity in training**. Some comments suggested similarities. "I would say right now...the only major difference...is that they have to write notes and have billable time that they have to meet..." "I do very much everything they do...I do write notes based on my contacts with families that go into client records, but I'm not responsible for billable time..."

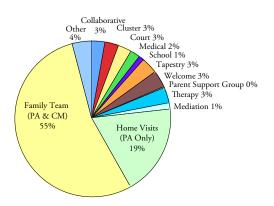
#### Importance of Having Been There

Advocates discussed their perceptions that it matters to families that they *have been there*. "We've been on the other side of trying to find the services and being so frustrated..." "I think we, having gone through this before, can give other parents the most hope, much more hope than a professional can..." "It gave her so much hope to talk to someone who had been through all of this..."

## **Quantitative Findings**

Parent advocate assessment with the PAAF form began in January 2006. By defining meeting types, data show a clear picture of the types of meetings that advocates are attending, along with percentages illustrating that parent advocates spend most of their time in family team meetings and home visits (see Figure 1). These data provide information for training efforts.

#### Figure 1 Parent Advocate Meeting Attendance July 2007 (*N* = 286)



## Discussion

Together these data suggest that parent advocates perceive themselves to play numerous roles in the SOC and wraparound process. The parent advocate's role flexibility contributes to an expanded range and menu of non-traditional supports and services, ultimately blending informal supports with formal mental health services. This may be particularly important in communities such as Cleveland, where poverty rates are extremely high.

Less social distance (i.e., having been there) and personal credibility with parents may lead to increased levels of client engagement and a greater volume of supportive contacts. This in turn may result in greater exposure to formal mental health services.

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## Poster 23 Family Driven, Youth Guided Facilitation for Monterey County System of Care Development

Presenting: Dana Edgull & Mike Robles Contributing: Rebecca Ruiz, Maria Munoz DeBerry & Kristy Meyer

Acknowledgements: This research was funded by Substance Abuse and Mental Health Services, and supported through the efforts of Monterey County Family/Caregiver Partners, Children and Youth Partners, La Familia Sana Local Evaluation Team and Behavioral Health Staff, and United Advocates for Children and Families.

## Introduction

Monterey County System of Care La Familia Sana—The Healthy Family provides services to children and youth who have substantial impairments in self-care, school performance, family relationships and/ or ability to function in the community. These services target a specific population defined as seriously emotionally disturbed children and youth who are in or at risk of being placed outside the home, or who are qualified under special education.

The local evaluation component of Monterey County System of Care La Familia Sana—The Healthy Family was established in 2004 to identify evaluation indicators, monitor, analyze and report findings related to Behavioral Health System of Care children, youth, young adults and their families. In 2006, the development of family and youth-focused consumer surveys to augment state mandated satisfaction surveys was addressed to provide important guidance for system of care efforts. La Familia Sana Local Evaluation Team partnered with families, caregivers and youth to develop new, family and youth-focused surveys to assess satisfaction, perceptions and needs. Survey findings were instrumental in providing family-driven, youth-guided facilitation for system of care development. Key indicators, perceived outcomes and perceptions regarding stigma were reported and analyzed. This poster presents the Monterey County System of Care Family/Caregiver and Youth Satisfaction and Perceptions Findings for 2006.

## Method

The State of California Health and Human Services Agency Satisfaction Surveys, Youth Satisfaction Survey (YSS) and Youth Satisfaction Survey for Families (YSSF), are distributed twice annually, in the months of May and November. La Familia Sana Survey for Youth (LFS-Y) and La Familia Sana Survey for Families (LFS-F) forms were developed by families and youth through focus group efforts, and are distributed as attachments to the state surveys (YSS, YSSF). Quantitative as well as qualitative methodology was incorporated within the analysis tools.

**Consumer background.** Two hundred twelve Monterey County Youth completed the Youth Satisfaction Survey (YSS). Of that total, 163 youth also completed La Familia Sana Survey (LFS-Y). For Gender, 43% were female and 56% were male. The age range was 5 to 25 years of age, with the 10 to 14 and 15 to 17 age ranges representing 71% of the youth population who filled out survey forms. The children and youth surveyed were from diverse backgrounds with the two largest race/ethnic groups as follows: Mexican, Hispanic or Latino represented 60%; and Whites represented 20% of the youth consumers who filled out survey forms.

One hundred and forty-six Monterey County Family Members/ Caregivers completed the Youth Satisfaction Survey for Families (YSSF). Of that total, 139 Family Members/Caregivers completed La Familia Sana Survey (LFS-F). For Gender, 27% were female and 73% were male. The Family Members and Caregivers surveyed were from diverse backgrounds with the two largest race/ethnic groups as follows: Mexican, Hispanic or Latino represented 54%; and Whites represented 31% of the family/caregiver consumers who filled out survey forms.

Of the Youth (N = 212) and Family Members/Caregivers (N = 146), 56% of Family Members/Caregivers and 52% of Youth Consumers reported that they received services for 3 or more months. 74% of Family and 63% of Youth Consumers did not need help with the completion of the survey.

## **Findings**

## Family/Caregiver and Youth Satisfaction and Perceptions Findings Report, FY 2006

For 146 Family Members/Caregivers and 212 Youth Consumers, General Satisfaction with Services and all key indicators surveyed received positive feedback, especially Staff Commitment, and Cultural Competence. Of the 212 Youth, 81% (compared to 74% in FY 2005) reported satisfaction with services received. Of 146 Family Members and Caregivers, 92% (compared to 88% in FY 2005) reported satisfaction with services received.

Key Indicators reported and analyzed include the following: Family Driven Services, Youth Guided Service Delivery, Staff Commitment, Individualized Care, Community Based Care, and Cultural Competence. Perceived Outcomes and Perceptions Regarding Stigma Findings were analyzed, as well.

# Areas that reflected a need for further investigation and discussion (based on 10% and above Consumer Disagreement):

For Family Driven Services: Helped to Choose My Child's Services, Helped to Choose My Child's Treatment Goals. For Youth Guided Service Delivery: Helped Choose My Services, Helped Choose My Treatment Options, Participated in My Own Treatment, Well Informed of Medication. For Individualized Care (Youth Respondents): Services Received Were Right for Me, Got Help I Wanted, Got Help I Needed. For Community Based Care (Family/Caregivers): Location of Services was Convenient. For Community Based Care (Youth): Location of Services was Convenient, Services Available at Convenient Times. For Cultural Competence (Youth): Staff Members a Match to My Own Culture, Spoke My Native Language and Staff Understood. For Perceived Outcomes (Family/Caregivers): Doing Better in School/Work, Better Able to Cope, Satisfied with Family Life Right Now. For Perceived Outcomes (Youth): Doing Better in School/Work, Better Able to Cope, Satisfied with Family Life Right Now Get Along Better with Family Members.

## Conclusion

Through collaborative efforts, a useful assessment tool was developed to help inform system of care stakeholders of key indicators that are strong and weak in supporting family and youth driven system transformation, consumer perceptions of outcomes achieved or falling short of achievement, and current day perceptions of mental health stigma/reception to mental health services. For evaluation purposes, a "comparison of results against benchmarks" approach is used. Benchmark performance measurement data is established for baseline year 2006 and answers the question, "How well did Monterey County perform in it's efforts to develop and implement family driven, youth guided system of care services in fiscal year 2006?" and comparatively in subsequent fiscal years.

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## Poster 24 Facilitating Family Driven Processes: Training Therapists to Provide Outcomes Feedback to Caregivers

Presenting: Ashley Lyon, Heidi Wale, Kay Hodges & Malisa Pearson Contributing: Lisa Martin

## Introduction

The 1980s introduced a paradigm shift in treatment of youth and families that had been long requested by parents to "help us help." Since then, multiple commissions, research studies and publications have outlined the crucial need for including parents as full partners in the treatment of their children (Collins & Collins, 1990; Huang, et al, 2005; Johnson, et al, 2003).

Including parents as collaborative partners in the care of their children has represented a major paradigm shift for service professionals. Studies of practitioners' views indicate that viewing parents as full treatment partners is still by no means a consistent standard of practice (Johnson, et al, 2003, Huang, et al, 2005). The completion of this paradigm shift is long overdue.

Practitioners are typically not taught how to communicate with parents as members of the treatment team. Emerging research is demonstrating improved clinical outcomes by sharing outcome measurement results with both the therapist and the patient (Hawkins, et al, 2004; Miller, et al, 2005). To date the authors have not encountered any research specifically using these methods of providing outcome feedback as a means of collaborating with caregivers, however we suggest that this is an appropriate application of the research.

The authors have undertaken a two-part study endeavoring to increase caregiver and practitioner collaboration through soliciting

information from both groups to develop a training program. The first phase of gathering information is currently underway with an expected completion date of January 2008. This phase involves first soliciting feedback from practitioners who use the Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 1994) to determine current practices of sharing CAFAS assessment results with caregivers. Feedback from caregivers will be solicited regarding how practitioners can best communicate CAFAS results as a means of building a collaborative partnership. The second phase will commence in 2008 and involve measuring the effects of implementing the training program within different care settings.

## Method

### Materials

**CAFAS.** The Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 1994) assesses a child's functioning across eight domains: School, Home, Community (i.e., delinquency), Behavior Toward Others, Mood, Self-Harmful Behavior, Substance Use, and Thinking (i.e., irrationality). A total score and subscale scores (0 = *no impairment*; 10 = *mild*; 20 = *moderate*; and 30 = *severe*) are generated.

A survey was developed to understand current practitioner procedures. In an effort to increase the number of responses by making completion of the survey as effortless as possible, the survey was conducted by email and simply consisted of two questions: *Do you typically share CAFAS results with the families you work with?* and, *Why or why not?* 

#### Procedures

The survey was emailed to supervisors of programs and practitioners known to utilize CAFAS assessments. They were asked to email back their responses and to pass the survey along for completion by other practitioners. Respondents were assured that no individuals will be identified by their responses. These surveys are still being collected.

### Findings

To date, 32 practitioners and supervisors in Michigan have responded to the email survey. Results show no majority methods of practice: 43.8% (n = 14) report that they typically share CAFAS results with families, 43.8% (n = 14) report that they do NOT typically share results with families, and 12.5% (n = 4) state that they sometimes do and sometimes don't share the results. Reasons given for sharing the information include: to include parents as full partners, to increase commitment to treatment, for treatment planning, to encourage families by showing progress or to objectively demonstrate lack of progress and discuss treatment needs. Reasons given for not sharing the information include: time constraints, lack of instruction by supervisors for a sharing protocol, previous negative experiences with attempts to share with parents, beliefs that parents are not interested in the results, and beliefs that results would not be understandable by parents or would be taken out of context by parents.

## Conclusion

Preliminary results support existing research indicating that many practitioners do not collaborate with caregivers as full treatment partners. Practitioners cite lack of instruction, generalized beliefs about parents' abilities to use and comprehend information and a history of negative experiences with previous collaboration efforts amongst reasons for not sharing data with caregivers. Thus far, information obtained supports the authors' view that a training program teaching practitioners how to communicate outcomes results to parents is crucial. The poster will reflect the total summary of feedback gathered and how the feedback was incorporated into a practitioner training program involving providing CAFAS feedback as a method to collaborate with caregivers.

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## Poster 25 The Power of Parents: Preliminary Outcomes from the Family Peer Support Program

Presenting: Monica Mitchell Contributing: Kelly Grubbs, Staci Barnes, Carolyn Brinkmann, Lori E. Crosby, Alisha Nichols & Olivia Davis

#### Introduction

Rates for parents who relinquish custody of their children due to their inability to access behavioral health resources remain high. In an effort to decrease out of home placements and increase access to care, the Hamilton County Mental Health and Recovery Services Board contracted with two local agencies in Hamilton County and developed The Family Peer Support Program (FPS). This school-based program targets families of youth with mental health needs in Hamilton County. The Center for Children and Families and Beech Acres Parenting Center were identified as lead agencies for this program due to their track record in recruiting and training competent family peer support workers who reflect the selected schools' cultural composition and understand the schools' cultural environment while providing outreach and support services to parents. This unique program pairs parents who have children struggling with academic, social, or mental health issues, with parents who have been through similar issues with their children.

FPS workers offer support and advice, guide parents as they maneuver through the mental health system, and help families get connected to the resources they need. The service is offered free of charge to families in participating schools. FPS workers also participate in trainings in the areas of: Parental Engagement, Educational Advocacy, Inner Systems Resources and Navigation, Mediation, Mental Health, Alcohol and Substance Abuse Identification and Resources, Family Health, Juvenile Court Services and System Navigation and Child-Adult Relationship Enhancement.

#### The FPS has five goals:

- 1. Decrease incidents of custody relinquishment made solely for the purpose of meeting the behavioral health needs of the child or youth.
- 2. Decrease incidents of out of home placements made solely for the purpose of meeting behavioral health needs of the child or youth.
- Increase access to behavioral health services for children involved in juvenile court child welfare, education and/or primary health care systems.
- Parents have access and support to access behavioral health care systems resources to stabilize and/or empower the family to reach their identified needs.
- 5. Family Peer Support program will offer education trainings to professionals, staff, parents, and community members regarding culturally relevant ways of addressing the needs identified by parents; Increase the capability of parents to meet the needs of their children and families through the use of intentional and strength based methods.

## Methodology

Ten schools in Hamilton County were selected based on readiness criteria and 20 Family Support workers were hired and trained to offer this service in the selected schools. Youth in the  $4^{th}$  and  $5^{th}$  grades were targeted for the first year (2006-2007 academic year).

Referrals, contacts, survey and outcome data were tracked through a confidential web-electronic assessment portal. Staff collected forms via hard copy and these forms were entered by INNOVATIONS (program evaluator) staff in the database. The plan is to transition the data entry process to Family Peer Support workers in 2007-08 once system upgrades have been completed.

The following forms were collected to track key variables and to assess progress on goals during 2006-07: Parent Survey Card, Parent Referral Form, Parent Feedback and Satisfaction Form (Impact Form), and Parent Inservice Evaluation Form.

Гa	bl	e	1

Total Forms Collected by Form Type			
Parent Survey Card	699		
Parent Referral Form	147		
Parent Feedback (Impact) Form	63		
Parent In-service Evaluation Form	95		
Total	1004		

\*only forms that were comparable across participants were included in this summary and in the analysis. Additional forms may have been collected that were later revised for clarity.

All program goals were tracked consistently across schools. The database was comprised of a combination of process and impact outcome data as well as needs assessment measures to inform the program's development and application. All data were analyzed in SPSS (version 14.0).

## **Findings**

**Decreased custody relinquishments and out of home placements.** Data show the need for and the potential of the program as approximately 3% of the parents in the parents sampled reported that they were dealing with child relinquishment issues as a result of their inability to access services for their child's behavioral health needs. Given that FPS workers are more likely to see highly functioning parents; it is possible that the actual percentage of parents facing relinquishment is higher. Only approximately 4% of families reported out of home placements due to behavioral health care needs.

#### Table 2 Residential Information from Parent Survey Cards and Parent Feedback and Satisfaction Surveys (*n*=699)

During this school year, has your child:	Percentage of Parents Endorsing
Been in residential care for psychological/ emotional support	1.3%
Has had residential transitions related to accessing behavioral	
health care services	2.4%

*Increased access.* Approximately 40% of the general sample of parents reported that they initially did not know where to go for behavioral health care or for related resources. The majority of parents reported increased access and awareness of behavioral health services.

# Table 3Data Collected from Parent Feedback and Satisfaction Surveys(n = 95)

Through the Family Peer Support Program, have you:	Percentage of Parents Endorsing
Increased your awareness of behavioral health care/ community resources	82.1%
Learned how to access behavioral health care programs/ services	86.3%
Strengthened your supportive network	78.9%
Received primary/ health care resources or services for your child	50.5%
Received legal/ financial assistance information for your child/ family	42.1%

*Educational trainings.* Training satisfaction results were very positive (n = 63):

- 86.5% of participants were Satisfied or Highly Satisfied with the training.
- 100% of participants found the material Helpful or Very Helpful to their families
- 100% of participants were Likely or Highly Likely to use the information presented at the training.
- 90.3% of participants better understood the social and emotional needs of children as a result of the training.

## Conclusion

In general the FPS program achieved or made progress on all outcome goals. Having a FPS program located in the school provides a cost-efficient infrastructure for referring parents to the program and providing needed support services for families of youth with mental health needs.

# Poster 26 Youth Involvement in Research and Evaluation of Systems of Care

#### Presenting: Richard Chapman & Robert Friedman

The concept of family involvement in systems of care is not a new one. Families have been included in the implementation and evaluation of systems of care. Youth have been involved in systems of care but they have not been involved to any significant extent in research and evaluation, except as respondents to surveys or interviews. For example the Research and Training Center in Portland Oregon has written a manual on how to involve youth in treatment planning, but there has been very little done on how to involve youth in the evaluation of systems of care.

In other types of services research that has been conducted and in which youth have been involved, the involvement has been primarily with youth who are not at risk or not involved in the system, and youth have largely been in the role of respondent to questionnaires or interviews. Because of the absence of involvement of youth, with mental health challenges, an important perspective is being omitted from the design and analysis of research.

Participatory action research (PAR) offers a framework for involvement of individuals in research that will be about them "When individuals who are the participants in research also are active in designing, implementing, analyzing, and disseminating the research, the likelihood increases that the most important questions will be addressed, that appropriate methods will be selected, that findings will be clearly interpreted, and that new knowledge will be communicated in an efficient manner to the most critical audiences....Studies using PAR empowerment research with marginalized groups, such as persons with disabilities, have demonstrated the resulting increase in skill development, self-reliance, empowerment, and social and policy change." (Powers et al., 2007).

PAR is a growing influence in the field of disabilities, including adult mental health. However, currently there are very few examples of PAR involving youth who have been served in the mental health system.

But what is the role of the youth in the evaluation of the system and in research on the system, and how should this role be carried out? Kirshner, O'Donoghue, and McLaughlin (2005) distinguish between three roles of youth in research: as research informants; as research assistants; and as research partners. Research partners are fully engaged in the selection of topics, the design of the study, the selection of data collection procedures, data analysis and interpretation, and dissemination of findings.

It is recognized that for youth to assume partnership roles, there must be training provided to enhance their skills and knowledge. Also, opportunities for participation must be created. This study is gathering data from attendees at the conference on strategies for increasing the involvement of youth with mental health challenges in research.

The study is based on the belief that such involvement first of all is the right thing to do and represents an operationalization of system of care values and principles. It is also based on research about youth participation that indicates that such involvement brings multiple benefits for the youth, and offers important perspectives for the researchers (Zeldin, O'Connor, & Camino, 2006).

It is hoped that through the collection of information on the surveys, and the review of the literature on this topic, information will be gathered that can be used to enhance the participation of youth with mental health challenges in research and evaluation efforts about the systems that are established to try to help them.

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# Poster 27 Predictors of Perceived Control over Treatment Decisions and its Influence on Subsequent Service for Youth in Systems of Care

Presenting: Diogo L Pinheiro Contributing: Robert L. Stephens

## Introduction

It is estimated that between 4.5 and 6.3 million children in the United States have a serious emotional disturbance (Friedman et al., 1999). The Center for Mental Health Services (CMHS) within the Substance Abuse and Mental Health Services Administration (SAMHSA) has responded to the service needs of these children with the Comprehensive Community Mental Health Services for Children and Their Families Program (CMHI).

The 1999 U.S. Surgeon General's Report on Mental Health placed an emphasis on the need to reduce coercion through provision of adequate, readily accessible services to individuals with a serious mental disorder who pose a threat of danger to themselves or others. While the issue of coercion in treatment decisions has been an issue in the adult mental health literature (c.f.; Monahan et al., 2005) it has received less attention in the children's mental health literature with some noted exceptions.

The national evaluation of the CMHI has been underway since the program's inception. Revisions to instrumentation made in 2003 added items to the initial interview of the longitudinal outcome study component to address perceived choice and level of control over mental health treatment. The present study examines perceived control over treatment choice among study participants in grantee communities initially funded between 2002 and 2004, and examines the contribution of demographic, resource, clinical, and treatment factors to perceptions of choice.

## Methodology

Participants were pairs caregivers and youth (n = 1105) participating in the longitudinal outcome study of the national evaluation of the CMHI. Perceived control over treatment decisions was assessed with five items that consisted of true-false statements regarding control over various aspects of treatment-seeking.

## **Findings**

Table 1 presents the percentages of respondents that agreed to the statements for each of the five questions related to perceived control. There was significant variation in terms of who agreed to which statements. To demonstrate this, Table 2 contains proximity matrices for the 5 items for youth.

Results indicate that respondents respond differentially to the items with resulting variations in response patterns. Three of the items (1, 2 and 4) had similar patterns while the remaining two items showed unrelated patterns suggesting three separate dimensions of control are represented.

A new binary measure was created that was coded 1 when the youth agreed to all three control-related statements (i.e., items 1, 2, and 4) and 0 when the youth disagreed with any one of the statements. The other two dependent variables were binary variables that reflected agreement with items 3 and 5, respectively, which assess whether it was the respondent's idea to seek treatment and whether he/she had the most influence over decision making. These measures were then used as dependent variables in the logit models below. To control for possible causes of variation on the part of caregivers, the only cases included in these models are those where the *caregiver* indicated perceived control.

#### Table 1 Percentage of Respondents Endorsing Each Item

Question\Respondent	Youth (N=1,930)	Caregiver (N=3,036)
1. I felt free to do what I wanted	51.99%	86.60%
2. I chose to get mental health treatment	40.36%	94.40%
3. It was my idea to get mental health treatment	20.60%	83.60%
4. I had a lot of control	39.03%	83.50%
5. I had more influence than anyone else	32.10%	82.60%

Table 3 presents preliminary results of the three logistic regression models of youth perceptions of control over treatment decisions. Additional analyses are planned that will examine the impact of perceptions of control on subsequent service use.

Table 3
Log-Odds for Models Regarding Youth Control Over Treatment <sup>a</sup>

	Youth Control	Youth Control	Youth Control
	1	2	3
	N=1008	N=1104	N=1105
Constant	.9600738**	5552799	.3555372
	(2.12)	(-1.02)	(0.75)
Yearly family income	.1328959	.3221801**	.1561535
below \$15000	(0.92)	(2.02)	(1.14)
Caregiver objective	.0051467	.0011502	.0008046
strain	(0.44)	(1.13)	(0.56)
Caregiver subjective	0014019	1888624**	110253
strain-externalizing	(-0.02)	(-2.02)	(-1.35)
Caregiver subjective	0045209	0260879	0550907
strain- internalizing	(-0.06)	(.0929119)	(-0.66)
Oppositional defiant	4841329*	5949881*	1568966
disorder	(-3.20)	(-3.20)	(-1.04)
Attention deficit	1603888	0120769	0676872
hyperactivity disorder	(-1.09)	(-0.07)	(-0.47)
Corrections agency	7413188**	0261712	.0551465
involvement	(-2.01)	(-0.06)	(0.14)
Child race = white	.023436	072366	.099603
	(0.16)	(-0.46)	(0.72)
Caregiver education	03211	0316361	0644402**
level	(-1.06)	(-0.99)	(-2.36)
Days spent in juvenile	.0029551	0003292	0002915
justice facilities	(0.52)	(-0.08)	(-0.06)
Child gender = female	.2700119	.1513792	.0490243
	(1.82)	(0.96)	(0.35)

<sup>a</sup> values in parentheses are z-scores

p < 0.01 p < 0.05

#### Table 2 Proximity Matrix For Youth

	Rescaled Jaccard Measure				
w.	felt free to do what I anted about getting mental health reatment for myself	I chose to get mental health treatment for myself	It was my idea to get mental health treatment for myself	I had a lot of control over whether I got mental health treatment	I had more influence than anyone else on whether I got mental health treatment
1. Felt free to do what I wanted about getting mental health treatment for myself	1.000	1.000	.000	.758	.438
2. I chose to get mental health treatmer for myself	<sup>nt</sup> 1.000	1.000	.460	.784	.423
3. It was my idea to get mental health treatment for myself	.000	.460	1.000	.182	.091
4. I had a lot of control over whether I mental health treatment	got .758	.784	.182	1.000	.625
5. I had more influence than anyone els on whether I got mental health treat		.423	.091	.625	1.000

In the first two models, youth diagnosed with oppositional defiant disorder were less likely to report feeling in control of their treatment. The only other significant variable in model 1 was youth involvement with corrections agencies indicating youth with corrections agency involvement were less likely to perceive control over treatment choices.

Results of Model 2 indicated the likelihood of youth reporting it was their idea to have treatment was higher when their annual family income was below \$15,000. The likelihood decreased with increasing caregiver ratings of subjective externalizing strain, indicating that youth felt less control over treatment decisions when their caregivers reported experiencing negative feelings (e.g., anger, resentment, or embarrassment) about caring for the youth.

Results for Model 3, which dealt with youth reporting they had the "most" control over their treatment, indicated only one variable was statistically significant: caregiver's level of education. While it is difficult to venture an interpretation for this fact, it might be that more educated caregivers are more involved in the treatment of the youth, leading the latter to feel that they did *not* have the most influence over their treatment.

## Conclusion

In this study, most caregivers and youth differed in their perception of control over treatment choices. On all items, youth were less likely to perceive control, and were least likely to report the idea of treatment was theirs. These findings are similar to those from previous reports on the national evaluation in which youth were less likely than caregivers to report that they were satisfied with services and less likely to feel that they had input into their treatment plans (CMHS, 1999, 2000, and 2001). Results of subsequent planned analyses will provide insight into the influence perceived control over treatment decisions impacts continued service use.

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## Poster 28 Mental Health Services Utilization of Youth Screened for Suicide Risk and Mental Disorders During School

Presenting: Mathilde M. Husky Contributing: Leslie McGuire, Laurie Flynn, Christine Chrostowski & Mark Olfson

## Introduction

Approximately one-half of adolescents with psychiatric symptoms including suicidality do not receive mental health services (Burns et al., 1995; Cheung & Dewa, 2007). One approach to ameliorate mental health services in adolescents is voluntary school-based mental health screening (Vander Stoep, Weiss, Saldanha, Cheney, & Cohen, 2003). In recent years, mental health screening has received significant attention. A report from the U.S. Surgeon General highlighted screening as an effective suicide prevention method (U.S. Public Health Service, 2000), and the 2003 final report of the President's New Freedom Commission on Mental Health placed a high priority on the implementation of voluntary school-based mental health screening programs (U.S. Department of Health and Human Services, 2003). Furthermore, as the recognition of the link between mental health and academic performance grows (Kessler, Foster, Saunders, & Stang, 1995), schools have become increasingly interested in mental health screening. Despite increasing interest, it remains unclear whether voluntary mental health screening is capable of identifying adolescents at risk for psychopathology and suicide and increasing appropriate service utilization. The objective of this study is to examine service use among high school students identified as being at risk through a mental health screening program.

## Methodology

Following institutional review board approval, high school students in Pennsylvania were invited to participate in a volunteer mental health and suicide risk screening program, the Columbia University TeenScreen Program. The 244 students who received parental consent and provided assent were asked to complete the Columbia Health Screen (CHS). This questionnaire was used to identify students at varying risk for mental health issues and suicide. Adolescents "at risk" or who scored positive were administered a second-stage clinical interview. If a child was determined to be in need of mental health referral after the clinical interview, a referral to school and or to community-based services was provided and the subsequent utilization of these services was documented in school records. Such referrals were also available to all students throughout the academic year. Participants were asked to permit access to their school records prospectively covering the 10 months after the screening.

In the present study, we distinguished two groups: those who screened positive (n = 47) and those who screened negative (n = 197). Between-group comparisons were made with chi-square tests (alpha  $\leq .05$ , two tailed) with regard to school and community services recommendations and service utilization.

## Results

A significantly greater proportion of those who screened positive (36.2%) than negative (4.1%) were recommended school services

( $\chi^2(1, N = 244) = 41.4, p < .001$ ). Similarly, significantly more students who screened positive (23.4%) than negative (2.5%) were referred for community services ( $\chi^2(1, N = 244) = 26.3, p < .001$ ) over the course of the academic year. Service utilization was also significantly greater in those who screened positive as compared to those who screened negative both with regard to school services (34% vs. 4.1%),  $\chi^2(1, N = 244) = 37.43$ , p < .001 and community services (10.6% vs. 2%),  $\chi^2(1, N = 244) = 7.67$ , p < .01.

### Conclusion

A significantly greater proportion of adolescents in the group identified as being at high risk of a clinically significant mental health problem were recommended and utilized school and community services as compared to adolescents who were identified as being at low risk. While a substantial portion of young people with mental disorders do not receive appropriate treatment for their psychiatric symptoms (Burns et al., 1995; Cheung & Dewa, 2007), our results provide support for voluntary mental health screening as a mechanism to promote appropriate mental health referral and service use.

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## Poster 29 Decreasing Adolescent Suicidality through a Multiple Component Suicide Prevention Program

Presenting: Sarah Tarquini Contributing: Christa Labouliere, Christine Totura, Krista Kutash & Marc Karver

Suicide is the third leading cause of death in youths in the United States (National Center for Injury Prevention and Control, 2003), and many more adolescents contemplate or make a suicide attempt. In response to this severe national problem, many schools around the country have developed suicide prevention programs. Addressing suicide prevention through the public schools is a logical step since adolescents spend much of their day in school and suicidality and other mental health problems interfere with education.

One of the most significant challenges associated with suicide prevention efforts is the under-identification of suicidal adolescents (Gould et al., 2005), as most people do not know how to recognize or what to do if approached by a youth who is at risk for a suicide attempt (King & Smith, 2000). Thus, several different types of school-based suicide prevention efforts have been developed. Gatekeeper training programs have been shown to increase school personnel's knowledge, attitudes, intervention skills, and confidence in identifying and referring at-risk youths (e.g. Gould et al., 2003). Screening procedures have also been shown to be an effective method of identifying at-risk youths (Shaffer et al., 2004). This is not surprising, as suicide screening measures ask about known risk factors for suicidal behavior (e.g. Shaffer & Pfeffer, 2001). Interestingly, several recent multiple component studies utilizing new generation student gatekeeper training have had positive results (e.g. Aseltine & DeMartino, 2004) but more research is needed on multiple component suicide prevention programs, especially in parts of the country where the need is greatest.

Among youths, New Mexico has the third highest suicide rate in the nation (New Mexico Department of Health, 2000). Furthermore, one New Mexico school district was the location of one-third of all of the suicides by youth between the ages of 15 and 19 in New Mexico (Office of New Mexico Vital Records and Health Statistics, 2003). In response to this crisis, the high-risk New Mexico school district implemented a Multiple Component Suicide Prevention Program (MCSPP). The MCSPP includes gatekeeper training for school personnel, parents, and students and a multi-stage suicide screening process. The MCSPP uniquely incorporates multiple components that increase identification of suicidal adolescents. Gatekeeper training increases awareness by helping school personnel, parents, and youths to recognize warning signs of at-risk youths and provides them with information on appropriate responses. The Question, Persuade, Refer (QPR) Program was provided to school staff, the Jason Foundation curriculum (JFC) was provided to students and parents, and a multiple stage screening program utilizing the Columbia Suicide Screen (CSS) was implemented in four high schools. In addition, this school district has established a strong school to community mental health agency networks. Thus, when adolescents are identified as being at-risk, a system is in place for immediate assessment and referral for mental health treatment.

Funding provided by the Substance Abuse and Mental Health Services Administration (SAMHSA) is currently being used to evaluate and refine this MCSPP. This research has allowed us to evaluate what could be one of the most impressive multiple component suicide prevention programs in the country. In addition, there is very little research that has been done that tracks successful school referral for mental health and nothing is known about the processes involved in a successful referral (e.g., relationships between youths and referring professional, acceptability of referral to parents, etc.). Through this research, we hope to show that gatekeeper training procedures increase knowledge of suicide warning signs, knowledge of how to address and refer at-risk youth, and attitudes toward identification and referral. The aims of this presentation are to provide a description of the MCSPP, an overview of the ongoing evaluation, and a summary of our preliminary findings.

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## Poster 30 Special Education for Emotional Disturbance: Needs, Outcomes for Children in Child Welfare

### Presenting: Madeline Y. Lee Contributing: Melissa Jonson-Reid

Acknowledgements: The parent study is funded by grant R01 MH06173305 from the National Institutes of Health. The points of view expressed in this poster do not necessarily reflect those of the funding agency. Special thanks to Lu Han for assistance with data linkage.

## Introduction

Compared to 13% of the general population (NCES, 2004), approximately 25-52% of children receiving in-home child welfare services or foster care also receive special education services (Jonson-Reid, Drake, Kim et al., 2004; Stahmer, Leslie, Hurlburt et al., 2005). Youth in special education for emotional disturbance (ED) are at particularly high risk for poor outcomes (Wagner, Kutash, Duchnowski et al., 2005). Child welfare involved youth have higher rates of services for ED (NSCAW, 2007), but little is known about differences in assessment and outcomes of ED children according to child welfare involvement (Smucket & Kauffman, 1996). This study investigates the following with a sample of low-income children in special education:

**Question 1:** What are the baseline characteristics of children identified as ED by level of child welfare involvement (no maltreatment history = AFDC-only; children with abuse or neglect reports but no child welfare services = CAN-only; children who received in-home child welfare services = CWS; children in foster care = FOSTER)?

*Question 2:* Do functional outcomes vary by ED diagnosis and level of child welfare involvement?

## Methodology

Administrative records from a larger longitudinal study comparing low-income maltreated children to low-income-only children were used to identify children from the sample who became eligible for special education services. Special education case files captured (a) initial assessment scales (e.g. IQ, academic achievement), problem areas, services and (b) academic and behavioral functioning listed on the most recent Individualized Education Program (IEP) or withdrawal record. Case file records were merged with child welfare, emergency room (ER), and juvenile arrest and court records. Although mental health services were considered interventions, ER treatments for mental health (ER MH) generally denote crises and are coded as such, along with continued school behavior problems, school dropout, and juvenile delinquency. Analyses are restricted to one child per family (N = 521).

Descriptive statistics examined baseline assessment differences by level of child welfare involvement. Similar techniques described various mental health and behavioral outcomes at time of last known IEP or withdrawal record. Multivariate logistic regression controlling for clustering within census tracts modeled risk of any negative outcome.

## **Findings**

When comparing the groups (AFDC-only, n = 142; CAN-only, n = 90; CWS, n = 177; FOSTER, n = 112), FOSTER was statistically more likely to have an emotional disturbance diagnosis (32% vs. 22% CWS, 16.7% CAN-only, and 10.6% AFDC-only; CMH  $\chi^2 = 18.64$ , p < .0001).

**ED** youth: Baseline characteristics. Among ED youth, there were no significant baseline differences in IQ scores, though the mean for AFDC-only was higher than other groups ( $\mu = 90$  vs.  $\mu = 83$ ,  $\mu = 84$ ,  $\mu = 85$ ). Youth in the CAN-only (20%, n = 15) or FOSTER (25%, n = 36) groups were more likely to have known health problems at initial assessment than AFDC-only (0%, n = 15) or CWS (5%, n = 39) (Fisher's Exact, p = .02). Though not statistically significant, over 33% of the CAN-only, CWS, and FOSTER groups had known mental health diagnoses compared to 15% of AFDC-only children.

*ED youth: Outcomes.* Due to small ED sample sizes, most outcomes among ED children were non-significant. Children in the CWS or FOSTER groups more frequently had records of ER MH use than either AFDC-only or CAN-only cases (20.5% v. 3.7%). The school drop-out rate for CAN-only (15%) was at least twice as high as other groups. Excluding youth who had dropped out of or graduated from school, AFDC-only children were much less likely to still require services for behavioral needs on later IEPs (8.3%) than CAN-only or CWS (39.2%; Fisher's Exact, p = .05).

*ED v. Other.* In the full sample, we examined if child welfare involvement had a relationship to negative outcomes separate or interactive with ED. A logistic regression model controlling for clustering

included control variables for IQ, mental health diagnoses at baseline, year of birth, race, gender, and income level in census tract. The model fit the data well and the c-statistic indicated moderate predictive utility (Wald $\chi^2$  = 60.5766, *df* = 11, *p* < .0001, c = .74). Females and those living in higher income census tracts had fewer poor outcomes. There was increased likelihood of poor functioning for ED compared to other special education diagnoses (*OR* = 2.15); and for CWS (*OR* = 2.4) and for FOSTER (*OR* = 3.38) groups compared to AFDC-only. Although the main effect for CAN-only was not significant, a significant interaction term indicated that children with both ED and CAN-only status had the highest likelihood of poor outcomes (CAN-only and ED: *OR* = 6.0).

## Conclusion

Children involved with child welfare were more likely to be diagnosed ED compared to low-income only children. Among ED children, those involved with child welfare had higher levels of baseline need. Nevertheless, the proportion of known mental health diagnoses suggests that only one-third of ED and child welfare youth had received mental health services outside of school. More attention has focused on outcomes for foster youth, but our analyses indicate that all child welfare involved youth with ED are at greater risk for negative outcomes. While child welfare may be the first system contact, schools may be the first to attempt to serve mental health problems. Collaboration with child welfare to provide early screening and services for emotional problems may help offset later negative outcomes.

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## Poster 31 Individual and Organizational Predictors of Readiness for School-Based Bullying Prevention Program Implementation

Presenting: Charles Cunningham Contributing: Tracy Vaillancourt, Lesley Cunningham & Heather Rimas

## Background

Bullying at school poses serious risks to the health and well-being of students (Arseneault et al., 2006). Although schools are a key component in a community wide system of care, educators often fail to adopt evidence-based bullying prevention programs, reduce the impact of demonstrably effective programs by modifying their delivery, or prematurely discontinue potentially effective programs. This study tested a model predicting that the adoption of school-based bullying prevention programs reflects both the readiness of individual educators and broader organizational factors within the school.

## **Methods**

#### Participants

As part of a larger study, 909 educators participated in this survey.

#### **Dependent Measures**

We composed a "Readiness for Bullying Prevention Program" survey consisting of 27 5-point Likert scale questions (*strongly agree* = 1 to *strongly disagree* = 5).

**Readiness.** 5-items ( $\alpha$  = .93) measuring the extent to which educators were ready to participate in the implementation of bullying prevention programs (e.g. *I am willing to help our school reduce bullying*).

**Severity.** 3-items ( $\alpha$  = .93) measuring the extent to which bullying was a serious problem in their school (e.g. *Too many students at this school are bullied by other children*).

**Anticipated Effectiveness.** 3-items ( $\alpha$  = .93) measuring the extent to which educators believed that bullying prevention programs were effective (e.g. *anti-bullying programs reduce the number of children who are bullied*), one component of the trans-theoretical model's construct, decisional balance (Prochaska et al., 1994).

**Anticipated Barriers.** 3-items ( $\alpha$  = .88) measuring whether time and curriculum requirements made it difficulty for educators to participate in bullying prevention programs (e.g. *I don't have enough time to help with anti-bullying programs).* This measures a second component of the trans-theoretical model's construct, decisional balance (Prochaska et al., 1994).

**Decision Control.** 3-items ( $\alpha = .87$ ) measuring whether educators could influence the development of bullying prevention programs in their schools (e.g. *I can influence how bullying is dealt with in this school*). This measure is related to the construct, decision latitude (Karasek & Theorell, 1990).

**Stakeholder Support.** 3-items ( $\alpha$  = .80) measuring whether educators felt they would receive support if they attempted to implement bullying prevention program (e.g. *Administrators would support me if I tried to develop anti-bullying programs*).

**Consensus among Staff.** 3-items ( $\alpha = .69$ ) measuring whether there was a consensus among staff regarding the implementation of bullying prevention programs (e.g. *There is a consensus among staff about how to deal with bullying*).

**Staff and Student Morale.** 6-items ( $\alpha = .87$ ) measuring the extent to which educators felt the atmosphere in their school was positive (e.g. *The morale of staff in this school is high*).

#### **Data Analysis**

We computed a structural equation model using SPSS Amos version 7.0. We modeled 2 latent predictors, the *Anticipated Effectiveness* of bullying prevention programs and the *Anticipated Obstacles* to bullying program implementation, which operationalize decisional balance in the trans-theoretical model (Prochaska et al., 1994). We modeled a third latent variable, *Decision Control* which operationalized decision latitude (Karasek & Theorell, 1990). We predicted a latent variable, *Readiness* for bullying prevention program implementation. This model achieved an adequate fit (RMSEA = .05, CFI = .97, Hoelter's critical N .01 = 360).

#### **Results**

The *Anticipated Effectiveness* of bullying prevention programs predicted an increase in readiness for bullying prevention programs (standardized beta = .33).

Anticipated Obstacles, the time and logistical demands of implementing bullying prevention programs predicted a reduced *Readiness* for program implementation (standardized beta = -.23). Decision *Control*, a measure of the extent to which schools allowed participation in the decision making process, was the best single predictor of *Readiness* for program implementation (standardized beta = .50). In combination, this model accounted for 56% of the variance in *Readiness* for bullying prevention program implementation. The inclusion of measures of *Severity, Consensus among Staff, Stakeholder Support*, and *School Morale* did not improve the model.

## Discussion

This study suggests that successfully introducing bullying prevention programs requires a shift in a complex set of attitudinal and organizational factors. Educators who believed bullying prevention programs would be effective reported higher readiness for bullying program implementation scores. The extent to which educators felt that there was inadequate time available or room in the provincial curriculum for bullying prevention program activities reported lower readiness for implementation scores. This is consistent with the predictions of the transtheoretical model's concept of decisional balance (Prochaska et al., 1994).

The best single predictor of *Readiness* was *Decision Control*, the extent to which educators felt they could participate in decisions regarding the implementation of bullying prevention programs. This is consistent with studies suggesting that decision control increases readiness for health service organizational change (Cunningham et al., 2002).

This study has several implications. First, educators need to be involved in decisions regarding the adoption of bullying prevention programs. Our findings do not support central decisions regarding a single standard program. The influence of decision control on attendance, morale, job performance, emotional adjustment, and health suggests that this factor would contribute to the broader organizational climate needed to sustain these programs (Stansfield & Candy, 2007). Second, information regarding the effectiveness of bullying prevention programs may be more important than evidence regarding the extent of the problem in individual schools. Our research suggests that the experience of other educators exerts a greater influence on program decisions than more formal scientific evidence (Cunningham, Vaillancourt, Rimas, & Cunningham, 2005). Finally, programs need minimize the time and logistical demands placed on educators.

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# Poster 32 Reducing Waiting Times for Children's Mental Health Services: A Qualitative Analysis of Parental Preferences

## Presenting: Charles E. Cunningham

Contributing: Jenna L. Ratcliffe; Heather Rimas & Kathy Sdao-Jarvie

## Background

Many families of children with mental health problems wait for extended periods to receive services. As a part of a larger mixed methods study we used focus groups to explore the experience of parents waiting for children's mental health services, resources they found useful while waiting, and their recommendations regarding the design of new services that might be helpful while families waited for CMH services.

## Method

**Participants.** We composed a stratified purposeful sample by asking clinicians to contact parents of representative boys and girls aged 5 to 12 with either externalizing (ADHD, Oppositional Disorder, or Conduct Disorder) or internalizing problems (e.g. anxiety disorders or mood disorders).

**Procedures.** Experienced interviewers conducted 90-minute focus groups, 4 with mothers (n = 18) and 3 with fathers (n = 8). Focus groups were conducted according to an interview guides with standard introductory comments, interview questions, and follow-up strategies. We transcribed audiotapes verbatim, coded the content using N-7, and conducted a grounded theoretical analysis.

## Results

#### **Effects of Waiting for Services**

Parents described several mechanisms via which problems worsened while they waited for services. These included an increase in the severity of their child's behavior which was often mediated by a counter productive parent response, a contagion effect in which other siblings developed problems as a result of the referred child's difficulties, the disruptive effect of child problems on family functioning (e.g. restricting activities or increasing conflict), or a deterioration in the mental health of parents.

Some parents, particularly those of children with externalizing problems, became angry and frustrated while waiting. They failed to understand the waiting list process, how prioritizing decisions were made, or the rationale supporting eventual service recommendations. Discussions in the group revealed inconsistencies and inequities in waiting times and experiences.

## **Coping with Waiting Lists**

Rather than simply waiting for CMH services, many sought referrals to other agencies. Some obtained service by repeatedly contacting intake workers, negotiating alternative routes to an agency, or threatening litigation.

Although some sought materials helping them understand their child's problems, they were often overwhelmed by the amount conflicting information they encountered, especially on the internet. Those joining group parenting courses found these helpful. Although parents devoted considerable time and energy attempting to deal with their child's problems, their efforts were often chaotic, ineffective, or counter productive. In some cases this adversely affected their interactions with therapists the children's mental health system ultimately offered service.

#### How to Deal with Waiting List

Parents made many recommendations regarding the redesign of CMH waiting list strategies. The following themes are examples of the strategies that emerged:

- 1. Brief Front End Services (assessments, home visits).
- Bridging Contacts (e.g. e-mail contact, phone calls, video conferences) updating parents regarding their position on the waiting list and assuring parents they had not been forgotten,
- 3. *Information Regarding Waiting List Options* listing the various services parents might pursue while waiting for assessment and treatment.
- 4. *Information* (books videos) that helped parents understand children's mental health problems, treatment options, and the service delivery system.
- 5. *Self Help Options* (books or videos, parenting courses) that helped parents develop skills to help solve their child's problems.
- 6. *Alternative Activities* (recreational activities, coached sports, clubs) that provided respite, helped children develop friendships, and introduced helpful adults,
- Support (peer support or support groups) allowing parents to interact with families having similar difficulties.

#### The Process of Developing Waiting List Options

Parents wanted to participate in decisions regarding waiting list strategies for their child, rationales for different options, and the opportunity to participate in the design of waiting list services.

#### Discussion

The time, energy and financial resources parents devoted to the pursuit of help while waiting for children's mental health services was considerable. Although, some found self help options useful (e.g. group parenting courses), others did not have the time, energy, or organizational skills needed to pursue these problems.

Child characteristics appear to moderate the utility of different waiting list options. Parents of children with externalizing problems (ADHD and conduct problems), for example, felt they were too stressed and exhausted by their child's difficulties to pursue potentially useful services. Moreover, because these parents sometimes felt they shared symptoms of their child's disorder, they lacked the organizational ability and persistence needed to pursue potentially effective options, a finding supported by research in this area. Parents of children with internalizing problems such as anxiety disorders, in contrast, found these options more helpful.

Although some families made progress while waiting for services, the complexity of the problems other parents confronted increased over time. Moreover, the frustration of waiting for services, complex contacts with several agencies, or involvement in services without an evidence base may reduce the effectiveness of the services parents ultimately received.

Finally, parents suggested a range of potentially useful waiting list strategies and evidenced a strong desire to participate in the service planning process.

# Monday, February 25 Events

7:30 am	Registration & Networking Breakfast
8:30 am	Opening Plenary: Terry Cline, Michael Q Patton
10:15 – 11:45 am	Concurrent Sessions 1–8
11:45 am	Research Luncheon
1:15 – 2:15 pm	Concurrent Sessions 9–16
2:30 – 3:30 pm	Concurrent Sessions 17–24
3:45 – 4:45 pm	Concurrent Sessions 25–32
5:00 – 6:00 pm	Concurrent Sessions 33–40
6:15 – 9:00 pm	Steve Banks Memorial
6:30 – 9:00 pm	Implementation Interest Group
Dinner on your owr	1

# Monday Evening Special Events

## 6:15 PM – Meeting Room 9

## **Steve Banks Memorial Session**

Join your colleagues to share memories of the work and life of Steve Banks. In addition to a slideshow of important moments in Steve's life, we will offer a 15-minute film of Steve describing application of research methods. All are invited to attend and share special memories. The film will be repeated prior to the Tuesday morning plenary session, at 8:15 AM in Salon E/F.

Hosted by the Research and Training Center for Children's Mental Health and the Center for Mental Health Services Research, UMASS Medical

## 6:15 - 7:15 PM – Salon E

## Implementation Research Interest Group

Come meet and network with colleagues who are interested in the science and practice of implementation. Connect around research topics, measures of implementation, financing of implementation activities, policy issues, cultural and linguistic issues, disparities, and effective implementation strategies at the practice, program, and system level.

Hosted by the Child & Family Evidence-based Practices Consortium, a national community of practice

# Monday Plenary

## 8:30 AM Salons E & F

## Welcoming Remarks

Robert M. Friedman, PhD, Director, Research and Training Center for Children's Mental Health, and Junius J. Gonzales, MD, MBA, Dean, Louis de la Parte Florida Mental Health Institute, University of South Florida

## Federal Perspectives on Children's Mental Health Services Research



On Monday, Feb. 25, the conference will open with remarks by Dr. Terry Cline, Administrator of the Substance Abuse and Mental Health Services Administration. With extensive experience in overseeing health and human services at the state level, Dr. Cline leads the \$3.3 billion agency responsible for improving the nation's substance abuse prevention, addictions treatment, and mental health service delivery systems. Throughout his

career, Dr. Cline has championed the principle that mental health and freedom from substance abuse are fundamental to overall health and wellbeing and that mental and substance use disorders should be treated with the same urgency as any other health condition.

## The Gwen Iding Brogden Distinguished Lecture Series

Getting to Maybe: Evaluation, Systems Thinking, and Complexity Science



Michael Quinn Patton, organizational development and evaluation consultant, Former President of the American Evaluation Association (AEA)

Monday's Gwen Iding Brogden Distinguished Lecturer is Michael Quinn Patton, a leader in evaluation, strategic planning, policy analysis, and management consulting. Patton is author of five evaluation books – one has been used by over 300 universities. His most recent book, Getting to

Maybe: How the World Is Changed, focuses on complexity theory and systems thinking as frameworks for evaluation. He is the only recipient of both the Alva and Gunner Myrdal Award from the Evaluation Research Society for "outstanding contributions to evaluation use and practice" and the Paul F. Lazarsfeld Award for lifetime contributions to evaluation theory from the American Evaluation Association. He was also awarded with the 2001 Lester F. Ward Award for Outstanding Contributions to Applied Sociology.

Patton will share real-life examples of social change and present a new way of thinking about making change in communities through understanding the complex relationships between discrete elements. He will also be available after the lecture for a questions and answer session in Meeting Room 9. In addition, a special book purchase and signing has been arranged for the conference.

# Monday, February 25 10:15 am

Session 1 Room 11	Symposium—Michigan's Statewide Implementation of an Evaluation Based Program (EBP): Building Capacity and Sustainability Chair: Kay Hodges, Discussant: Karen Blase	Page 53
	Transferring Evidence-Based Practice to the Community: A Dynamic Collaborative Process Presenting: Marion Forgatch	
	A Statewide View of Transferring Capacity to Sustain Implementation of an Evaluation Based Program (EBP)	
	Presenting: Jim Wotring	
	Building Capacity for Implementing PMTO at the State and Local Level	
	Presenting: Luann Gray	
	Outcome Indicators for Youth's Functioning and Parent's Child Management Skills: Results from PMTO Training	
	Presenting: Kay Hodges	
Session 2 Room 12	Symposium—Educational Outcomes in Systems of Care: Emerging Evidence? Chair: Jeffrey A. Anderson, Discussant: Sylvia K. Fisher	Page 57
	Educational Profiles at Enrollment in Systems of Care: A National Perspective	
	Presenting: Jeffrey Anderson, Ana Maria Brannan & Brigitte Manteuffel	
	Using Local Data to Evaluate Educational Outcomes	
	Presenting: J. Sean Allen	
	Comparing Academic Progress Over Time in Systems of Care and Usual Services	
	Presenting: Jeffrey Anderson, John Houser, Robert Stephens& Christine Walrath	
	Schools and Systems of Care: Challenges and Models for Collaboration from the National Evaluation	
	Presenting: Charles Seagle & Freda Brashears	
	Topical Discussion—A Model for Effective Partnering of Mental Health and Public Education K-12	Page 62
	Presenting: Camille Paras & Teresa Wright	
Session 3 Salon C	Symposium—Waiting Lists in Canadian Children's Mental Health: Current Status and Potential Solutions	Page 63
	Chair: Charles E. Cunningham	
	Approaches to Managing Child Mental Health Waitlists in Canada: A Qualitative Investigation Presenting: John McLennan	
	Modeling Children's Mental Health Waiting List Reduction Strategies Using Discrete Choice Conjoint Experiments: Parent versus Professional Preferences	
	Presenting: Charles Cunningham	
	Family Help: Distance Treatment for Child Mental Health Problems	
	Presenting: Patrick McGrathContributing: Cathy MacLean, Charles Cunningham & Sherry Stewart	
Session 4 Salon D	Symposium—Unregulated Residential Services: The Challenge to Ensure Quality Services and Protections—Part I	Page 67
541411 5	Chair: Lenore Behar, Discussant: Robert M. Friedman	
	Risks to Children and Pressures on Parents	
	Presenting: Christina Young, Cynthia Clark Harvey & Paul Lewis	
	Steps to Stimulate Policy Changes: Gathering Data Presenting: Art Merriam & Allison Pinto	

Session 5	Symposium—Implementing Evidence-Based Practices for Justice-Involved Youth	Page 69
Room G	Chair: Joseph A. Cocozza	
	Evidence-Based Practices: Advances in the Models for Change States	
	Expanding Evidence-Based Community Services: The Louisiana Experience	
	Presenting: Debra DePrato	
	Culturally-Competent, Evidenced-Based Practices for the Latino Community	
	Presenting: Eric Trupin	
	Family Advocacy and Evidence-Based Practices	
	Presenting: Darcy Gruttadaro	
	Paper—Youth Group Participation: A Potential Component of Clinical Care for Behavioral Difficulties	Page 73
	Presenting: William Bannon & Mary McKay	
Session 6 Salon G	Symposium—Using the System of Care Practice Review (SOCPR) for Needs Assessment and Quality Assurance: Experiences of Several Communities Chair: Mario Hernandez, Discussant: John Mayo	Page 75
	System of Care Practice Review (SOCPR): A Qualitative Evaluation of the Children's Mental	
	Health System in Ottawa Canada	
	Presenting: Natasha Tatartcheff-Quesnel	
	System of Care Practice Review: A Multi-Year Evaluation in Broward County, Florida	
	Presenting: Keren Vergon	
	Use of the SOCPR for Quality Improvement, Training, and Improving Cultural Competence	
	Presenting: John Mayo & Terry Johnson	
Session 7 Salon I	Symposium—Creating the Evidence Based Practice was the Easy Part Who Knew?	Page 77
	Chair: James Alexander, Discussants: Charles E. Frazier & Mike Robbins	
	Integrating and Sustaining Functional Family Therapy Within Statewide and Larger Systems— The Statewide Pennsylvania (PCCD) Project 2000 - 2007	
	Presenting: Helen Midouhas & Doug Kopp	
	Quality Assurance and Practice Improvement: The Washington State Functional Family Therapy Project	
	Presenting: Jeffrey Patnode & Kim Mason	
	International Replications of FFT: Transcending Issues of Culture, Language, Treatment Systems, Funding Criteria and Distance	
	Presenting: Kjell Hansson & Andrea Neeb	
Session 8	Topical Discussion—Participatory Action Research Agenda for Family-to-Family	Page 80
Salon J	Peer Support Models	
	Presenting: Elaine Slaton, Teresa King, Amy Winans, Norín Dollard, Chris Stormann, Bill Hobstetter & Vestena Robbins	

# Session 1 >> 10:15-11:45 am >> Room 11

## Symposium Michigan's Statewide Implementation of an Evaluation Based Program (EBP): Building Capacity and Sustainability

#### Chair: Kay Hodges, Discussant: Karen Blase Presenting: Marion Forgatch, Luann J. Gray, Kay Hodges & Jim Wotring

Training on an EBP, Parent Management Training-Oregon Model (PMTO), has been implemented with the workforce in Michigan's public mental health system. Building the state's capacity to sustain the training of additional practitioners and the monitoring of treatment fidelity will be described, as well as the client outcome data for practitioners trained in PMTO. Forgatch provides a purveyor's perspective in her discussion of processes involved in transferring methods from program purveyors to systems of care. She addresses the need to attend to efficiency, sustained fidelity, and positive outcomes. Wotring presents the perspective of a state administrator, with an emphasis on leadership issues and financing strategies. Gray discusses the model for sustaining training and fidelity monitoring at both the state and local levels in Michigan. Hodges presents the client outcome data for families who received training from the practitioners participating in the first wave of PMTO statewide training.

## Transferring Evidence-Based Practice to the Community: A Dynamic Collaborative Process

## **Presenting: Marion Forgatch**

Implementation science is a field in its infancy. This presentation describes processes and data from two large-scale implementations, one nationwide in Norway and one statewide in Michigan. Transferring Parent Management Training Model-Oregon (PMTO) from controlled settings to the field has required extensive collaboration with committed partners in the service community as well as the development of new methodologies.

A broad and complex set of skills is required to install an Evidence Based Practice (EBP) in a system of care. The skills that must be transferred from program purveyor to the community include the following: understanding the theory underlying the method, knowledge of the mechanisms of change, sophisticated teaching and clinical process skills, responsive and competent infrastructure systems to monitor, support and evaluate the implementation, and leadership committed to overcoming barriers in the service of long-term positive outcomes. In this presentation we specify and illustrate skills and processes relevant to an EBP being implemented statewide in Michigan and more recently in Detroit-Wayne County. The EBP is Parent Management Training, Oregon Model (PMTO), which was developed by Gerald R. Patterson and his colleagues at the Oregon Social Learning Center (OSLC) (Patterson, 2005).

The social interactional learning (SIL) model that underlies PMTO specifies certain parenting practices as mechanisms of child adjustment. The intervention calls for parents to be treated as the agents of change for the child and coached by professionals. Parents learn to apply strategies that promote children's prosocial skills and delimit coercive and other problematic behaviors. Tests of the intervention have been conducted and demonstrated efficacious with youngsters from preschool through adolescence in prevention and clinical samples at risk for or identified with externalizing and internalizing problems. Randomized controlled tests of the intervention support the efficacy of the method and the viability of the theoretical model: Intervention effects on child outcomes are produced by the intervention's positive effects on parenting practices. Improved child outcomes include reduced delinquency, police arrests and out of home placements, reduced child depression and externalizing behavior, and increased academic performance. Collateral effects of the intervention include reduced maternal depression and improved financial circumstances.

The first large scale PMTO implementation began in the late 1990s nationwide in Norway. Since then professionals have been certified in Norway, Iceland, the Netherlands, and Michigan. New trainings are underway in Mexico and Detroit-Wayne County. An RCT has been completed in Norway, is taking place in Iceland, and begins in the Netherlands in January, 2008.

The current presentation focuses on the data from the Norwegian implementation with preliminary data from the Michigan program. In Norway, an Oregon group of PMTO mentors trained the first generation (G1) of professionals from child psychiatry and social welfare agencies selected from regions throughout the country. The goal was for them to become certified in PMTO and for several to become trainers. Similarly, in Michigan, PMTO mentors trained G1 professionals selected from regions throughout the state with the expectation that they would become trainers for future Michigan generations. The training program for G1 in Norway and Michigan was extensive, requiring approximately 18 months, including attendance at 18 workshop days as well coaching based on video recordings of family intervention. Coaching was provided for session samples from a minimum of three training families. Two additional families were treated and samples rated for certification.

One question is whether or not professionals will complete such an extensive training program. In Norway, 85% of those in G1 who started the training completed with certification. In Michigan the completion rate is similar. Currently in Norway, two additional generations have been trained by the Norwegian professionals. In G2 and G3, 95% of those who started the training program completed with certification. In Michigan, the second generation is currently being trained. Challenges and progress in the two implementations will be discussed.

Another implementation question is whether or not the transfer from progenitor to community can be done with sustained fidelity. We present data using the Fidelity of Implementation (FIMP) measure, which is based on direct observation of therapy sessions and was first validated with an OSLC sample (Forgatch, Patterson, & DeGarmo, 2005). We then examine fidelity with this measure across the three generations of Norwegian therapists assessed at certification. Next we examine G1 fidelity scores at certification in the Michigan statewide implementation.

The implementation methods used in Norway have been extended and adapted for use in Michigan, the Netherlands, Iceland, Mexico, and Detroit-Wayne County. The complexities inherent in transferring programs from purveyors to community systems of care cannot be underestimated. The goal for PMTO implementations is complete transfer of skills necessary for sustained fidelity and positive outcomes over multiple generations. Consultation with the purveyors is primarily to ensure continuing fidelity. This goal has been accomplished in Norway. In Michigan, the goal is to replicate and improve findings achieved in Norway. The first generation of PMTO specialists in Michigan has been certified by the Oregon group and these professionals are now in the process of training a new generation of professionals in their own agencies.

## References

- Forgatch, M. S., Patterson, G. R., & DeGarmo, D. S. (2005). Evaluating fidelity: Predictive validity for a measure of competent adherence to the Oregon model of parent management training (PMTO). *Behavior Therapy*, 36, 3-13.
- Patterson, G. R. (2005). The next generation of PMTO models. *Behavior Therapist*, 28(2), 25-32.

## A Statewide View of Transferring Capacity to Sustain Implementation of an Evaluation Based Program (EBP)

#### Presenting: Jim Wotring Contributing: Sheri Falvay

The science of implementation of an EBP or a promising practice within a system of care is in its infancy. We are learning (1) What it takes to successfully transfer new knowledge to staff, (2) Conditions that need to exist or be developed in organizations and systems to successfully support the dissemination of this new knowledge and, (3) What capacity or infrastructure needs to be developed in a state or nation to be able to train, coach and support staff to ensure the complete transfer of the EBP to a state or nation into the future. We have learned a lot and still have a lot to learn.

This presentation will describe what it has taken from a "state point of view" to implement Parent Management Training-Oregon Model statewide over the past several years in Michigan. The implementation of (EBPs) requires significant broad based planning and preparation. It involves helping individuals understand the need for change by providing them with rationale for change and at the same time creating a sense of urgency to change. Building teams at various levels to help plan as well as problem solve issues as they arise has proven to be important. The teams have helped identify and resolve problems before they become obstacles to implementation. Leadership at various levels has been used to help envision a new direction and a theory of change or logic model was developed that helped lead various teams and staff in this new direction. The theory of change helped make a complex process look simple. Clear lines of communication at numerous levels helped build support for implementation and helped with problem solve later in the process. Planning and preparation are not enough staff also needed support and monitoring throughout the process. They need support from their supervisor to take action and to be allowed to make mistakes. They also need to be monitored and held accountable but more importantly they need support and nurturance throughout the process.

## **Outcome Evaluation**

Outcome evaluation was vital. Demonstrating early success with outcome data proved to be extremely helpful in securing additional funding and helped build momentum to expand training in PMTO in Michigan. Preliminary client level outcome data using the Child and Adolescent Functional Assessment Scale (CAFAS) and the Caregiver Wishlist were shared on the first 20 children served by therapists trained in PMTO. The preliminary data demonstrated that staff who received training in PMTO had twice the effect on client outcomes when compared to similar clients before they were trained in PMTO. Although the data was preliminary it proved was critical to help influence those that control funding to continue to support PMTO. Early success gives people a reason to join the process. It helps non believers become believers and believers become leaders. Outcomes provided the evidence to make sure the new EBP "sticks." Finally outcomes monitoring can also help assure appropriate cases are being referred and acts like a compass to keep everyone on track.

## **Financing Strategies**

Financing strategies include three primary areas: (1) Financing to support the initial training, (2) Financing to build capacity or infrastructure in a state for ongoing training, coaching, and fidelity monitoring, (3) Financing to support the service. The initial cost of providing training is significant when introducing an EBP and can be secured from a variety of local, state, and federal resources. Federal mental health block grant

reporting has recently been changed and states are now required to report on the number of evidence based practices they are providing and the number of individuals being served by these evidence based practices. States are also being asked how they are using the block grant to transform their systems and comply with the Presidents New Freedom Commission Report. Recommendation 5.3 of this report calls for states to, "improve and expand the workforce providing evidence-based mental health services and supports." Both of these changes at a federal level make mental health block grant an excellent choice to support initial and ongoing funding for training and capacity building in states. Funding for ongoing services also needs to be identified and supported at both a federal and State level. Medicaid financing is a logical fund source to support ongoing services. Medicaid is also a combination of state and federal funding and requires working with both state and federal offices in order to secure this funding to support and EBP. Making Medicaid work to support an evidence based practice has its own challenges however Medicaid can be supportive of implementing EBP's. Medicaid financing has to support the clinical aspects of the particular EBP and not require the EBP be bent in such a way that it is not able to be implemented with fidelity. Financing strategies have to be identified that will help sustain an EBP into the future and make it a, "practice as usual rather than an unusual practice." The presenter will share some of the strategies they have used with Medicaid to support implementation of EBP's including Parent Management Training-Oregon Model and Multi-Systemic Therapy. The presenter will also discuss some of the challenges that will need to be addressed in the future in order to successfully implement EBP's across the country.

## Building Capacity for Implementing PMTO at the State and Local Level

#### Presenting: Luann Gray Contributing: Pat Weighman

Multiple factors must be attended to when building capacity for the implementation of an evidence-based practice at a state-wide level. Successful integration of Parent Management Training-Oregon (PMTO) model into the skill repertoire of the workforce requires that the state develop a stage-wise roll-out of the training program, capacity to provide ongoing training to new practitioners after the purveyors initial delivery of the training program, and establishment of a means for monitoring treatment fidelity and client outcomes.

Michigan launched a collaborative training plan utilizing the input of Oregon Social Learning Center (OSLC)/Implementation Sciences International Inc (ISII), The Michigan Department of Community Health (Jim Wotring, Sheri Falvay), the Practices Improvement Steering Committee-an affiliation of County Based Community Mental Health Boards, and Eastern Michigan University (Kay Hodges/Level of Functioning Project). Michigan's plan for implementation includes key elements such as:

- Establishment of a training plan and curriculum.
- Establishing a selection and certification process for PMTO certified therapists, coaches, Fidelity of Implementation monitors ("fimpers") and trainers.
- Establishment of a plan to maintain/monitor fidelity for PMTO service delivery, training, and coaching.
- Establishment of a plan for certifying second and third generation PMTO therapists, coaches, "fimpers," and trainers.
- Establishment of a state data base.
- Establishment of video streaming for training and Fidelity of Implementation ("fimping") of trainee's sessions.
- Establishment of a regional and state training schedule.

Michigan developed a plan following a successful pilot between OSLC and 3 Michigan Counties to certify PMTO therapists. The intent became to build capacity and infrastructure to provide PMTO to public mental health consumers throughout the state. Michigan's implementation strategy needed to include flexible methods due to the diverse regions in Michigan. Michigan has large urban cities as well as rural and suburban communities. Michigan's mental health system is a county based system that is comprised of 18 Medicaid Prepaid Inpatient Hospital Plan (PIHP) regions that encompass 49 Community Mental Health Service Programs.

The process to certify therapists to provide PMTO with fidelity required extensive collaborative work with the purveyor of the model, and commitment of the trainees and sponsoring agencies. Each trainee requires 18 workshop days, coaching sessions with peers and trainers, and up to 18 months of PMTO service provision to become certified in the practice. As part of next phase of statewide implementation, Michigan, in collaboration with OSLC, developed a statewide plan for second generation (G2) PMTO therapists, coaches, "fimpers," and trainers. Michigan has 23 first generation (G1) certified therapists and trainers.

Michigan's plan establishes 6 regions throughout the state. Each region has certified therapists and trainers who will train G2 PMTO therapists and PMTO trainers. It is projected that 71 G2 trainees have either begun or will begin training during FY 2008. Additionally, the State plan includes the largest urban region in Michigan, Wayne County, to train an additional 28 G2 PMTO trainers.

The plan to disseminate an evidence based practice follows the guiding principals of:

- Assuring that model fidelity and integrity are maintained.
- Assuring that infrastructure to support the model was developed. Infrastructure includes: methods of fidelity management; methods of certifying and recertifying therapists, coaches, "fimpers," and trainers; contractual agreements with the purveyor; contractual agreements with sponsoring agencies; methods of selecting trainees; methods of selecting certified training sites; methods of financing nonbillable training time; establishing HIPAA compliant billing codes; establishing Medicaid billing processes; establishing a method of monitoring outcomes through the Eastern Michigan University Level of Functioning project (Kay Hodges) and through a local system of care (Kalamazoo Wraps).
- Assuring a collaborative and participatory planning process. Participants in planning included families/parents, state representation, local county input, OSLC/ISII staff, and input from Michigan SAMHSA System of Care sites.
- Assuring cost-effective implementation strategies via a regional training model.
- Assuring effective State coordination efforts that meets the needs of local counties, regions, and trainees.

Kalamazoo Wraps is a local system of care that was awarded a SAMHSA grant in 2005. Grantees are now required to include evidence-based practices as part of the service delivery plan. Kalamazoo Wraps selected several evidence-based practices including Parent Management Training, Oregon (PMTO). The community chose this model after participating in the initial pilot and reviewing outcome data. In implementing evidence-based services, Kalamazoo Wraps has not encountered resistance from families, but has encountered resistance from service providers. Stakeholders, including families and community members, prioritized services that would deliver positive outcomes and changes in functional status of youth. When asked for their treatment preferences, stakeholders typically asked for "services that worked" rather than "the same-old services." Provider resistance took the form of concerns that the practice selected was not for the type of families they serve/the families needs were too complex; concerns that training would result in the loss of too many "billable" hours; concerns that if they invested in training that the certified staff would be lured away by competing agencies. Kalamazoo Wraps, as a local system of care, developed strategies to overcome resistance. These strategies included marketing of outcomes, establishing contractual provisions for reimbursement of actual training costs, establishing billing mechanisms for training and certification consumers, and encouraging provider agencies to establish contractual agreements with trainees to remain in the sponsoring agency for specific timeframes following PMTO certification.

## Outcome Indicators for Youth's Functioning and Parent's Child Management Skills: Results from PMTO Training

## Presenting: Kay Hodges

Contributing: Jim Wotring, Marion Forgatch, Ashley Lyon, & Jamie Spangler

Statewide data collected on youths receiving public mental health services in Michigan suggested that training the workforce in parent management techniques would be beneficial for at least half of the families served (Wotring, Hodges, Xue, & Forgatch 2005). This paper describes the outcome data on the PMTO training program. Each trainee was asked to collect outcome data on two cases before training began, and these data were used as a comparison group.

### Method

#### **Subjects**

The criteria for participant families are as follows: (1) age of child is 5 to 12 years old, (2) child must reside with at least one caregiver, who cannot be addicted to substances, neglectful, a sexual predator, or actively psychotic, (3) at intake, the child's scores on the CAFAS meet the following criteria: moderately or severely impaired on the Home subscale, severely or moderately impaired on either the School or Behavior Toward Others subscales, and not severely impaired on the other subscales which would indicate serious comorbidity (i.e., Community [i.e., delinquency], Mood/Emotions, Self-Harmful Behavior, Substance Use, or Thinking).

*Family participants.* Data on two samples of families are presented. The families who were treated before training commenced are referred to as the *before-training sample*, (BT) and the families treated while the trainees were in PMTO training are referred to as the *during-training sample* (DT).

**Before-training sample.** CAFAS data are available on 29 youths, of which 62% are males and the average age is 9.5 years. Caregiver Wish List data are available for 18 families, with 72% of the caregivers reporting on males who had an average age of 9.4 years.

**During-training sample.** CAFAS data are available on 34 youths, of which 62% are males and the average age is 8.8 years. Caregiver Wish List data are available for 23 families, with 56.5% of the caregivers reporting on males who had an average age of 9.2 years.

#### Measures

*CAFAS.* Each youth is rated on the Child and Adolescent Functional Assessment Scale (CAFAS: Hodges, 2000). A score is generated for the total scale and for each of the eight subscales.

*Caregiver Wish List (CWL: Hodges, 2002).* The CWL has two parts. The first part, entitled Skill Wish List for Your Child, consists of 14 questions about the child's behavior. The second part, entitled Skill Wish List for You, consists of 53 items that ask the caregiver about his or her own parenting behavior. The items are grouped into six skill domains: Providing Direction and Following Up, Encouraging Good Behavior, Discouraging Undesirable Behavior, Monitoring Activities, Connecting Positively with the Youth, and Problem Solving Orientation. Each item consists of a question and a 5-point response option. The response options are specific to the question, although they primarily refer to frequency (e.g., Hardly Ever, Once in a while, Sometimes, Often and Most of the time). The directionality of the scoring varies across items. The CWL was developed using social validation procedures and then piloted in a child welfare agency. Preliminary data analyses with the pilot sample suggested that numeric values, ranging from 1 to 5, with 5 indicting greater skill, can be assigned to the response options. These scores can then be summed to generate domain scores.

#### Analyses

CAFAS total scores and subscale scores for School, Home, Behavior Towards Others, and Mood are calculated and pre-and post-scores are compared. Pre- and post scores are compared with CWL total scores for the child and parent scales as well as the six domains on the CWL. Paired *t*-tests were computed to compare differences in subscale scores and *d*-statistics were calculated to measure effect size.

#### Results

CAFAS. The BT group produced a significant reduction in impairment from pre- (M = 84.5) to post-treatment (M = 68.3), with a moderate effect size (p < .01, d = .69). The DT sample achieved a greater reduction in impairment, as indicated by a large (p < .01, d = 1.57) effect size with a reduction in total score from pre-(M = 90) to post-(M = 52.6). Statistically significant reductions were observed for each subscale except for the School and Mood subscales for the BT sample. Results for the BT sample were as follows: Home score was reduced from pre-(M = 21) to post-(M = 16.9)with a large effect size (p < .01, d = .81) and Behavior Toward Others was reduced from pre-(M = 20.3) to post-(M = 16.2) with a moderate to large effect size (p < .01, d = .79). For the DT sample, the subscale scores all decreased significantly from pre-to post. School was reduced from pre-(M = 17.35) to post-(M = 10.9) with a moderate effect size (p < .01, d = .73); Home was reduced from pre-(M = 23.8) to post-(M = 12.6) with a large effect size (p < .01, d = 1.69); Behavior Toward Others was reduced from pre-(M = 21.2) to post-(M = 11.8) with a very large effect size (p < .01, d =1.40); and Mood was reduced from pre-(M = 17.9) to post-(M = 12.4) with a large effect size (p < .01, d = .89).

*CWL: Youth Behaviors.* The caregivers in the BT sample reported a significant decrease in frequency of noncompliance from pre-(M = 45.33) to post-treatment (M = 38.78) with a large (p < .05, d = 0.98) effect size. The DT sample reported even greater reduction in frequency of noncompliance from pre- (M = 43.87) to post-treatment (M = 31) with a large (p < .01, d = 1.85) effect size.

CWL: Parenting Skills. Results are reported for the total score as well as for each of the six domain subscales. For the total score, the parents in the BT group reported a significant increase in parenting skills, with a moderate effect size (p < .05, d = -.62). The total score for the parents in the DT group reported an even greater increase in parenting skills with a large effect size (p < .01, d = -1.56). On the six domains scores for the BT sample, a significant increase in skills was reported from pre- to posttreatment for Monitoring Activities (p < .05, d = -.76) with a moderate effect size. A significant increase in skills were reported for all six domains in the DT group: Providing Direction and Following Up with a large effect size (p < .01, d = -1.26); Encouraging Good Behavior with a large effect size (p < .01, d = -.93); Discouraging Undesirable Behavior with a large effect size (p < .01, d = -1.73); Monitoring Activities with a large effect size (p < .01, d = -.84); Connecting Positively with Youth with a moderate effect size (p < .05, d = -.62); and Problem Solving Orientation with a large effect size (p < .01, d = -.84).

### Discussion

These results suggest that client outcomes were enhanced by the therapists' participation in PMTO training. Parents treated after the therapists began PMTO training were more likely to report changes in parenting skills on the CWL domains. In addition, the youths in the families treated by therapists during PMTO training showed improvement at school and in mood, which was not observed for the BT sample.

#### References

- Hodges, K. (2000). *Child and Adolescent Functional Assessment Scale (2nd ed., rev.)*. Ypsilanti: Eastern Michigan University
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# Session $2 \gg 10:15-11:15$ am $\gg$ Room 12

## Symposium Educational Outcomes in Systems of Care: Emerging Evidence?

#### Chair: Jeffrey A. Anderson, Discussant: Sylvia K. Fisher Presenting: Charles Seagle, Freda Brashears, Jeffrey Anderson, John Houser, Robert Stephens, Christine Walrath, J. Sean Allen, Ana Maria Brannan & Brigitte Manteuffel

This symposium focuses on educational processes and outcomes in federally funded systems of care. It has been hypothesized that systems of care can support improved school functioning because, unlike schools, these approaches ostensibly offer assistance to students, their families, and their schools 24 hours a day, 7 days a week. However, little is known about the extent to which systems of care approaches actually focus on educational and school outcomes.

The first study examined a national dataset of systems of care participants to describe the typical educational profiles of K-12 students at the time they entered a system of care. In the second study, a collaboration between evaluators and a local school district is described in which the academic records of children receiving wraparound were compared with data obtained from caregivers in evaluation interviews. Findings underscored the importance of utilizing multiple data sources when evaluating academic outcomes. In the third study, hierarchical linear modeling was used to better understand the extent to which SOC involvement impacts academic progress over time. Findings suggested that outcomes improved to a greater degree for young people served in the system of care as compared to youth receiving usual services. In the last study, researchers discuss distinct approaches to collaboration between schools and systems of care. Findings uncovered two general approaches. In the first, mental health workers are out-stationed in schools to coordinate and provide services and in the second, schools and systems of care collaborate through positive behavioral interventions and supports.

# Educational Profiles at Enrollment in Systems of Care: A National Perspective

# Presenting: Jeffrey Anderson, Ana Maria Brannan & Brigitte Manteuffel

## Introduction

It has been hypothesized that systems of care (SOCs) can improve school functioning because, unlike schools, these approaches ostensibly offer support to students, their families, and their schools 24 hours a day, 7 days a week, and across multiple domains, including the home and community. SOC approaches have now reached over 65,000 students in 49 states, two territories, and the District of Columbia. Although historically, many of these students would have been excluded from attending their home schools, it is predicted that with SOC supports more of these students will be attending K-12 schools. Thus, the purpose of this paper was to examine a national dataset in an effort to increase our understanding of the educational characteristics of students who participate in SOCs. Characteristics were examined at the time a student enrolled in federally funded systems of care and included grade level, attendance, absenteeism, suspensions, school and residential settings, remedial services, special education services, grades, and performance ratings that caregivers gave to their child's school.

## Methods

Data for this study were provided by the national evaluator, Macro International, compiled from interviews with the caregivers of students enrolled in a large-scale evaluation of the Comprehensive Community Mental Health Services for Children and Their Families Program. Interviews for this ongoing evaluation are conducted at enrollment and at 6-month intervals, up to and beyond 24 months. Caregiver is defined as an adult with whom the student is residing at the time of the interview. Data of interest for the study reported here were drawn from a subset of the evaluation interview questions that asked caregivers to rate their child's educational experiences during the six months preceding enrollment in the system of care.

*Sample.* Although the Macro sample consisted of 17,554 students, the sample size used in this study fluctuated across variables because of missing data, SOC program completion and attrition, as well as differing response rates among items and participants. Thus, only participants with available data were included in the various variables summarized in this study. In terms of the demographic makeup of the sample, males comprised the majority of students served in SOCs (66.4%). Specifically, Caucasian males made up 38.7% of the sample, followed by Caucasian females (19.2%), African-American males (17.1%), and African-American females (8.0%). The mean age for the sample was 11.42 years (SD = 4.47) (see Table 1).

Table 1 Demographics Characteristics of Students in the Sample

Race/Ethnicity	Male (N / %)	Female (N / %)
American Indian	826 (7.8)	588 (11.0)
Asian	73 (0.1)	42 (0.1)
African-American	2707 (25.7)	1269 (23.8)
Pacific Islander	48 (0.1)	15 (0.0)
Caucasian	6141 (58.3)	3048 (57.2)
Other	748 (7.1)	363 (6.8)
Total	10543 (100.0)	5325 (100.0)
Missing or unknown	1686	
Referral Source		N (%)
Juvenile Justice		2041 (15.3)
School		1674 (18.3)
Mental Health		3505 (26.7)
Child Welfare		2172 (13.5)
Caregiver or Self Referral		1179 (11.5)
Other		2239 (15)
Total		12180 (100)
Unknown or Missing		5374

**Analysis Procedures.** For brevity, descriptive statistics of the various educational characteristics reported below are summarized as percentages.

## **Results**

Educational Characteristics. Caregivers reported the highest grade level their child had completed in school, with approximately 60% reporting that their child had completed between 5th and 9th grade at the time they entered a SOC. The highest percentage of students (14.3%) entered the SOC while in the eighth grade. When responding about their child's academic performance during the prior 6 months to entering the SOC, 23.3% of caregivers noted that the child was failing all or at least half of her or his classes; 11.5% reported average grades of Ds; 27.5% reported Cs; and 26.8% reported that their child was earning As or Bs.

In terms of special education identification, 57.5% of respondents reported that their child had an Individualized Education Plan (IEP) at the time of enrollment. Caregivers also were asked to specify the disability. Of those students with a label, 31.3% had behavioral and/or emotional challenges, 22% had learning disabilities, 4.5% had developmental disabilities, 4.1% had speech impairments, 1.4% had vision/hearing impairments, and 1.4% had physical disabilities. In terms of the amount of the school day that these students were receiving special education services, 52.6% of respondents said their child was spending less than 25% of the school day in special education classes; 9% indicated their child was in special education 25-50% of the day; 7% said 50-75%; and 29.7% reported that their child spent over 75% of the day in special education classes.

Regarding rates of absenteeism at enrollment, approximately 23% of caregivers reported that their child was missing 2 to 3 days of school each week; 29% said 2 to 4 days a month; and 48% indicated their child was missing one day of school per month or less. Caregivers were also asked whether their child had been suspended in the six months prior to enrollment and 44.6% reported answered yes. Similarly, at enrollment, 7.7% of students had been expelled during the past 6 months.

**Parent Perceptions of School.** Caregivers were asked to rate how well the school had met their child's needs during the last 6 months. At enrollment, approximately 50% of the respondents felt that the school was doing well in meeting their child's needs; while 23% said the school was doing a fair job; and 27% felt the school deserved a poor or failing grade. Approximately half (49.7%) of the respondents also reported that their child had needs that the school should be addressing but was not.

#### Discussion

No research to date has made use of such a large national dataset to examine educational profiles of students served in SOCs; thus, this study provides some previously unavailable information. Several notable trends can be observed in the educational profiles of the participants who were in this study. First, most students are reported to be attending school at the time they enroll in a SOC and are most likely to be referred when they are in late elementary school or middle school. This study also demonstrates that at the time students are entering a SOC, a large portion have recently been suspended from school. This finding reflects other studies that have reported higher rates of suspension for students with emotional and behavioral challenges as compared to the overall student population (Wagner et al., 2005). In our research with the Dawn Project SOC in Indiana, findings have indicated that a more third of students were removed from school prior to their involvement with the SOC, educated for some amount of time either at home or in a residential setting.

These findings should be considered in light of several important limitations particularly the use of self report data that was collected from a single source. On the other hand, we are encouraged by the comprehensiveness of this dataset and we look forward to more research to emerge from these data examining how SOCs can support schools and improve academic achievement and other educational outcomes.

## Using Local Data to Evaluate Educational Outcomes

Presenting: J. Sean Allen

### Introduction

This presentation will describe a local collaborative effort to evaluate educational outcomes for children receiving wraparound in Fort Worth, Texas. Some academic data on these children were already collected as part of the national longitudinal study. These data consisted of caregiver-report measures such as the Education Questionnaire. At the request of the school district, evaluators sought to supplement the existing caregiver-report data with objective data obtained from school records.

The first effort to collect objective academic data was largely unsuccessful. Evaluators asked families for copies of children's report cards. Although many report cards were collected, the resulting data were sporadic with problematic gaps. Parents often did not have copies of their children's report cards or they had misplaced them.

A second approach—obtaining academic records directly from the school district's central database—was more complex but ultimately successful. This process, along with the resultant findings, will be described. Finally, a comparison between the academic data and the caregiver-report data will be presented.

### Methodology

Fort Worth's system of care is a school-based program. Families typically enter the system through one of four Family Resource Centers located on school campuses within the Fort Worth Independent School District (FWISD). Because nearly all children in the wraparound program attended schools within the FWISD, their academic data resided in the district's central database.

Signed releases were obtained from families, granting permission for evaluators to access school records. Photocopies of each family's release were delivered to the school district, along with a password-protected database of children's identifying information to match with school records. A researcher employed by the school district manually pulled electronic records for each child and extracted requested data fields.

Grade percentages in core subjects (Math, English, Science, and Social Studies) were captured for each 6-week grading cycle for the academic years of 2002-03, 2003-04, and 2004-05. The school district provided these data on a total of 212 children.

In order to assess the possible impact of involvement with wraparound, each child's academic data were aligned with his or her intake date. The 6-week grading cycle during which the child entered wraparound was designated as a baseline. The previous grading cycle was designated as a pre-intervention measure. The following 3 grading cycles were used as post-intervention measures. Thus, for each child a window of 5 consecutive grading cycles was examined, with the baseline occurring in the second cycle. (Note that grading cycles were not necessarily evenly spaced due to holiday breaks and summer vacation.)

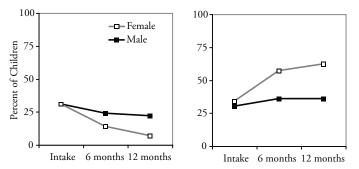
Children were eliminated from the analysis if they had missing data in any of these cycles (e.g., transfer students from outside the district), if the relevant data were not yet available (e.g., data from the 2005-06 school year were needed), if their schools did not give letter grades, or if they had not yet been in wraparound through 3 grading cycles after their baseline cycle. These constraints left 76 children for the analysis.

## Findings

The results of the pre/post analysis indicated no change in grades from the pre-intervention grading cycle to the post-intervention grading cycle. Instead, in all 4 core subject areas, grade averages remained stable at around 76%.

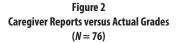
This result was surprising, given that caregivers reported dramatic improvement in grades. Figure 1 shows caregiver-report data from the Education Questionnaire. The number of children with failing grades declined and the number making As and Bs increased, according to caregivers. Moreover, a striking gender difference is apparent in the caregiver-report data, with girls showing greater improvement over time than boys, but this pattern was not found in the objective academic data (i.e., there was no difference in grades between boys and girls).

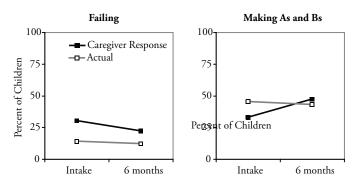
Figure 1 Caregiver Reports of Grades (*N* = 107 boys, *N* = 29 girls)



In order to shed light on the discrepancy between caregiver reports and school records, additional analyses were run to compare directly data from these two sources. Comparisons were made between individual caregiver reports to actual grades from the most recent report card the caregiver would have seen – i.e., the grading cycle which had most recently concluded prior to the date of the data collection interview. Each child's overall grade average at two points in time (baseline and 6 months) was estimated by averaging grades across the four core subjects. The mean grade percentage was then converted to a 6-point score corresponding to the responses on the Education Questionnaire.

Figure 2 shows the comparisons between caregiver reports and actual grades. At intake, caregivers tended to under-report the number of children making As and Bs and to over-report failing grades by a factor of 2. At follow-up, caregiver reports drew closer to actual grades, but failing grades were still largely over-reported.





Moreover, the gender of the child interacted with caregivers' tendency to underestimate their children. At intake, both boys and girls were underestimated. At follow-up boys continued to be underestimated but girls were no longer underestimated. This pattern may explain the apparent gender difference observed in the caregiver-report data.

## Conclusion

Through a successful collaboration with the school district, children's academic data were obtained, allowing evaluators to conduct a pre/ post analysis to determine whether children's grades improved after involvement with wraparound.

Although data obtained from caregiver reports indicated dramatic improvement in grades, no evidence of a change in grades was found in the school records. Instead, the apparent improvement in grades arises from an artifact in the caregiver-report data. Specifically, caregivers tend to underestimate their children's grades at intake while at follow-up grades are more accurately reported. This pattern of results gives rise to the illusion that grades are improving over time, when in reality there has been no change in grades.

## Comparing Academic Progress Over Time in Systems of Care and Usual Services

Presenting: Jeffrey Anderson, John Houser, Robert Stephens & Christine Walrath

### Introduction

It is estimated that more than 40% of the young people served in systems of care (SOCs) have conduct-related challenges that result in exclusion from school because of aggressive behavior. Moreover, as Walker and his colleagues (2004) noted, "...it is highly unlikely that the needs of most antisocial students are addressed by school systems" (p. 6). On the other hand, SOCs can provide the kinds of supports necessary to help children and youth with serious emotional and behavioral challenges succeed in school (Porter et al., 2003); thus, it is important to understand the potential SOCs have for impacting school functioning. The purpose of this study was to examine school data from a large national evaluation of SOCs to better understand the degree to which SOC involvement impacts academic progress over time. This project is unique in that no study to date has compared longitudinally the educational progress associated with SOC involvement with the educational progress associated with usual services.

#### Method

An important national evaluation is the longitudinal comparison study that examines the conditions under which the outcomes of children and families receiving services in SOCs differ from those of children and families receiving services in non-CMHS funded systems using more traditional approaches to service delivery (CMHS, 2005). For this particular study, data were drawn from Macro's dataset, specifically from the Human Services Region III, based in Kearney, Nebraska, one of the federal funded SOC communities, so they could be compared with its non-funded comparison community, Human Services Region IV, based in Norfolk, Nebraska. Data in the Macro dataset were collected from the caregivers of the children and youth participating in SOC services (Region III) as well as the usual services community (Region IV). Caregivers were interviewed at the time of their child's enrollment in services and then at six month intervals thereafter. Data collected up to and including 18 months were used in the current study (Macro, 2005).

#### **Dependent Variable**

The dependent variable for this study was grades, which was created from a subset of interview questions from the Educational Questionnaire (EQ; Macro, 2000) that asked caregivers to rate students' academic performance during the previous six months. This variable ranged from one, indicating the child was failing all classes, to six, which meant the child was getting all As.

#### **Independent Variables**

*Time.* In these analyses, time indicated the number of months since a young person had entered either the SOC or usual services, starting with zero months (the time of enrollment into services).

Attendance and discipline (AD). This level 1 (i.e., longitudinal) variable was created from several questions from EQ and represented the interaction term of two separate factors: attendance (A), defined at as the percentage of time students were in school and discipline (D), which was determined by disciplinary responses, if any, a child had received during the previous 6 months. The variable AD ranged from zero, indicating a student had been suspended or expelled and had very poor if any attendance, to three, indicating that there had been no disciplines problems during the past six months and school attendance was near perfect.

**Demographics.** Demographic variables for the study included age (at the time students entered the SOC), and sex and race, which each was coded dichotomously, indicating whether students were male or female and Caucasian or from another racial group, respectively.

#### **Analytic Strategies**

Hierarchical linear modeling was used to examine the trajectories of grades over time (Singer & Willet, 2003). The model included the attendance and discipline variable as the sole level 1 predictor, along with, age at enrollment, sex, race, and child risk factor as the level 2 variables. For the sake of brevity, only the final models, which exclude non-significant predictors, are presented.

#### **Findings**

Demographics and Descriptive Statistics. For brevity, the reader is directed to Tables 1 and 2. Table 1 presents the demographic comparison statistics for the study. Significant *p*-values indicate instances in which the two groups (SOC v. usual services) differed significantly from each other. Table 2 describes the outcome variable, grades, at enrollment, 6, 12, and 18 months. For the entire sample, average grades improved over time. At enrollment, the grade average was 3.53 (suggesting a D+ to C- average grade), which increased to 3.90 (suggesting a C average) at 18 months (t = 4.40, p < .001); Cohen's d = .27. The interaction term (attendance x discipline) also is described, as are attendance and discipline separately.

**Unconditional Models.** The grand mean of grades in the unconditional means model was  $3.74 \ (p < .001)$ ; the overall average score for all participants at all times. The intraclass correlation indicated that 46% of the total outcome variation was located between individuals and 54% was within individuals. In the unconditional growth model, with the addition of time, initial status was 3.58, which is significantly different from zero (p < .001). The slope, .03 was significant (p > .001) and the covariance correlated with the rate of change.

*Final Model.* Including only significant predictors, the final equation for the study was Y = 3.87 - .06(age) - .05(SOC) + .008(time) + .02(time) (SOC) + .39(AD) - .19(SOC)(AD). The equation provides the relative strengths of each coefficient in the model, which is illustrated in Figure 1.

#### Discussion

This is the first study that we know of which examines academic progress over time and compares young people served in a SOC and those receiving services as usual. While the important limitation that this study relied exclusively on caregiver reports of academic progress tempers our enthusiasm about these findings, we are nonetheless encouraged by our result. The SOC appeared to offer substantial school support for a group of young people who demonstrated greater challenges in school functioning at all times as compared to youth receiving usual services. As

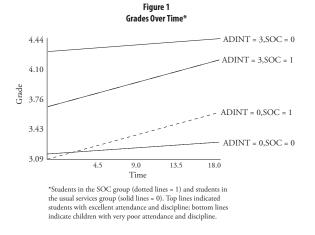


Table 1 Demographic Comparison of Children Entering a System of Care and Services as Usual

	NON-SOC		SO	С		
Variable	Mean	SD	Mean	SD	t	p
Age	12.86	3.37	12.18	3.21	2.287	.023*
	Ν	%	Ν	%	$\chi^2$	Þ
Gender					5.669	.017*
Boy	124	62.3%	218	72.4%		
Girl	75	37.7%	83	27.6%		
Race					2.961	.085
Non-White	30	15.1%	30	10.0%		
White	169	84.9%	271	90.0%		
Child has one						
or more risk facto	ors				.001	.980
Yes	134	67.3%	203	67.4%		
No	65	32.7%	98	32.6%		
Referral Source					133.809	.000*
Corrections	5	2.5%	16	5.3%	2.339	.126
Court	27	13.6%	6	2.0%	26.035	.000*
School	16	8.0%	58	19.3%	11.979	.001*
Mental Health	35	17.6%	142	47.2%	45.862	.000*
Physical Health	3	1.5%	6	2.0%	.160	.689ª
Child Welfare	72	36.2%	24	8.0%	61.442	.000*
Caregiver	34	17.1%	14	4.7%	21.343	.000*
Other	7	3.5%	35	11.6%	10.241	.001*

\* p-value < .05. <sup>a</sup>More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.

Table 2
 Academic Indicators at Four Time Points for Children in a System of Care and Children in Services as Usual

		NON-SOC			SOC					
		Entry	6 mos.	12 mos.	18 mos.	Entry	6 mos.	12 mos.	18 mos.	Total
Grades	Mean	3.69	4.12	4.22	3.83	3.42	3.65	3.88	3.97	3.75
	Ν	189	110	95	58	272	179	154	66	1123
	SD	1.49	1.43	1.14	1.55	1.38	1.37	1.31	1.11	1.39
Discipline issues	Mean	1.82	2.15	2.44	2.19	1.79	1.86	2.14	2.20	1.99
	Ν	192	113	98	59	274	184	156	66	1142
	SD	1.23	1.05	0.94	1.17	1.17	1.19	1.10	1.14	1.16
Attendance (% time in school)	Mean	0.82	0.91	0.91	0.92	0.87	0.91	0.93	0.93	0.89
	Ν	170	93	76	48	228	153	118	48	934
	SD	0.29	0.17	0.23	0.17	0.22	0.17	0.13	0.17	0.21
Attendance X discipline (interaction)	Mean	1.54	1.85	2.11	1.97	1.45	1.62	1.85	1.82	1.68
	Ν	171	93	76	47	232	159	118	51	947
	SD	1.25	1.10	1.09	1.22	1.14	1.18	1.13	1.19	1.18

Note: Variables indicate caregiver's report of average performance during the last 6 months.

SOCs proliferate and are successful in maintaining children and youth with emotional and behavioral needs in their communities, schools should expect to have primary responsibility for educating these young people. For example, CMHS noted in its 2001 report to Congress that the percentage of youth attending school regularly increased from 68% to 74% during the first six months in a SOC. Thus, it appears that when SOCs are successful, more youth with emotional and behavioral challenges attend school. We therefore end by reiterating the importance for future researchers to investigate the conditions under which SOCs can best assist schools and families to ensure that participating young people have successful educational experiences.

## Schools and Systems of Care: Challenges and Models for Collaboration from the National Evaluation

Presenting: Charles Seagle & Freda Brashears

#### Introduction

If school systems and systems of care overlap in the population served and in establishing less restrictive settings in which to provide individualized, family-driven, and culturally competent care for children with serious emotional disturbance, it should follow that strong interagency relationships would develop. Systems of care have established varying interagency relationships with school systems and other educational institutions and programs, but many systems have failed to develop comprehensive, sustainable mechanisms for cross-agency collaboration in both infrastructure and service delivery. Challenges to interagency collaboration between schools and systems of care include competition for resources, differences in (perception of) pedagogic and therapeutic missions, difficulty serving families, and duplication of personnel. The advantages of strong school – system of care collaboration include increased referrals for services and improved comprehensive service planning and delivery (Robbins & Armstrong 2007, Sebian et al., 2007).

Over the course of the federally funded Comprehensive Community Mental Health Services for Children and Their Families Program, the National Evaluation has identified various forms of collaboration between schools and systems of care. In this presentation, we discuss two general approaches that have been used for effective collaboration. In one approach, mental health workers are out-stationed in schools in order to coordinate and provide mental health services, facilitate referrals to other services, and conduct outreach to underserved children and youth. In another approach, schools and systems of care collaborate through the Positive Behavioral Interventions and Supports program, which often also involves some out-stationing of mental health providers in schools, but there are different agendas involved, since PBIS mainly focuses understanding and impeding problem behaviors, teaching and rewarding new skills, altering environments, and creating support systems for students. The aim of both models is to support successful educational experiences and outcomes for children and youth with serious emotional disturbance.

## Methodology

This study involves secondary analysis of qualitative data collected through system-level assessment site visits conducted annually by the National Evaluation from 1999 to 2006. The system-level assessment gathered information about the implementation of eight system-ofcare principles: family-focused, individualized, culturally competent, interagency, coordination and collaboration, accessible, community based, and least restrictive care. The data were collected through face-to-face semi-structured interviews with representatives from core child-serving agencies, project directors, representatives from family organizations, intake workers, case managers, direct service delivery staff, and caregivers. Narrative reports of the findings from the interviews were organized and analyzed with Atlas.ti, Version 5.2.9. The secondary analysis identified themes related to collaboration among schools and systems of care.

This study also involves a review of the educational outcomes data collected by local program evaluators through the descriptive and longitudinal outcomes study portion of the National Evaluation. Through this review, educational outcomes were determined for the children and youth served by programs that were identified as using the various models of school – system of care collaboration. We identified the efforts made and mechanisms used by systems of care that were successful in establishing strong collaboration with schools, and what educational outcomes children exhibited at those sites. Contextual, descriptive, and outcome analysis of collaboration between schools and systems of care was conducted. Outcomes statistics are used descriptively, and are not intended to establish any formal or causal correlation.

#### Findings

Emergent patterns and potential models of successful collaboration were found. Positive Behavioral Interventions and Supports (PBIS) was part of the interagency collaboration in nine systems of care funded from 1997 to 2003. Mental health clinicians, case managers, or wraparound facilitators were placed within schools or school-based clinics in at least 18 additional programs.

The nine communities which supported PBIS in schools were located in Delaware, Kentucky, Massachusetts, New Hampshire, New York, Connecticut, and Illinois; they served children/youth in elementary schools, middle schools, high schools, and alternative schools; some were local programs while others were statewide systems. Some of the systems of care shared staff and assessment measures with PBIS. In one program, PBIS was initiated by the system of care, while in others the PBIS was supported in it its implementation at the local level by the system of care.

Mental health providers and other system of care personnel were located in schools in 18 additional programs located in Texas, Florida, Maryland, Mississippi, South Carolina, Alabama, California, Maine, Nebraska, North Carolina, Kentucky, Oregon, Rhode Island, Utah, and Washington. They also served children in elementary, middle, high, and alternative schools. In some programs, multi-service family resource centers – some free-standing and others linked to community mental health centers – were located in schools, while in others school-based multi-service teams provided case management and service planning.

Educational outcomes varied for systems of care that supported PBIS. For most programs with PBIS, schools provided the vast majority of intake referrals, though mental health was also significantly involved. Educational staff tended to have higher levels of involvement in developing service plans than in other systems of care.

For systems of care with mental health personnel located in schools, outcomes were positive but also varied. Intake referrals were higher for schools than most other agencies, but not to the degree of schools with PBIS. Individualized Educational Plans were developed for increasing numbers of students once they entered the system of care in most programs. School attendance usually increased, and for most school performance remained the same or increase slightly.

#### Conclusion

Both out-stationing personnel in schools and supporting PBIS represent promising approaches to engaging school systems in systems of care. Engaging school staff in making appropriate referrals, planning services, and promoting and raising awareness of system of care principles can enhance interagency collaboration and service coordination and provision. Based on the experience of these successful programs, other systems of care can increase levels of coordination with school systems. Schools with PBIS generally had a much higher involvement of the education agency in making referrals, and considerably less involvement of other referral sources. Further analysis might reveal possible explanations for the similarity of most outcomes measures and for the difference in sources of and involvement in intake referral.

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## Session 2 >> 11:15-11:45 am >> Room 12 Topical Discussion A Model for Effective Partnering of Mental Health and Public Education K-12

#### Presenting: Camille Paras & Teresa Wright

The intent of this discussion is to share the model developed for partnering mental health services with the public education system here in Spokane, WA. The model is about how services get delivered. All services start from the assumption that the reason students and their families get referred for services is related to complex trauma. Everyone involved with this project fully supports the work done by Susan Cole and the Massachusetts Advocates for Children Trauma and Learning Policy Initiative: Helping Traumatized Children Learn.

We will share an overview of our process and experience developing the model and distribute copies to the participants. We have collected considerable research data that we will also distribute containing information about types and amounts of services and the impact of service delivery on academic progress (grades) and attendance/ truancy rates. This has been a process with many challenges and we will share the strategies used to overcome each challenge. Our efforts to develop this model have been extensive and has involved countywide community collaborations and working with six different school districts, representing both rural and urban areas. Services have been provided in all grades K –12 and the therapists have worked with early childhood learning centers as well.

This model has been developed in partnership with our Regional Support Network (RSN), Spokane Public Schools (SPS) and Educational School District 101 (ESD 101) as part of a Safe Schools Healthy Student Initiative. The model remains a work in process; it is based on the experiences and learnings of the past three years and as the data supports, has been very successful. We will share real case studies like the following short case study:

Student was initially referred to treatment for her lack of motivation, low self-esteem, and self-harming behavior. At the time of referral, Student's school counselor indicated that Student had little chance to graduate on time to receive her diploma. Student was failing the majority of her classes and occasionally attended school. When Student began therapy she reported a lack of motivation, engaging in self-harming behavior, feeling depressed, and extreme family conflict. Initially, Student showed no indication that she wanted to graduate with her senior class. Student's goal was to possibly make up her failing grades in the summer or obtain her GED. Student presented as an individual who had little self worth and did not care about herself enough to take control of what happened in her life. As Student continued with treatment, she began to self reflect on her life and understood why she was feeling depressed and making choices that were self-abusive. A turning point came when Student revealed in treatment that a family member sexually abused her when she was a young child. While Student explored her feelings and processed the trauma she endured as a child a new person began to emerge. Student developed positive self-worth, and her outlook on life started to change. To graduate with her senior class and receive her diploma was a goal Student 1 wanted to obtain. Student began to develop increased motivation and make positive choices in her life. As Student began to work on graduating her depressive feelings and self-harming behavior decreased. At school, Student spent long days meeting with teachers before and after school to make up her work. Student began to see her hard work paying off and strived to make her life better. At the end of the school year Student attended all of her senior class events and was able to graduate with her senior class. After graduation Student developed goals to attend college and continue her healing process.

A youth and parent who have received services will co-present as partners in this program. This entire project has included youth and family voice in all aspects of planning and implementation. It is our belief that all services must be client driven, individualized and strength-based, which we believe our model represents. The Project Coordinator assigned to the program will present as well, she is a half time therapist in a high school and half time program management responsible for data collection and managing the logistics of the program. The final member of the presentation panel will be the Project Director and clinical supervisor.

Presenters will engage in a discussion with the audience about:

- The model, gathering feedback and insights into how it would or would not fit within their schools and their communities.
- School policies and practices that have an impact, either positive or negative on the ability to provide school based mental health services.
- Their experiences with providing and receiving school based mental health services.
- Roadblocks, barriers, and solutions.
- Shared language between education and mental health.
- Lessons for future collaborative efforts.

Information collected during the session will be used to improve the model and our continued efforts to effectively partner with education to meet the mental health needs of students and their families.

#### Who should attend

Educators, students, family members, school board members, school administrators, mental health providers (public and private) and persons invested in the academic success and health of our schools.

# Session 3 >> 10:15-11:45 am >> Salon C

## Symposium

## Waiting Lists in Canadian Children's Mental Health: Current Status and Potential Solutions

Chair: Charles E. Cunningham Presenting: John McLennan, Patrick McGrath & Charles Cunningham

Utilization studies suggest that many children with mental health problems do not receive professional assistance. Those locating services often wait for extended periods of time. This symposium illustrates the application of a combination of qualitative and quantitative methods to develop effective alternatives to simply waiting for children's mental health (CMH) services.

The first paper, by several of Canada's most noted health service policy researchers, used qualitative embedded case study methods to determine the range of strategies Canadian CMH services providers employ to manage or reduce waiting lists.

The second presentation combines qualitative and quantitative consumer preference modeling methods to involve parents and professionals in the development of information strategies that might be helpful for parents waiting for CMH services. A sample of 909 parents seeking CMH services and 500 CMH professionals completed a discrete choice experiment examining content, process, and outcome preferences for information about CMH problems. Simulations predicted that, although 95% of professionals thought parents should use a solution-focused information strategy while waiting for services, only 39% of parents would choose this approach. An additional 38% would prefer an information-focused strategy while 21.8% would prefer to simply wait for traditional services.

Dr. Patrick McGrath and colleagues present the results of four randomized trials evaluating the effectiveness of Family Help, a suite of interventions approximating the solution-focused information strategies emerging from Dr. Cunningham's modeling studies. Family Help is a distance treatment approach that uses a disorder-specific handbook, videotapes, and a non-professional coach to help parents develop strategies to manage oppositional defiant disorder, attention deficit disorder, anxiety disorders and night-time enuresis. These trials demonstrate that services consistent with parental preferences yield outcomes rivaling the best available evidence-based treatments.

## Approaches to Managing Child Mental Health Waitlists in Canada: A Qualitative Investigation

Presenting: John McLennan Contributing: Mary Perry, Charlotte Waddell & John Lavis

Acknowledgement: Funding for this study was received from the Canadian Institutes of Health Research.

## Introduction

The need and demand for child mental health treatment services frequently outstrip the public resources made available by the responsible provincial governments in Canada. This state of affairs typically leads to the development of waitlists for assessments and interventions within the child mental health service system. How child mental health service agencies are managing this situation, however, is not known. This presentation will describe the range of strategies employed by Canadian agencies to manage waitlists for child mental health services identified within an exploratory case study.

## Methodology

An embedded case study design was used to explore the range of practices employed to manage waitlists for child mental health services. Maximum variation sampling was used within the case study in an attempt to identify a diversity of approaches used by a range of mental health agencies throughout Canada. The range of strategies employed was extracted from 75 qualitative interviews of key informants from 25 child mental health agencies from a variety of locations in Canada. The data were further supplemented by discussions with additional key contacts with experience working in the child mental health field in Canada.

## Findings

Key informants indicated that their agencies used a variety of strategies to manage waitlists. These strategies were employed at various points along a pathway from help seeking to treatment receipt. For example, centralization at the point of entry into the system was one strategy which aims to facilitate easier access to the most appropriate "line-up" for assessment and treatment. At times, preliminary decisions as to the appropriateness of placement on a waitlist are made at this intake screening point. This can include a decision that such placement is "inappropriate." Ineligibility for a service given certain characteristics of the help seeker (e.g., age of child) or a need for different services (e.g., emergency care given the current level of risk) are possible reasons for inappropriateness. Additionally, eligibility for other services can be determined (e.g., community or private based services) at this intake screening point. Deciding not to place the child on a given waitlist can be one outcome of these situations.

Once on the waitlist, further strategies may be employed. These include ongoing monitoring and triage which can influence relative positioning on the waitlist. In addition, during the wait for formal or extended assessments/interventions, some agencies offer more rapidly accessible alternatives (e.g., educational courses, brief-time limited therapies).

Reducing the time on the waitlist is potentially facilitated by expanding formal assessment and treatment services. Receipt of new additional resources or reorganization of existing sources could accomplish this aim. Hiring additional clinical staff may accomplish the former, while having existing clinicians offer more group versus individual services or restrict the number of treatment sessions they offer per patient can accomplish the latter. Alternatively, some agencies employ strategies which apparently bypass a formal waitlist structure (e.g., by offering drop-in/walk-in clinics).

## Conclusion

Multiple strategies are employed to manage child mental health waitlists in Canada. Unfortunately, little empirical work has been reported as to the effectiveness of these strategies on wait times, access to services, and clinical outcomes. A subsequent component within this CIHR team grant proposes to rigorously evaluate the use of telephone-based parent coaching as one strategy to address the needs of children with oppositional defiant disorder and anxiety disorders who are on child mental health waitlists.

## Modeling Children's Mental Health Waiting List Reduction Strategies Using Discrete Choice Conjoint Experiments: Parent versus Professional Preferences

Presenting: Charles Cunningham Contributing: Heather Rimas, Ken Deal, Don Buchanan, Michael Boyle, Jeff St. Pierre & Sdao-Jarvie

## Background

Many families of children with mental health problems must wait for extended periods to receive mental health services for their children. This study illustrates the use of methods from marketing research to model parent and professional preferences for information strategies that might be helpful while families wait for CMH services.

## Method

Using themes from 6 parent focus groups (3 with fathers, 3 with mothers), we composed 20 4-level content, process, and outcome attributes describing the transfer of CMH information to parents. Using themes from 3 professional focus groups we composed a similar set of 14 4-level information transfer attributes reflecting professional preferences regarding the provision of CMH information to parents. Using Sawtooth Software SSI Web's experimental design module, we composed a partial profile discrete choice conjoint experiment for each participant (Orme, 2006). Parents (n = 1,028) and mental health professionals (n = 500) completed 30 choice tasks, each presenting 3 children's optional CMH information strategies defined by two content, process, or outcome attributes. Parents also completed questions on their use of CMH information, the usefulness of different information sources, and barriers to information access. Parents completed a standardized measure of child behavior and emotional problems, rated the impact of child problems on family functioning, and completed a depression rating scale.

**Data Analysis.** We computed individual parameter estimates using Hierarchical Bayes and used Latent Class analysis to identify segments with similar preferences (Orme, 2006). Next, we used multinomial logit to fit a set of utilities to the choice data. We computed standardized importance scores reflecting the influence of each attribute on parent or professional choices and standardized (zero-centred) utilities to reflect the relative influence of each level of the 20 parent and 14 professional information attribute levels on parent and professional choices. Given the utilities associated with each attribute, we used randomized first choice simulations to estimate preference for each of three alternative approaches to the waiting list. We validated our simulations by predicting the response of participants to hold out tasks. The waiting list options we simulated are described below:

*Waiting List as Usual.* While parents are waiting for CMH services, evidence-informed readings about CMH problems would be provided at parental request.

*Information-Focused Strategy.* While parents are waiting for CMH services, therapists would recommend a package of evidence-informed readings designed to help parents understand the type of behavioral or emotional problems their child was experiencing.

**Solution-Focused Strategy.** While parents are waiting for CMH services, therapists would recommend an evidence-informed program of interactive cd-roms including questions to ensure parents understood the information and homework exercises to build their parenting skills. A therapist would call parents once weekly to review progress, help parents solve problems, and plan homework projects.

## Results

Simulations predicted that 95% of professionals would prefer that parents use a Solution-Focused option while waiting for CMH services. Only 3.9% of professionals preferred an Information-Focused model while 1.2% would prefer the Waiting List as Usual. Parents, in contrast, evidenced a very different pattern of preferences. Simulations predicted that, while 39.4% of parents would prefer the Solution-Focused strategy, 38.8% would prefer an Information-Focused strategy, and 21.8% would prefer the Waiting List as Usual. Those preferring the Waiting List as Usual reported significantly greater child oppositional and conduct disorders, felt their children's problem had a significantly greater adverse impact on family activities, and reported significantly higher depression scores than parents predicted to prefer the Solution-Focused or Information Focused strategies. They felt that CMH information was less useful and less applicable to their child and more likely to be a source of stress and guilt than did parents preferring the Solution-Focused and Information-Focused groups. They reported significantly more logistical barriers to information access and felt CMH professionals withheld information. Although parents preferring a Solution-Focused strategy described their children as more anxious, there were no other differences between the Solution-Focused and Information-Focused groups.

## Discussion

This study is among the first to apply the consumer preference modeling methods used widely by market researchers to the design of CMH services. Simulations suggested that most professionals would prefer a Solution-Focused option for parents waiting for CMH services. Indeed, this type of strategy yields moderate effect sizes in randomized trials (Montgomery, Bjornstad, & Dennis, 2006). Simulations, however, suggest that only 39.4% of parents were ready for this approach, findings consistent with readiness for change research and prospective utilization studies (Cunningham et al., 2000).

Maximizing utilization of CMH information as a waiting list strategy would require options consistent with the preferences of both the Solution-Focused and Information-Focused segments. Readiness for change research suggests that the percentage of parents choosing a Solution-Focused strategy could be increased by raising the anticipated benefits or reducing the logistical demands of the Solution-Focused option. Standardized utility values, for example, suggest many parents would prefer to work independently rather than receiving weekly "coaching" calls from a therapist. This highlights a potential tradeoff in waiting list service design. Although therapist support improves the outcome of the types of Solution-Focused strategies modeled here, (Montgomery et al., 2006), simulations suggest that eliminating this component would reduce costs and increase utilization by parents preferring an Information-Focused strategy. When children were more difficult, had a more negative impact on family life, and parents were more depressed, simulations predicted parents would fail to utilize either the Solution or Information-Focused option. Utility values, however, suggest that this segment would consider the option of an evidence-informed book providing information about optional medications. The next speaker in this symposium, Dr. Patrick McGrath of Dalhousie University, will present the results of a randomized trial testing the utilization and outcome of the type of Solution Focused Strategy modeled here.

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## Family Help: Distance Treatment for Child Mental Health Problems

#### Presenting: Patrick McGrath Contributing: Cathy MacLean, Charles Cunningham & Sherry Stewart

## Background

Approximately 14% of Canadian children aged 4 to 17 years (more than 800,000) have mental health problems (Waddell, McEwan, Sheperd, Offord, & Hua, 2005). Longitudinal studies show that early childhood problems are linked to adult psychiatric disorders (Caspi, Moffitt, Newman, & Silva 1996). Canadian utilization studies indicate that, as in other industrialized countries (U.S. Department of Health and Human Services, 1999; Pihlakoski, Aromaa, Sourander, Rautava, Helenius, & Sillanpaa, 2004), 80% of children and youth with mental health problems do not receive specialist care. Families successful in locating children's mental health services wait for extended periods of time (5-12 months) and professionals limit referrals when waiting lists are excessive. Finally, despite the availability of a range of effective treatments for child mental health problems (Compton, Burns, Helen & Robertson, 2002), few Canadian children receive evidence-based care (Waddell,Lomas, Offord, & Giacomini, 2001). System issues include the shortage of appropriately trained mental health professionals, the relative rarity of the use of protocolized treatments and the cost of delivery of care. Mental health services are stigmatized and thus families are reluctant to attend mental health clinics for services. Families of children with mental health problems are often marginalized, isolated, poorly motivated and disorganized. The demands of organizing transportation, babysitting and time from work for appointments at a mental health clinic are often daunting. Family Help was designed to remedy the current situation in access to treatment for children's mental health. The intervention is a system of evidence-based protocolized distance psychoeducational interventions targeted at specific mental health problems common in children.

## Method

Family Help provides evidence-based interventions to families in their homes without any face-to-face contact using easy-to-read handbooks, videos and a telephone "coach" who is a trained non-professional. The Family Help team consists of a supervising clinical psychologist, a licensed health care provider, coaches and assessment assistants. Coaches maintain contact with families, provide encouragement and problem solve with the family. For the various Family Help trials, all evaluations were conducted by assessment assistants who were blind to the participant's group membership. An internal computer-based management system for participant activities was created for the Family Help trials. All tasks and notes from each member of the Family Help team were entered into this system to facilitate a more efficient and economical delivery of the programs. All data from participants was also entered into this system. A data coordinator organized the various aspects of the Family Help Intranet.

*Disruptive Behavior Disorders Program.* Modules for Oppositional Defiant Disorder (ages 3-8 years) and Attention Deficit Disorder (ages 8-12 years) are based on a modification of the well validated COPE program (Cunningham, 2006) of parent training. Each of the 12 units involves teaching a specific parenting skill (e.g. noticing the good, sticker charts).

*Anxiety Disorders Program.* This Family Help program targets anxiety disorders in children 6-12 years. The program is based on coping skills training and gradual exposure. The anxiety intervention is delivered to both the child and a parent in 12 weekly sessions. Coping skills include behavioral skills such as different forms of relaxation and cognitive skills including appropriate self talk. Self monitoring and problem solving of sources of anxiety is an important prelude to gradual exposure which begins early in the program.

*Enuresis Program.* Our night-time enuresis program focuses on rehearsal and the use of a urine alarm. The training is spread out over several months depending on the achievement of landmarks in the control of the bedwetting. Although the parent is the primary focus, children are involved as needed.

*Study Design.* A practical randomized trial model was used in each of the four programs. The same procedure was followed in each of the four programs. After consent, families were randomly assigned to treatment or control condition (usual care). After randomization, participants entered the program or usual care. There were standardized assessment times across the four programs at baseline, during treatment, end of treatment and follow-up. All participants were followed for one year following randomization. Control group families were offered the opportunity to participate in the appropriate Family Help program.

*Selection Criteria.* For each of the programs (i.e., Disruptive Behavior Disorders, Anxiety Disorders, Enuresis) a similar selection process was followed. Families whose children had the corresponding DSM-IV diagnosis for the program (i.e., ADHD for the Disruptive Behavior Module), measured by scores on the Kiddie-SADS-Present and Lifetime Version (KSADS; Kaufman, Birmaher, Brent, Rao, Flynn, Moreci, Williamson, & Ryan, 1997) interview and no evidence of self-harm or harm towards others were eligible for participation in the program.

*Measures.* Other measures used in all four programs include the Child Health Questionnaire (Landgraf, Abetz, & Ware, 1996) and several measures developed specifically for the trials including: a severity of disability index, an economic impacts of illness measure, and a questionnaire on therapeutic alliance and satisfaction with treatment. For the Anxiety Disorders program, child's anxiety was evaluated using the Mood and Anxiety Symptom Questionnaire (Watson & Clark, 1991) in addition to the KSADS. Children in the anxiety program and the families in the enuresis program kept diaries using a provided structured format. Disruptive Behavior Disorders program participants also completed condition-specific measures including the Child Behavior Checklist (Achenbach, 1991).

## Results

Combined results from the four trials (n = 367 families) indicate that a very high percentage (ranging from 80-90%) of participants complete treatment. The preliminary analyses from the four Family Help programs (i.e., Disruptive Behavior Disorders, Anxiety Disorders, Enuresis) indicate significant reduction in diagnosis compared to the control groups. For example, 29/38 (76%) of children with Oppositional Defiant Disorder were disorder free one year after randomization versus 21/41 or 51% of control participants. In terms of anxiety disorders, 45/50 (90%) of our treatment children were disorder free and 21/41 (51%) of our control group were disorder free at one year after randomization.

## Discussion

Evidence for the effectiveness of the Family Help program in treating the four conditions has led to several health districts in Nova Scotia adopting the intervention as part of their mental health treatment services. The high completion rate of participants across the four trials indicates that

the Family Help distance coach-delivered protocolized approach is appropriate and accessible for families. Several of the challenges from the Family Help trials will be reviewed. Notably, families with a mentally ill child are often in crisis leading to difficulties in working through the Family Help materials within the original timeframe. Implications for an evidence based, family oriented mental health system are discussed.

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# Session 4 >> 10:15-11:45 am >> Salon D

## Symposium

# Unregulated Residential Services: The Challenge to Ensure Quality Services and Protections—Part I

#### Chair: Lenore Behar, Discussant: Robert M. Friedman Presenting: Christina Young, Cynthia Clark Harvey, Paul Lewis, Art Merriam & Allison Pinto

In the past decade, disturbing information has emerged, through investigative reporting and by youth and families, of abusive treatment in unregulated or unmonitored residential facilities. Such abuses include harsh discipline, inappropriate seclusion and restraint, medical and nutritional neglect, poor quality treatment and educational services, and rights violations. In 2004, a group of professionals was formed to address these concerns. This group, the Alliance for the Safe, Therapeutic, and Appropriate Use of Residential Treatment (A START) has advocated for quality services and safety of children in such programs, while helping families to make informed choices when seeking services for their children. Efforts by A START and other organizations led to a study by the Government Accountability Office and an investigative hearing by the Committee on Education and Labor of the U.S. House of Representatives. The GAO findings are shocking. The investigative hearing has highlighted how parents are persuaded to use unregulated or unmonitored services and has raised questions about what oversight is provided. The symposium is divided into two sessions. During the first session, topics covered included: (1) Risks to Children and Pressure on Parents and (2) Beginning Steps to Stimulate Policy Changes. The second session covers The Challenges of Changing Public Policy. The overall focus of the two parts of the symposium is on how policy makers, parents, advocates, service providers and researchers can come together to provide improved ways to access services, determine quality services and good outcomes and ensure protections to youth in need.

## **Risks to Children and Pressures on Parents**

## Presenting: Christina Young, Cynthia Clark Harvey & Paul Lewis

Over the past five years, the media, including newspapers, television, and books, has reported findings of abusive residential programs. Their investigative studies have identified serious problems of poor quality treatment and education services, safety risks, mistreatment, violation of parental rights and the human rights of youth, resulting in some cases in injury or death. The practices of poorly run, unregulated or unmonitored programs have created a public health and a public policy crisis, requiring the attention of parents, service providers, lawmakers, decision-makers, and researchers. The leadership of these programs may describe the need for non-traditional approaches, unfettered by oversight and professional standards, and, as private programs, free of government oversight. Their rationale is that the problems presented by youth appear intractable. Some of these programs are abusive and destructive to youth, with tragic results. Certainly some unregulated or unmonitored programs do provide well for some youth, and the programs provide testimony to the successes they achieve. A START has worked to remedy the serious problems, along with other organizations, including the American Bar Association, the American Psychological Association, the National Conference of State Legislatures, the Federation of Families and a youth group-the Community Alliance for the Ethical Treatment of Youth (CAFETY). The Children, Youth and Families Branch of the Center for Mental Health Services has a focus on the use of appropriate residential services within a system of care.

Although there is a growing belief that non-residential, community based, quality services provide well for most youth, there are parents and youth who do not or can not access non-residential programs and who struggle to find help. This panel focuses on parents who seek treatment, primarily private treatment, with the expectation that these programs will provide needed help. The presentations address how parents identified what they believed to be excellent treatment programs, how they tried to verify the quality of the programs, and their communication with these programs about their child's needs, treatment plans, and progress. They will discuss the disastrous outcomes in these programs, resulting in the deaths of their children. The question raised in the discussions by the panel members is how parents can know the differences between the programs that are credible and those that are not. The underlying question is how public policy can allow for programs that have little or no oversight and little or no accountability to the parents, to other professionals, or to an accrediting body.

The parents also presented testimony at the investigative hearing by the Committee on Education and Labor of the U.S. House of Representatives. In that hearing, they described in very powerful and emotional terms the experiences they had with the residential treatment industry, leading to the death of their children. They are determined that other parents know their stories, so that other parents won't make the same mistakes. They are working toward major changes in public policy, focusing on ways to ensure quality services in residential programs, to ensure adequate staffing, and to ensure that programs don't mislead parents into believing that they have the qualified staff and good management to succeed with troubled youth. They discuss how they were misled by the programs on such issues as how the program goals were accomplished, the training and preparation of the staff, and the emergency procedures that were in place should they be needed. They describe how they found that the actual operations of the program were different than described, and that it was clearly a situation of "buyer beware" in which it was not possible for parents to genuinely know what they and their children were getting when they made a placement. Another theme highlighted in the presentations by each of the parents was that complaints by the youth were not believed and were instead viewed as manipulations.

These parents are making strong efforts to bring awareness to the problems of unregulated or unmonitored programs. They are working to remedy the situations that allow for programs that are abusive and dangerous, and that use methods of treatment are not professionally acceptable. The parents who present on this panel have called together a group of parents, advocates and professionals to develop strategies to address the problem of unregulated or unmonitored residential programs, especially those that provide misleading information about their capabilities and their successes with youth. Their efforts dovetail with those of A START and the other organizations and together they are working on multidimensional strategies to ensure the safety of youth in residential programs and to ensure that the treatment approaches are sound, respectful of the rights of youth and families, and that the treatment results in documented positive outcomes.

## Steps to Stimulate Policy Changes: Gathering Data

#### Presenting: Art Merriam & Allison Pinto

Although there may be problems in other kinds of residential programs, the current panels focus on those programs that are unregulated or unmonitored, either by state license or by approval of a recognized professional accrediting body. These are residential programs where there is no independent body directly overseeing the health and safety of the youth and where the quality of the program is not reviewed. The issues of setting standards for safety, health, and the quality of services and monitoring against those standards are difficult tasks, usually based on a consensus of expert opinions. However, such consensus is based on the best known or best available information. The task may be complicated by the lack of scientific evidence of what quality is in residential services. Good, reliable and repeatable measures of service quality, progress and outcome are lacking—a failing of the fields of services to youth.

As the first panel has discussed, parents feel no choice but to seek help for their children and make the best possible decisions. There is little guidance for them, both in terms of what to look for and how to determine if the promises of the programs are accurate—or how to know when things are going well or badly. Although the emphasis on community based systems of care is widespread, the families and youth that use these residential programs are sometimes outside the system. Many of them are not aware of the community based services or do not access them because they use private-sector services. Public policy, in some instances, has failed these families and left them to make their own determinations about what works and what is quality programming.

The remedies for this problem require the actions of many sectors, including the research community. The remedies require considerable information and sound research to move toward better services and improved regulation of programs. In the absence of data about the full scope of the problem—how many youth attend unregulated or unmonitored programs, how many such programs are there, how many of the programs function well and how many function badly—it may be hard for the state legislatures to see the need for change. Further, in the absence of valid findings about what program elements are important for the wellbeing of youth, for their health and safety, and for quality treatment, it may be difficult to change the laws and policies in the states. Thus, building a research agenda is a challenging task, but one of paramount importance. The panelists will discuss the beginning steps of gathering data and the broader needs for sound research into this area.

At the request of Congressman George Miller, Chair of the House Committee on Education and Labor, the Government Accountability Office undertook studies of residential programs. "Given concerns about allegations, particularly in reference to private programs, the Committee asked GAO to (1) verify whether allegations of abuse and death at residential treatment programs are widespread and (2) examine the facts and circumstances surrounding selected closed cases where a teenager died while enrolled in a private program." They began to study the issues, first using a case study method. They have also undertaken a study of broader scope and the report of this broader study is being prepared for publication. The first report, entitled *Residential Treatment Programs: Concerns Regarding Abuse and Death in Certain Programs for Troubled Youth*, was released in October 2007, at a hearing of the House Committee on Education and Labor about residential treatment programs. The report provided background information and focused on a case study of 10 youth who died in residential programs. A summary of the report indicates that the

GAO found thousands of allegations of abuse, some of which involved death, at residential treatment programs across the country and in American-owned and American-operated facilities abroad between the years 1990 and 2007. Allegations included reports of abuse and death recorded by state agencies and the Department of Health and Human Services, allegations detailed in pending civil and criminal trials with hundreds of plaintiffs, and claims of abuse and death that were posted on the Internet. GAO could not identify a more concrete number of allegations because it could not locate a single Web site, federal agency, or other entity that collects comprehensive nationwide data. GAO also examined, in greater detail, 10 closed civil or criminal cases from 1990 through 2004 where a teenager died while enrolled in a private program. GAO found significant evidence of ineffective management in most of the 10 cases, with program leaders neglecting the needs of program participants and staff. This ineffective management compounded the negative consequences of (and sometimes directly resulted in) the hiring of untrained staff; a lack of adequate nourishment; and reckless or negligent operating practices, including a lack of adequate equipment. These factors played a significant role in the deaths GAO examined.

A second report to the House Committee on Education and Labor was of an online survey, gathering information from over 700 individuals with first-hand experience in residential programs as adolescents, as well as 150 parents who placed their children in residential facilities. The report revealed program practices and family experiences indicating systemic problems in many residential facilities across the country. Based on the information reported by the respondents, a sense of the nature and scope of problems that have emerged include:

- Reports of mistreatment, abuse and neglect are widespread.
- Youth are being transported to residential facilities by escort services under threat of force, without their consent.
- · Facilities are not maintaining health and safety standards.
- Pseudo-therapeutic interventions are being practiced.
- Youth are being deprived of educational services.
- Medical neglect is occurring.
- The use of seclusion and restraint is being used inappropriately.
- Human rights of youth are being violated.
- Treatment is abusive.
- Youth are suffering.

The discussant will outline the additional approaches that are needed to influence policy changes and he will provide a challenge for the future, suggesting potential areas for research.

# Session 5 >> 10:15-11:15 am >> Salon G

## Symposium

## Implementing Evidence-Based Practices for Justice-Involved Youth

#### Chair: Joseph A. Cocozza

# Presenting: Joseph Cocozza, Debra DePrato, Eric Trupin & Darcy Gruttadaro

Large numbers of youth with mental health needs are found in nontraditional settings, such as juvenile justice, child welfare and educational settings. The need to focus on multi-agency involvement of youth is one of the key elements of the Systems of Care approach and is emphasized by the New Freedom Commission Report. In particular, research has consistently found large numbers of youth with mental health disorders in the juvenile justice system. The movement to improve services for this population is also being influenced by a growing emphasis on the development and implementation of Evidence-based practices (EBPs). A multi-state initiative supported by the MacArthur Foundation—Models for Change—is attempting to reform juvenile justice systems. A major component of this effort and the focus of this symposium is on improving the availability and implementation of EBPs for justice involved youth with mental health needs.

The symposium will include four presentations: an overview of mental health and juvenile justice issues and a brief description of Models for Change; a case example of progress being made in Louisiana, including information on the research, training and new funding initiatives in the state; an overview of the work being done in Washington to review the appropriateness of EBPs for youth of color and to pilot a community process for promoting the adoption of EBPs within local counties with high proportions of Latino youth; and a description of efforts by a major family advocacy group to involve and inform family members in the provision of EBPs.

# Evidence-Based Practices: Advances in the Models for Change States

## Presenting: Joseph J. Cocozza

# Acknowledgements: Models for Change is supported by the John D. and Catherine T. MacArthur Foundation.

A recent study by the National Center for Mental Health and Juvenile Justice found that approximately 70% of the youth in residential juvenile justice settings meet criteria for at least one mental health disorder (Shufelt & Cocozza, 2006). These youth often end up in the juvenile justice system because of a lack of effective community-based services to meet their needs. Many of these youth are placed in the juvenile justice system for relatively minor offenses with the hope of obtaining treatment that is unavailable in the community (NAMI, 2001; U.S. GAO, 2003). Unfortunately, in many cases their mental health needs continue to go unaddressed by the juvenile justice system (US Department of Justice, 2005).

Alarmed by this trend, over the past few years researchers, practitioners and policy makers across the country have been exploring new ways to address the needs of youth with mental health problems who come in contact with the juvenile justice system. As a result, new approaches have emerged for responding to this population, including the development and expansion of evidence-based treatment practices. In general, the term "evidence-based practices" refers to standardized clinical treatments, preventive programs, or service practices that have been carefully evaluated using rigorous research designs, and which have demonstrated effectiveness. The availability of evidence-based practices represents a real opportunity for improving the effectiveness of the juvenile justice system, while simultaneously improving the lives of the youth who come in contact with the system.

However, several barriers and issues remain that limit the adoption of these practices on a large scale. For example, evidence-based practices are often developed in an isolated, program-by-program way, rather than through systematic needs assessment, infrastructure development, and sustained funding. As a result, evidence-based practices often do not go "to scale" and can be difficult to sustain. Many communities also struggle with workforce development and funding challenges and issues around how best to ensure family involvement when they seek to implement or expand evidence-based practices. Finally, many EBPs and their implementation have not been widely tested in communities of color. Therefore, localities with large populations of people of color face unanswered questions about the effectiveness and appropriateness of those services for the youth they serve.

Efforts are now underway in a number of jurisdictions to begin to address some of these issues and pave the way for more widespread adoption of evidence-based practices. States and counties are beginning to incorporate the development of EBPs in systems reform efforts, presenting a real opportunity for new and innovative solutions to some of the issues that have limited the spread of EBPs. In particular, much of the work now occurring within the states participating in the Models for Change initiative of the John D. and Catherine T. MacArthur Foundation is aimed directly at addressing these issues. Models for Change seeks to create successful and replicable models of juvenile justice reform through targeted investments in four states-Pennsylvania, Illinois, Louisiana, and Washington. The goal of Models for Change is to "identify and accelerate promising statewide models for juvenile justice reform." To attain this goal, the Models for Change states work with a variety of organizations, from the local to national level, to carry out a plan for developing models of reform around the selected Targeted Areas of Improvement (TAI). In selecting the TAIs, the Models for Change states have in some way focused on enhancing the use of evidence based practices.

This presentation will provide an overview of evidence-based practices, including the characteristics and the rise and spread of EBPs over the past few years. In addition, the presentation will discuss the benefits of EBPs and some of the emerging issues and challenges associated with their adoption. Given the importance of this issue within the four Models for Change states, and the significant advancements that are likely to result from the work of these four states on this issue, this presentation will also serve as an introduction to the Models for Change Initiative. Presentations highlighting some of the major efforts underway in these states will follow. The first will provide a case example of the progress being made in Louisiana including information on the research, training and new funding initiatives to support evidence-based practices being developed in the state. The second will provide an overview of the work being done in the state of Washington to review the appropriateness of EBPs for youth of color and to pilot a community process for promoting the adoption of evidence-based practices within local counties with high proportions of Latino youth. The final presentation will describe efforts by a major family advocacy group to involve and inform family members in the provision of EBPs.

## Expanding Evidence-Based Community Services: The Louisiana Experience

### Presenting: Debra DePrato

For a long time, the State of Louisiana relied heavily on residential and institutional care for youth involved with the juvenile justice system. Many of the youth in these facilities had significant mental health needs. A survey conducted by the National Center for Mental Health and Juvenile Justice between 2003 and 2004 found that 70% of youth in Louisiana's secure correctional facilities met criteria for at least one mental health disorder. However, the state has recently undergone a major shift in policy and practice—emphasizing the need to keep youth in the community whenever public safety allows, and reducing the reliance on residential and institutional care. This reorientation has resulted in major changes in the way the state handles youth coming in contact with the justice system, and has significantly reduced the number of youth placed in residential facilities. Over the past six years, the number of youth in the state's juvenile correctional facilities has decreased from over 2,000 youth to below 500 youth.

While clearly a welcome change in Louisiana, the diversion of these youth into the community has highlighted the shortage of communitybased services throughout Louisiana. Considering that many of the youth being diverted from Louisiana's secure correctional facilities have significant service needs, particularly mental health needs, the lack of communitybased services is troubling. Recognizing this, the State of Louisiana, upon being selected for participation in Models for Change, a systems reform initiative supported by the John D. and Catherine T. MacArthur Foundation, identified the development and expansion of evidence-based community services as one of its Targeted Areas of Improvement.

Louisiana considered the new demand being placed on the communitybased services as a result of the diversion of youth in contact with the juvenile justice system from institutional placement as an opportunity for the State to invest in more effective services in the community that reflect the current knowledge about what works for juvenile justice youth, particularly those with mental health problems. In pursuit of this overarching goal, Louisiana has adopted a two pronged approach. First, through Models for Change, Louisiana is striving to expand the use of evidence-based and promising practices through both targeted local investments and activities at the state level. Second, Louisiana is working to ensure that the mental health and other needs of youth in the juvenile justice system are accurately identified, so that appropriate referrals to these evidence-based practices can be made. Therefore, Louisiana is also focusing on increasing the reliance on scientifically-sound screening and assessment procedures. To accomplish these goals, the state is working to develop a new model for juvenile justice reform-one that partners with the state's higher education resources. Louisiana Models for Change has formed partnerships with the Louisiana State University Health Sciences Center and the University of New Orleans, both of which are an integral part of the reform activities within Louisiana.

The State is working to address these issues on a variety of fronts. Training opportunities for practitioners, policy makers, and program administrators is being conducted across the state. For example, in April 2007, Louisiana Models for Change held an Evidence-Based Practices Summit for Louisiana Leadership in Baton Rouge. The event was a tremendous success, bringing together key stakeholders, both at the local and state levels, to raise awareness and provide education around evidence-based practices. Similarly, a Juvenile Drug Court Summit in November 2007 will bring together the juvenile drug court teams from all of the state's juvenile drug courts to learn about evidence-based practices relevant for juvenile drug court practitioners, to review the results of a recently conducted survey of the State's courts, and begin to discuss priorities and opportunities for increasing the reliance on researchsupported screening and assessment practices and evidence-based and promising practices within these programs.

Louisiana is also using research as a foundation to guide and inform the work across the State. The results of this work are intended to serve as a foundation for the identification of gaps and strengths in Louisiana, selection of goals and priorities, and the development of a plan for the growth of evidence-based practices. For example, Louisiana Models for Change recently developed a survey—the Juvenile Justice System Screening, Assessment & Treatment Services Inventory—to collect detailed information about the screening and assessment practices and the range of services available within the parishes currently participating in Models for Change. The survey results provide the parishes with a picture of the current state of affairs in their locality and set priorities and develop a plan based on that information.

Finally, to ensure the growth and sustainability of evidencebased community services, the State will need to invest in the actual implementation of these services. This work is already underway. The State Office of Youth Development recently announced the allocation of approximately \$1.25 million to the Models for Change sites, with the goal of accelerating their progress in achieving the goals of the State's Models for Change Work Plan. The infusion of these funds represents a critical first step for the Models for Change sites to conduct needed trainings and implement start-up activities.

This presentation will provide an overview of the Louisiana Models for Change efforts to develop and expand evidence-based community services. This will include a discussion of the changes within the state leading up to the prioritization of this issue, the strategies and approaches being used within the state to increase the reliance on evidence-based practices, and some of the challenges and possible solutions associated with such an undertaking.

## Culturally-Competent, Evidenced-Based Practices for the Latino Community

## Presenting: Eric Trupin

The current trend towards implementing evidenced-based practices is an exciting time for juvenile justice and mental health treatment. Juvenile courts, administrators and mental health providers can access information about what programs have been proven effective and feasible and assess how well these programs might fit into their community. These programs often come with detailed manuals and supervisory support to ensure good implementation and fidelity.

Many states now mandate or recommend the use of EBPs in statefunded Medicaid programs and lists of EBPs are being updated and maintained by academic, federal and international agencies. While all these agencies have slightly different criteria for establishing whether a program is "evidenced-based," the minimum criterion requires that the program have proven effectiveness through scientifically rigorous clinical trials. The American Psychological Association (APA) defines an evidenced-based practice as "the integration of the best available research with clinical expertise in the context of patient characteristics, culture, and preferences."<sup>1</sup> The APA statement describes an ideal for evidencebased practices in which programs are proven effective through scientific research in terms of their cultural appropriateness.

However, the implementation of an evidenced-based practice is complex and hinges on the degree of "buy in" to the program and the extent to which the program fits with the community culture. Some have raised legitimate concerns about the under-representation of minority groups in the clinical trials of these programs, and the potential mismatch between these programs and targeted ethnic populations.<sup>2</sup> In reality, while some programs have shown considerable effectiveness through clinical trials, much work remains to be done to ensure that these programs are sensitive to cultural preferences and needs.

For example, at the time of this writing, of the 57 programs listed in the National Registry of Evidenced-Based Programs and Practices (SAMHSA), only 2 were specifically developed for and tested with Latino populations. Approximately 11 other programs claimed that their program was appropriate for Latino populations, although very few had included a large enough subsample in their clinical trial to confidently make this claim.

The lack of research into the cultural appropriateness of EBPs with the Latino population is startling considering that Latinos are the largest and fastest growing minority group in the U.S. According to the 2007 U.S. Census, Latinos made up 15% of the population and between 1990 and 2000, the Hispanic population grew by 57.9%. By 2050, the Latino population is expected to make up 24% of the population.<sup>3</sup> The need to focus on the Latino population is critical, as large proportions of Latinos are living in poverty, have limited healthcare access, lower educational attainment and often experience language barriers and acculturation stressors.<sup>4</sup> Further, research shows that mental health and substance abuse problems get worse as youth become more acculturated to mainstream U.S. culture. It is essential that research with the Latino population take into account acculturation as well as country of origin issues.<sup>5</sup>

The good news is that greater attention and resources are being invested in researching ways to successfully engage and treat Latino youth and families. The National Institute of Mental Health has initiated a large scale epidemiology study with large subsamples of Puerto Rican, Mexican and Cuban peoples to get more accurate rates of mental health diagnoses for this population. It is also becoming commonplace for organizations and agencies to have standards of cultural competence; although many guidelines for cultural competence still lack empirical support.

Other clinician/researchers have begun to adapt existing evidencebased practices to reflect the values of the Latino community. One example is the cultural adaptation of Trauma-Focused Cognitive Behavioral Therapy (TF-CBT). The adaptation retains the main focus and structure of the program, but introduces words, phrases and engagement strategies that pull from values in the Latino community.<sup>6</sup> The adaptation was developed through clinical experience working with Latino families, as well as lessons learned from the literature and through focus groups and interviews. The TF-CBT adaptation incorporates values that are mentioned elsewhere in the literature regarding Latino culture.

Many questions remain regarding the prevalence of mental disorders for Latino subgroups, whether incorporating cultural values increases desired outcomes for evidence-based treatment, and what culturallyappropriate strategies will increase mental health service utilization and reduce problem behaviors. As part of the Models for Change Initiative, researchers at the Division of Public Behavioral Health and Justice Policy at the University of Washington are involved in examining some of these issues. We are working with Benton/Franklin county in Washington State, which has a sizeable Latino community, to assess the needs and perceptions of this community in regards to evidence-based practices, as well as issues encountered when attempting access mental health and juvenile justice services.

This process will likely proceed in a few phases. First, we plan to assess community needs and perceptions through key informant interviews, focus groups with targeted Latino populations, as well as a mass community survey. The survey and interviews will particularly focus on what the Latino community's experience has been in accessing different social agencies, including schools, mental health organizations and the juvenile court. The results of this needs assessment will inform the community's broader efforts to identify gaps in service for the Latino community and provide strategies for more successful engagement.

Second, we will be providing technical assistance to Benton/Franklin County as they decide whether a culturally-appropriate and sustainable evidenced-based practice could fill these gaps in service for the Latino community. This may entail selecting an EBP that already has existing guidelines for cultural adaptation, or it may include consulting around how to incorporate Latino values into the program. Third, if an EBP is selected for the community, we would encourage the use of fidelity and outcome assessments in order to gather information about the program's success in the community. We are also compiling an exhaustive literature review of cultural competence in the juvenile justice system, including screening and assessment instruments as well as available evidenced-based practices. These projects will inform the broader project of identifying key issues in the Latino community regarding the adaptation, implementation and sustainability of existing EBPs.

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## Family Advocacy and Evidence-Based Practices

## Presenting: Darcy Gruttadaro

We now know far more about the most effective treatments for children and adolescents struggling with serious mental health treatment needs. Yet, these interventions often fail to reach those children and adolescents who need them most. The failure to use effective treatment interventions outside of academic and research centers has widened the gap between what we know works and what is done in clinical practice. Many evidence-based interventions that have been shown to produce positive outcomes for justice involved youth are not available in communities around the country. Instead, these children and adolescents continue to be housed in detention centers and to receive institutional care despite research indicating that it does not benefit them and, in some cases, is harmful.

NAMI has developed a family network to promote evidence-based practices in children's mental health. We are working to better educate and inform families about research and evidence-based practices (EBPs) in children's mental health because we know that educated and informed families are in the best position to advocate for the most effective and appropriate interventions for their child. The goal is for family advocacy to lead to an improved quality of care, increased accountability, and ultimately better outcomes for children and their families.

The family network is also designed to empower family leaders to advocate for change and the broader dissemination and implementation of EBPs for early-onset mental illnesses. Our work focuses on the early identification of mental health treatment needs and early intervention with effective services and supports so that children and adolescents with mental illnesses can avoid contact with law enforcement and the justice system. This presentation will share why NAMI is focusing on closing the science to service gap, including a discussion on how children and adolescents with serious mental health treatment needs in America are struggling in our nation's schools, in the juvenile justice system, and in the loss of critical developmental years to undiagnosed and untreated mental illnesses. The presentation will cover what many families want from the treatment and service systems and how best to address the needs of children and their families. It will outline calls from national leaders for EBP reform that are slowly gaining attention and momentum in states and local communities. NAMI will share the resources that we have developed to educate and inform families, including a comprehensive family guide on EBPs developed with Barbara Burns, a national leading expert on EBPs in children's mental health.

It will show how far too many children and adolescents in our nation continue to receive services in institutional settings despite a lack of research to support institutional care and a stronger research base to support home and community based services. The presentation will also show that the national use of residential treatment facilities for youth with mental illnesses grew significantly during the past two decades despite the poorer outcomes associated with institutional care and the higher cost of services in these settings.

The presentation will outline the strategies that families are using to advocate for the broader availability of effective services for children and their families, which goes far beyond just learning about EBPs. It will outline the challenges that families face in advocating for systems reform that includes the availability of a broader array of effective interventions. NAMI is pleased to be involved with the Models for Change (MOC) project which promises to improve the lives of children and adolescents with mental health treatment needs, especially those involved with the juvenile justice system.

## Session 5 >> 11:15-11:45 am >> Salon G Youth Group Participation: A Potential Component of Clinical Care for Behavioral Difficulties

## Presenting: William Bannon & Mary McKay

## Introduction

Conduct Disorder (CD) and Oppositional Defiant Disorder (ODD), are often identified as the most frequently diagnosed disorders of childhood and adolescence, accounting for 1/3 to 1/2 of all youth mental health referrals (Knock, Kazdin, Hirripi, & Kessler, 2006). The behaviors that are associated with these diagnoses are broad, yet are regularly associated with sexual risk-taking, substance abuse, and delinquent behaviors. Reviews of the treatment of ODD and CD disorders note that while several forms of clinical care are successful in reducing these behaviors, disorders often fail to be reduced from clinical levels to non-clinical levels of impairment (Burke et al., 2002; Knock et al., 2006). This suggests while current forms of treatment do show promise in reducing ODD and CD behaviors, clinical care may benefit from other supplemental sources of mental health support that may enhance behavioral change. The current study examines youth group participation as a possible factor protective of youth behavioral difficulties that may warrant consideration as a supplement to clinical care toward enhancing therapeutic outcomes.

**Research question:** Will youth who participated in youth groups be less likely to engage in sexual risk taking, substance abuse, and delinquent behaviors?

## Method

#### **Study Sample and Settings**

All data were taken from the National Longitudinal Study of Adolescent Health (Harris et al., 2003). The study is one of the nation's largest and most rigorous studies of adolescent behavior. The current study utilizes the public-use dataset for Wave I, which consists of one-half of the core sample, chosen at random. The total number of respondents in the public-use dataset in Wave I is 6,504. Of these youth, 52% are female (n = 3356) and 48% are male (n = 3147). The average child is approximately 16 years old (SD = 1.62).

#### Measures

#### Outcomes

*Delinquent behaviors.* Youth reported if they had taken part in 15 delinquent behaviors over the past 12 months.

*Sexual risk-taking.* Sexual risk-taking was examined through a single item where youth were asked if they ever had sex.

*Substance abuse.* Youth reported data concerning their use of cigarette, alcohol, and various illegal drugs over their lifetime.

*Joint occurrences.* Youth reported if they over the past 12 months they had been drinking alcohol when using drugs, been driving while drunk or high on drugs, and been drunk or high on drugs while at school.

#### Independent variables

Participation in youth groups. Youth indicate if they attended youth groups weekly, infrequently (< once per month), or never, over the past 12 months.

#### Covariates

The following variables were controlled for in the current analysis:

**Demographics.** Data on basic child demographics (race, age, and sex) and family socioeconomic status (has the residential father or mother of the youth received public assistance over the past 12 months – yes/no) were collected and controlled for in these analyses.

*School problems.* The current research also measured and controlled for the presence of school problems through 2 items: (1) has youth ever repeated a grade - yes/no; and (2) has youth ever received an out of school suspension – yes/no.

*Youth mental health state.* Youth mental health state was measured with a 19-item scale included in the ADD Health study.

*Exposure to community violence.* Exposure to community violence was measured with an 8-item scale included in the ADD Health study.

*Protective factors.* Protective factors were measured with an 8-item scale included in the ADD Health study.

#### Data analysis

Logistic regression was used to examine the association between youth group participation and behavioral outcomes, while controlling for various other behavioral difficulty risk factors.

## **Findings**

The data indicate that youth group participation is protective of youth behavioral difficulties in several domains, while controlling for key youth demographic, protective, and risk factors. First, in regard to delinquent behaviors, Table 1 describes that over the past 12 months, in reference to youth that participated in youth groups weekly, youth that never attended youth groups were more likely to have shoplifted, used drugs, and stolen something worth less than \$50. Second, in regard to sexual risk taking behavior, Table 2 describes that in reference to youth that participated in youth groups weekly, youth that attended youth groups infrequently and never attended youth groups were more likely to have had sex. Third, in regard to substance abuse, Table 3 describes that in reference to youth that participated in youth groups weekly, youth that attended youth groups infrequently and never attended youth groups were significantly more likely to have smoked a cigarette, smoked regularly, have had a drink of beer, wine, or liquor more than two or three times in their lifetime, and to have used marijuana in their lifetime. There was also evidence of youth who never attended youth groups to be more likely to have used cocaine and other illegal drugs in comparison to youth who attended youth groups weekly. Finally, Table 4 presents that among youth who reported using drugs, those who never attended youth groups were significantly more likely to drink alcohol when using drugs, to drive while high on drugs, and to have gone to school while high on drugs in comparison to youth who attended youth groups weekly over the past 12 months.

Table 1
Delinquent Behavior Stratified by Youth Group Attendance Over the Past 12 Months\*

Rate of youth group Attendance past 12 mo	No n (%)`	Yes n (%)	B (SE)	Wald	Р	OR (CI)	
1) Shoplifted							
Weekly (Reference)	1145 (82%)	254 (18%)					
Infrequently	1390 (78%)	391 (22%)	.16 (.10)	2.79	.10	1.2 (.97-1.41)	
Never	1829 (76%)	573 (24%)	.19 (.09)	4.12	.04	1.2 (1.01-1.43)	
2) Used drugs							
Weekly (Reference)	1335 (96%)	63 (4%)					
Infrequently	1685 (95%)	95 (5%)	.01 (.18)	.00	.96	1.0 (.71-1.43)	
Never	2197 (91%)	209 (9%)	.36 (.16)	4.99	.03	1.4 (1.05-1.98)	
<ol> <li>Stolen something worth &lt;\$50</li> </ol>							
Weekly (Reference)	1195 (86%)	203 (14%)					
Infrequently	1469 (82%)	313 (18%)	.15 (.10)	2.13	.14	1.2 (.95-1.42)	
Never	1932 (80%)	473 (20%)	.21 (.10)	4.63	.03	1.2 (1.02-1.50)	

\* Only significant results among the 15 items contained on the scale are reported

Table 2 Sexual Risk-Taking Behavior Stratified by Youth Group Attendance Over the Past 12 Months

Rate of youth group Attendance past 12 mo	No n (%)`	Yes n (%)	B (SE)	Wald	Р	OR (CI)
1) Ever had sex						
Weekly (Reference)	1003 (72%)	388 (28%)				
Infrequently	1078 (61%)	695 (39%)	.44 (.09)	24.02	.000	1.6 (1.30-1.86)
Never	1317 (55%)	1075 (45%)	.53 (.09)	38.30	.000	1.7 (1.44-2.02)

Table 3 Substance Abuse Stratified by Youth Group Attendance Over the Past 12 Months

Rate of youth group Attendance past 12 mo	No n (%)	Yes n (%)	B (SE)	Wald	Р	OR (CI)
1) Ever smoked a cigarette		()				()
Weekly (Reference)	761 (55%)	635 (45%)				
Infrequently	823 (46%)	967 (54%)	.18 (.08)	5.71	.02	1.2 (1.03-1.40)
Never	967 (40%)	1441 (60%)	.33 (.07)	19.39	.000	1.4 (1.19-1.60)
2) Ever smoked regularly, (only includes youth the				days		
Weekly (Reference)	223 (52%)	207 (48%)				
Infrequently	291 (41%)	412 (59%)	.32 (.13)	6.05	.01	1.4 (1.07-1.76)
Never	426 (37%)	722 (63%)	.41 (.12)	11.76	.001	1.5 (1.19-1.92)
3) Had a drink of beer, with			ree times ir	n their lif	è	
Weekly (Reference)	833 (60%)	563 (40%)				
Infrequently	782 (44%)	999 (56%)	.52 (.08)	43.76	.000	1.7 (1.44-1.96)
Never	927 (39%)	1478 (62%)	.62 (.08)	67.84	.000	1.9 (1.61-2.16)
4) Used marijuana in their	lifetime					
Weekly (Reference)	1177 (85%)	212 (15%)				
Infrequently	1338 (79%)	436 (21%)	.20 (.10)	3.88	.05	1.3 (1.00-1.50)
Never	1605 (67%)	784 (33%)	.73 (.10)	57.84	.000	2.1 (1.71-2.49)
5) Used cocaine in their lif	etime					
Weekly (Reference)	1368 (98%)	22 (2%)				
Infrequently	1731 (97%)	44 (3%)	.15 (.28)	.31	.58	1.2 (.68-2.00)
Never	2288 (96%)	98 (4%)	.44 (.25)	2.99	.08	1.5 (.94-2.53)
6) Other illegal drugs in th	eir lifetime					
Weekly (Reference)	1341 (97%)	48 (3%)				
Infrequently	1681 (95%)	93 (5%)	.22 (.19)	1.31	.25	1.2 (.86-1.81)
Never	2139 (90%)	245 (10%)	.73 (.17)	17.62	.000	2.1 (1.47-2.90)

Table 4 Joint Occurrences of Substance Abuse Stratified by Youth Group Attendance Over the Past 12 Months

Rate of youth group Attendance past 12 mo	No n (%)`	Yes n (%)	B (SE)	Wald	Р	OR (CI)
mienaance pasi 12 mo	n (70)	n (70)	D(3L)	w uuu	1	OR (CI)
1) Drinking alcohol when u	ising drugs					
(only includes youth wh	o reported havin	g used alcohol :	and drugs)			
Weekly (Reference)	142 (67%)	69 (33%)				
Infrequently	243 (65%)	134 (35%)	.07 (.19)	.13	.72	1.1 (.74-1.56)
Never	395 (54%)	341 (46%)	.38 (.18)	4.63	.03	1.5 (1.03-2.06)
2) Driving while high on di	rugs (only include	s youth that re	port having	g used di	rugs)	
Weekly (Reference)	222 (87%)	34 (13%)				
Infrequently	334 (79%)	88 (21%)	.38 (.24)	2.61	.11	1.5 (.92-2.33)
Never	615 (74%)	220 (26%)	.46 (.22)	4.48	.035	1.6 (1.03-2.42)
3) Being high on drugs whi	le at school (only	includes youth	that repor	t having	used di	ugs)
Weekly (Reference)	194 (76%)	62 (24%)				
Infrequently	291 (69%)	131 (31%)	.28 (.19)	2.23	.14	1.3 (.92-1.93)
Never	511 (61%)	324 (39%)	.49 (.17)	7.87	.005	1.6 (1.16-2.28)

## Conclusion

There is evidence that youth group participation is protective of various types of delinquent behaviors, sexual risk-taking, and substance abuse, as well as the combining of these behaviors. These findings may offer preliminary evidence supporting the implementation of youth groups as an addendum to clinical care that may enhance therapeutic outcomes.

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# Session 6 >> 10:15-11:45 am >> Salon H

## Symposium

# Using the System of Care Practice Review (SOCPR) for Needs Assessment and Quality Assurance: Experiences of Several Communities

Chair: Mario Hernandez, Discussant: John Mayo Presenting: Natasha Tatartcheff-Quesnel, Keren Vergon, John Mayo & Terry Johnson

Systems of care (SOC) are mutable strategies for improving organizational relationships to create and provide access to an expanded and coordinated array of community based services. These strategies should shape organizational policies, regulations, and funding mechanisms; drive the development of services; and improve practice for individual children and their families. The SOC strategy is driven by an explicit organizational philosophy that emphasizes services that are childcentered, family focused, community-based, and culturally competent. Communities need to have an understanding of their readiness for embracing and implementing system of care values and principles. In addition, communities need to utilize tools, such as the System of Care Practice Review (SOCPR), for assessing the fidelity of service delivery to SOC principles. Moreover, existing or new quality improvement procedures that incorporate these tools enable systems of care to improve their direct services in ways consistent with their values. A representative from Ottawa, Canada will share her experience using the SOCPR as a needs assessment tool; the Broward County, Florida SOCPR Project will present three years of quality assurance data; and issues around agency culture towards the SOCPR and using the SOCPR with different cultural groups will be discussed by a provider and a parent from the Tampa Bay, Florida area. Attendees will learn how the SOCPR can be used for needs assessment, quality assurance, and in a culturally appropriate manner for both providers and consumers.

## System of Care Practice Review (SOCPR): A Qualitative Evaluation of the Children's Mental Health System in Ottawa Canada

Presenting: Natasha Tatartcheff-Quesnel

## Introduction

This portion of the symposium will focus on the implementation process and results of the System of Care Practice Review (SOCPR) conducted for the first time in a Canadian context in the city of Ottawa.

Over the course of the last few years Ottawa has been focusing on developing alternate methods of gathering systemic information to make decisions regarding enhancements and transformations of their Children's Mental Health System. Upon discovering the SOCPR and determining that the tool demonstrated promise as a "needs assessment measure," Ottawa decided to begin the process of training staff as reviewers and gathering baseline data within their children's mental health system.

The decision to move forward with this project was based on the desire to improve the children's mental health system by examining its strengths and challenges in the context of system of care (SOC) values, particularly the three primary principles assed by the SOCPR; 1) Child centered and family focused, 2) Community based and 3) Culturally competent. Although Ottawa is not an established system of care, the values and principles inherent in a SOC were believed to be central in Ottawa's mental health sector. Consequently, evidence of those principles should be noticeable at the practice level. Therefore, the SOCPR was used to determine if in fact such evidence was present. The data will

also be used to help determine what changes and training are needed to ameliorate the children's mental health system in Ottawa.

## Methodology

The project consisted of 32 case studies that were chosen using a random yet representative sample of children/youth and their families identified by the community as having complex mental health needs. The case studies were chosen by Ottawa's access mechanism, which provides case resolution and referrals services for children and youth from 0-18 year's of age (and their families) deemed as "hard to serve."

## Findings

Ottawa will share the strengths of their system as well as the areas that will require changes in order to improve service delivery within their children's mental health sector. Further, the training needs discovered during the SOCPR will be discussed. Finally, Ottawa will share the implementation factors that they believe lead to the overall success of the project.

## Conclusion

It is clear that the SOCPR can be used to determine the strengths and areas that need improvement in any given system, even one that is not necessarily an established system of care. The SOCPR helped Ottawa determine the changes needed in their system that would have the greatest positive impact on the children and families they serve.

This project is an excellent example of international partnerships, community collaboration and sharing of resources to work toward the improvement of service delivery for children with mental health concerns and their families.

## System of Care Practice Review: A Multi-Year Evaluation in Broward County, Florida Presenting: Keren Vergon

## Introduction

One Community Partnership, along with the other CMHSfunded programs, is based on a system of care philosophy in which a comprehensive, coordinated, community-based system of care brings together all agencies and resources needed to provide services to children with SED. Children with SED typically have multiple needs and thus are served by multiple agencies and organizations, such as education, social service, juvenile justice, health, mental health, vocational, recreation, and substance abuse providers. A system of care approach is an interagency approach in which agencies work together to develop and coordinate services for the child and family individually. The system of care approach also includes family involvement in which families of children with SED are treated as full participants in the planning and delivery of services. Cultural competence, the consideration of the unique needs of people from different cultural backgrounds, is also a critical component of the system of care philosophy.

## Methodology

As part of its local evaluation activities, One Community Partnership completed three consecutive System of Care Practice Review (SOCPR) studies from October 2004 through September 2007. Each study was a year in length, and approximately 20 cases were completed each year. Families recruited for the SOCPR studies were already enrolled in the CMHS longitudinal system of care evaluation, a 6-year initiative.

The study used the SOCPR as the central data collection instrument. The SOCPR is based on the SOC principles for children's mental health and uses a case study methodology informed by caregivers, youth, formal providers, and informal supports, where available. The purpose of the SOCPR is to collect and analyze data from a variety of sources to determine the extent to which the local service systems, through their direct service providers, adhere to system of care principles. It presents a measure of how well the needs of children with SED and their families are being met by the total service system in their community. The SOCPR seeks to accomplish this task by: (1) documenting the experiences of children with SED and their families enrolled in systems of care; (2) documenting adherence to the system of care (SOC) philosophy by the direct service providers and system; and (3) assessing the degree to which the SOC philosophy is implemented at the practice level and generate recommendations for improvement. Information learned through the SOCPR can then be used as feedback to enhance the quality of the system of care. Feedback can be provided at the direct service level by providing specific recommendations that can be incorporated into staff training, and may also be used at the system level to identify strengths of the system of care, as well as to highlight areas for improvement.

## **Findings**

Examination of scores from 2004 to 2007 showed improvement with the overall case score increasing from the neutral implementation range to the enhanced implementation range. Similarly, all subdomain scores improved between 2004 and 2007. The greatest improvement was observed in cultural competence, followed by impact, and child-centered, family-focused. Community-based showed the least change, but was in the enhanced range in 2005.

Many of the subdomains moved out of the neutral range and into the enhanced implementation range. Only four subdomains remained in the neutral range, and none were in the low range. This is a great improvement over the first SOCPR administration in 2004, when four subdomains were in the low range. In fact, two of these subdomains that were in the low range in 2004, Case Management and Sensitivity and Responsiveness, had moved into the enhanced range by 2007. Most of the domains and subdomains showed consistent improvement over the three studies, with the Child-Centered and Family-Focused and Impact Domains universally representing this pattern.

In addition to improvement in scores, in general the standard deviations in mean scores decreased over time. Case Management, in the Child-Centered and Family-Focused domain, showed about a point decrease in standard deviation from 2006 to 2007, and had a high standard deviation in 2005. At the same time the standard deviation decreased, the rating for this subdomain shot up from a low implementation score into one of the higher enhanced implementation score. These two factors demonstrate that OCP has been successful in improving its provision of case management services to its families consistent with SOC values and principles.

The second subdomain of special interest is Informal Supports, in the Culturally Competent domain. This subdomain's score improved by two full points, from a fairly low implementation score to a respectable neutral score. However, in contrast to the Case Management subdomain, the standard deviation did not decrease; in fact, it increased. This seems to indicate that while some providers have either received training in using informal supports or naturally increased their usage, others have not changed their practices, and there is still room for improvement in this subdomain.

## Conclusion

Overall, OCP has been successful at improving its inclusion of SOC values and principles in service practices across all domains. Strengths include the agency continuing to be accessible to families, providing services in the least restrictive environment, and case management. The two areas of greatest improvement are case management and providers being sensitive and responsive to issues of cultural competence.

## Use of the SOCPR for Quality Improvement, Training, and Improving Cultural Competence

## Presenting: John Mayo & Terry Johnson

This presentation will take the form of a topical discussion and will contain two parts, a review of provider experiences in using the SOCPR for quality assurance, training, and changing practice; and the experience of a family member who has participated as both a case participant and a case reviewer in different SOCPR projects.

The purpose of the first section is to describe how the System of Care Practice Review (SOCPR) has been of benefit to our System of Care (SOC) community in Tampa, Florida. We hope to be able to describe and discuss the multiple uses the SOCPR has provided for us. After an explanation of the SOCPR's uses in Tampa, a discussion and comparison of the three sites' use of the instrument will occur. Audience participation and questions will be elicited and encouraged. Goals for discussion include a conversation about the benefits of the continued collaboration between Tampa and Ottawa's use of the SOCPR, and generating a list or agenda for expansion of the SOCPR.

#### Section 1 Issues to be discussed:

- The major changes brought about by use of the SOCPR as a Quality Assurance/Quality Improvement (QA/QI) instrument with Success 4 Kids and Families (S4KF) and with the SOC community in Tampa.
- Using the format of the SOCPR as a training tool for new employees, existing staff, and family members who are doing advocacy and providing case management services in Tampa.
- A discussion on the need for an agency's culture (S4KF) to promote openness and flexibility that is necessary to change direct service practice using the SOCPR.
- The effect the SOCPR can have on increasing the awareness, and then change of, formal providers', informal providers', and family members' cultural competence practices.
- A discussion of the SOCPR's benefits in a culturally diverse community such as Tampa.

The emphasis of the second section will be on the Child Centered and Family Focused component of the SOCPR and what it means for parents, child and family teams, and how to help agencies understand the importance of this system of care component.

#### Section 2 Issues to be discussed:

 A discussion of what strengths a parent brings to the team. Parents' and children's perspectives are integral in bringing a holistic approach to the table. Parents need to be looked upon as "experts" when it comes to their child's and family's needs. A new way of looking at parents as credible informants is important as well as and honoring their experience and common sense approach to identify their family's needs.

- A discussion of how agencies must learn to truly individualize plans and fully incorporate and prioritize the needs of the family.
- A discussion and acknowledgement that some professionals have a difficult time in changing their attitudes and learning to be flexible not only with their time—but also with theories and practices they have utilized in the past.

# Session 7 >> 10:15-11:45 am >> Salon I

## Symposium Creating the Evidence Based Practice was the Easy Part...Who Knew?

Chair: James Alexander, Discussants: Charles E. Frazier & Mike Robbins

#### Presenters: Helen Midouhas, Doug Kopp, Jeffrey Patnode, Kim Mason, Kjell Hansson & Andrea Neeb

Developing an evidenced based practice (EBP) that meets the requirements of scientific rigor *and* applicability to "real" clinical populations of course was far from easy. In the case of Functional Family Therapy (FFT) the time span between the first technical report and publication of the first book on actual clinical model was eleven years. This span included published randomized trials, published change mechanism (including therapist characteristics) research, and numerous external reviews. In turn, the time span between the publication of the first book and FFT's identification as an EBP by the "Blueprints" Program was another 16 years. These years included additional controlled effectiveness studies, applications of FFT with more diverse different treatment contexts and populations, additional focus on therapist characteristics, the beginning of extra mural research funding on change mechanisms, and a published supervision model.

While evidence based models (EBPs such as Functional Family Therapy) achieve that designation through carefully controlled research designs, their dissemination and implementation requires multiple levels of anticipation and linking with (often) complex treatment systems. This becomes an even more challenging task when legal systems are also involved, as in the case of treating youth in the juvenile justice system context.

This symposium will discuss and provide descriptive data reflecting the variety of implementing contexts into which FFT has been integrated. Specific guidelines, notable factors that have contributed to lack of success, and lessons learned regarding successful implementation will be presented.

## Integrating and Sustaining Functional Family Therapy Within Statewide and Larger Systems— The Statewide Pennsylvania (PCCD) Project 2000 - 2007

#### Presenting: Helen Midouhas & Doug Kopp

In 1998 the Pennsylvania Commission on Crime and Delinquency appropriated state funding in order to support the implementation of effective evidence-based programs. As of 2007, Functional Family Therapy (FFT) leads the state in the area of home-based programs dedicated to at-risk youth (17 sites since 2000, a current sustainability rate of 60% for all sites and 80% for sites operating for three years or more). The FFT program involves a sophisticated statewide system of training and technical assistance for sites. As of 2006, it is one of two evidence based model programs now receiving Medical Assistance funding. These benchmarks of sustainability were achieved through a framework for maintaining a site beyond grant funding which embodies

## Who Should Attend

Family members, direct service staff, and community leaders.

two areas of focus; state level activities and local, site-specific activities. The goal of this presentation is explore both levels of intervention and the interplay between them, and to provide both descriptive qualitative and quantitative data. Lessons learned will be shared.

At the state level, sustainability is preserved through a statewide system led by a state team, while at a local level, it is upheld by the sites delivering the model. State level activities include networking with individuals involved in shaping the system of care in the state and creating a mechanism for disseminating the evidence model to both prevention and intervention interests. At the site (local agency) level, planning for sustainability begins at program conception. In addition, sites must serve both the current local stakeholder (referral source for the intervention) while facilitating interests in the alternate stakeholder (those individuals who can either directly or indirectly benefit from the model program). Last, sites must strategically plan for both growth and attrition, while understanding state and national trends in the system of care. The statewide system acts as a partner in this. Together both levels create a unique system that provides a platform for program stability within Pennsylvania. It is this platform that attracts funding resources at both a local (county/agency) level and state level (Medical Assistance).

#### **Overview of Statewide Project Roles Supporting the Infrastructure**

- Statewide Stakeholder Group—Pennsylvania Commission on Crime and Delinquency (PCCD): Provides support and direction regarding statewide trends and needs. The Statewide Stakeholder Group may also collaborate with the State Coordinator on issues regarding sites receiving current grant funding.
- Local Stakeholder Group (County Entities, Agencies investing in FFT for their community): Provides the vision of an evidence based program for local communities, usually demonstrated through the securing of funding for start up. The Local Stakeholder Group may collaborate in its implementation planning for the FFT model with the State Coordinator.
- *FFT State Coordinator*: Creates and oversees the infrastructure needed to maintain the Statewide Project and the state Quality Assurance and Improvement System. Works collaboratively with Stakeholder Groups on site needs, responding to state and national trends and funding issues. Provides administrative oversight to the statewide clinical team within the context of the state Quality Assurance and Improvement System. Organizes training needed to support this infrastructure. Provides technical and administrative assistance to PA FFT sites.
- *FFT State Supervisors*: Exists as a team of state supervisors, coordinated and administratively supervised by the State Coordinator and clinically supervised by a FFT National Consultant. The FFT State Supervisors carry out the Quality Assurance and Improvement System and assist in statewide clinical training efforts. State Supervisors function as Phase 3 site consultants. The State Supervisors are also available to provide supervision to Phase 3 sites returning to Phase 2 status due to loss of Site Supervisor. New sites will continue to be trained and supervised by FFT, LLC throughout Phase 1 and 2.

- *State Team*: Consists of the State Coordinator and the State Supervisors. Decisions around Quality Improvement can be made through this team.
- FFT, LLC: Provides ongoing clinical and quality assurance consultation and support to this team.
- FFT Provider agency, site executive, administrator, FFT supervisor, Clinical FFT Team: Participates in the statewide project and QA/QI system within an ongoing relationship with FFT, LLC.

## *Quality Assurance and Practice Improvement: The Washington State Functional Family Therapy Project*

## Presenting: Jeffrey Patnode & Kim Mason

## **Presentation Overview**

The Washington State Functional Family Therapy Project is dedicated to implementing Functional Family Therapy with high model fidelity. Recent evidence suggests that evidence-based intervention programs depend on high model fidelity for successful outcomes (Barnoski, 2002; Sexton, Hollimon, Mease, & Alexander, 2002). In Functional Family Therapy, model fidelity is based on the dimensions adherence to the principles of the model as well as the competent delivery of the model.

This presentation will provide the background for the Washington State FFT project and impetus for the QA/QI process. We will also cover the principles and components that comprise the current process and discuss some preliminary data and associated conclusions.

### **Project Background**

The 1997 Washington State Legislature created the Community Juvenile Accountability Act (CJAA), which provided funding for Evidence Based Practices to be implemented in local county juvenile court programs. The piece of legislation was intended to act as an incentive to local communities to implement interventions proven by behavioral science research to cost-effectively reduce recidivism among juvenile offenders.

Drawing on program evaluations and meta-analysis, the Washington State Institute for Public Policy (The Legislatures research organization), in collaboration with the Washington Association of Juvenile Court Administrators (WAJCA) and JRA (the States juvenile justice agency), identified a range of effective approaches that could cost-effectively reduce juvenile offender recidivism. Four of these approaches were ultimately chosen for implementation in Washington State. They are: Multi-Systemic Therapy (MST); Functional Family Therapy (FFT); Aggression Replacement Training (ART); and Coordination of Services (CS).

At the direction of the Legislature, the Institute completed a comprehensive evaluation of these programs. Analysis of program and control groups occurred at six, twelve, and eighteen months (preliminary information was released on FFT in August 2002). In January 2004, WSIPP released their final report, *Outcome Evaluation of Washington State's Research-Based Programs for Juvenile Offenders* and their data reflected the CJAA program's positive impact on felony recidivism. The report also provides data on the cost-effectiveness as well as competent versus non-competent delivery of each CJAA program.

The WSIPP final evaluation of the FFT project examined FFT as provided in Washington to determine if it cost effectively reduced repeat criminal behavior. The report indicated that when FFT was provided with fidelity, a 38% reduction in recidivism was accomplished. These results added further emphasis to the recent efforts to provide greater quality control to the FFT program in resulted in the development and implementation of the current QA/QI process. The quality assurance process was enhanced in October 2003. The goal of the enhancements is improved model fidelity. The quality assurance plan, developed by JRA in coordination with WSIPP, FFT LLC model developers, and WAJCA, has been in place since October 2003.

#### **Quality Assurance and Improvement Principles and Components**

Ensuring model fidelity in a community based system of care requires an ongoing systematic system of both quality assurance (QA) and quality improvement (QI). Quality assurance involves the ongoing and accurate monitoring/tracking of reliable measures of model implementation. Quality improvement involves the systematic implementation of activities to improve accurate implementation of the intervention. The Washington State QA/QI process is based on a set of core QA/QI principles and specifically set forth protocols.

The Washington State FFT quality assurance and improvement system is based on the following principles:

- I. The primary goal of this system of quality assurance is improvement of the delivery of FFT. As such, quality assurance information:
  - is intended for use primarily by FFT clinical consultants who are most capable of determining systematic improvement plans,
  - is not intended as a tool for routine program administration. While Juvenile Court and/or Regional Administrators need aggregate and summarized information that informs overall program implementation, specific clinical data is most useful as a tool for clinical supervision,
  - requires therapists be provided with accurate and timely feedback directly from the FFT clinical consultant. Therapists who perform below the national standards of model fidelity should be presented with a systematic plan for improvement,
  - notes that therapists who, after all attempts at improvement, continue to demonstrate model fidelity outcomes below the minimal national standard should not practice the FFT model, and
  - retains quality assurance information for employment status decisions only after all possible improvement strategies have been attempted.
- II. Monitoring and Tracking model fidelity (quality assurance) must be based on:
  - reliable and valid measures
  - multiple domains (adherence and competence)
  - multiple measures (specific case level ratings, global therapist rating) gathered from different and relevant perspectives (FFT clinical consultant and client)
  - incremental measurement, that is, more specific measures of fidelity are only undertaken when global ratings suggest that more specific and time intensive measures are necessary

#### III. Quality improvement is based on:

- ongoing, specific, and timely feedback based on accurate measure of model fidelity (adherence and competence).
- a systematic and individualized plan of therapist improvement.

When a therapist's performance falls below the national standard, the following steps will occur. Administrators will receive reports regarding therapist performance every 90-120 days. When informal improvement plans are implemented, juvenile court and/or Regional Administrators will be notified. When formal improvement plans are required, Juvenile Court and/or Administrators are involved in the development of the plan.

Step 1: Individual Consultation with Therapist Step 2: Informal Improvement Plans Step 3: Formal Improvement Plans Step 4: Removal from FFT Practice

## **Preliminary Data**

This system of QA/QI has been in place in the Washington State FFT project since 2003. Since its inception we have collected data as to the effectiveness of this process as it relates to improving Therapist adherence to the FFT model. We have seen a couple of trends as we look at completion rates and the number of therapists on plans and successful plan completions which indicates that the process is making a positive difference. For example, completion rates have increased since the current plan implementation, and fewer therapists are requiring improvement plans and are successful at higher rates. Ongoing evaluation will be necessary to collect further evidence regarding the effectiveness of this process.

## International Replications of FFT: Transcending Issues of Culture, Language, Treatment Systems, Funding Criteria and Distance

#### Presenting: Kjell Hansson, Andrea Neeb & Kellie Armey

### Introduction

The purpose of this presentation is to present the Swedish and Norwegian implementations of the evidence based prevention program Functional Family Therapy. A supposed problem is the transportability of treatment methods developed in the United States to other countries. This presentation will describe the culturally and system-sensitive modifications that have been necessary to replicate the success rate of FFT as an EBT. At the same time these experiences demonstrate that replication is more than possible despite differences in language, culture, treatment systems, juvenile laws, and economic base.

The Sweden FFT Projects, taken together, represent a unique relationship with FFT as an evidence-based intervention. In fact, the early FFT Sweden Projects, data from which are included in this presentation, were an important component of the "independent replication" criterion of the original Blueprints (Del Elliott & Sharon Mihalic) program.

The early FFT Sweden projects were antecedent to the formal large scale dissemination movement for FFT (and in fact all of the EBTs with the high risk and often seriously offending with whom we work). As a result, none of the currently available FFT dissemination resources were available for the FFT developers in Sweden. Instead, the FFT program developer (JFA), along with two colleagues at other times, was invited by the Sweden FFT program developer to present the extant FFT manual and training materials (including videotape sessions) to potential FFT therapists and supervisor level Swedish partners. The latter, in turn, translated materials and concepts, and later a web-based monitoring system, into their own culturally appropriate language (and related) products and procedures.

One particular and very important translation occurred with respect to the supervisory context. FFT LLC, being responsible for country wide (USA) and later international agencies / sites / funding sources / population variations, developed our current system of training (6 multi day, on-site, in the first year of site certification) and monitoring (weekly phone and web-based reports—the CSS) approach. Sweden has many fewer youth to serve, less cultural variation, but on average far greater distances to be covered for a given therapist or agency. The bi-monthly on-site direct observation and case review system developed to meet these challenges will be described in this presentation.

## Methodology

The results for the 15+ year Sweden FFT Projects will be presented quantitatively. The study has used standardized instruments as CBCL, YSR and SCL-90 as well as relapse rates as outcome measures. The more recent Norway Implementation process will be described both quantitatively and qualitatively, though the former will be based on only months, rather than years, of experience.

For the Norway project, although very early in the process, we have identified the factors that have attributed to successful implementation as follows:

- Training of administrators and supervisors who began practice of FFT prior to therapist recruitment and selection of therapists for teams with case consultation by FFT National Consultant allowed for greater understanding of therapist qualities and characteristics that would fit with FFT model.
- Initial Clinical Training, conducted by FFT model developer (JFA), was extended from 2 to 3 days. Additionally the senior FFT National Consultant designated to work with this project site attended the initial training and provided an overview of web based documentation and tracking system (CSS).
- Weekly phone consultation is being provided to both FFT Norway sites, and the FFT trained Norway Supervisor sits in calls to provide support of team and to aid in any language barriers.
- Four on-site subsequent clinical trainings as well as additional internal team (e.g., video case reviews) are being conducted during the first year of training. Case observation through video tape and transcription are included in the follow up trainings.

## **Brief Overview of Findings**

Currently 20 FFT teams are operating successfully in Sweden, and ongoing presentations and training experiences are planned for both Jim Alexander and Holly Waldron. The findings from the Sweden studies, covering 1988 through very recent evaluations, are similar to (if not sometimes stronger than) the United States studies both from RCT and matched control studies. We found ES of .50 - .80 for different measures, which will be presented. The relapse rates were reduced from at 80% (randomized controls) to at 40% (FFT treated youth) at 2 years follow up.

## Conclusion

The transportability and implementation of FFT to Sweden and now Norway seems to work well, and the positive results in the United States seem capable of replication, if not enhancement. In conjunction with the other presentations in this symposium, the balance of structure and flexibility necessary in and inherent to FFT become guidelines for future evidence based work with this and other needy populations.

# Session 8 >> 10:15-11:45 am >> Salon J

## Topical Discussion Participatory Action Research Agenda for Family-to-Family Peer Support Models

Presenting: Elaine Slaton, Teresa King, Amy Winans, Norín Dollard, Chris Stormann, Bill Hobstetter & Vestena Robbins Contributing: Maria Delmoro & Beverly Wilkinson

## Background

In recent years, parents and family members have increasingly been employed as service providers and supports to families of children with emotional and behavioral disorders in navigating systems of care. These expanded roles for families have included case management, resource linkage, training, and coaching. According to Osher, deFur, Nava, Spencer, and Toth-Dennis (1999), the term "system of care facilitator" implies that "the family member employed in this position uses a variety of strategies to help enrolled families become familiar with their community's system of care, learn how to effectively participate in it, and thereby gain access to quality services that improve outcomes for their child and family." Growing numbers of communities are relying on families, parents and caregivers to develop peer advocacy and support networks.

In July, 2007, family members and researchers from four system of care grantee communities were convened by the National Federation of Families for Children's Mental Health to provide an opportunity for family—evaluator teams to provide peer-topeer consultation on ongoing studies, identify common elements across peer-to-peer models and the evaluations of those models, and, identify gaps in the studies and the resources needed to fill the gaps. At the conclusion of the two days, the group decided that a common framework for evaluating family-to-family peer support programs would be an important tool for aggregating findings across sites, either directly or through metanalytic procedures.

## Purpose

The goal of this group is to glean information on essential elements and outcomes of family-to-family peer support models derived from practice settings. In order to do so, the group proposes to: (1) present an overview of the literature on peer support models, (2) identify gaps in this literature specific to the provision of family-to-family peer support, (3) present a logic model for family-to-family peer support guiding the evaluation of four such programs and to get feedback and input from participants, and, (4) engage the participants in outlining an agenda of evaluation and research in this area, as well as identifying action steps to move the work forward.

## Issues and topics to be discussed

While the above paragraph provides an overview of the proposed Topical Discussion, specific issues have arisen during the workgroups meetings and will be included:

- The role of participatory action research in developing practice-based evidence models of family-to-family peer support.
- The importance of evaluation for family organizations that provide support services.
- Outcome domains for family-to-family peer support—What outcome measures are appropriate for family-to-family peer support? Should there be a common set of outcome measures or domains for these types of supports?

## Future plans to utilize the discussion

The discussion from this session will be used in continuing efforts to develop a research agenda for family-to-family peer support and identify other family—research teams who would like to participate.

## Who should attend

Family members, researchers and policy makers.

## References

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## Session 9 >> 1:15-1:45 pm >> Room 11 Exploring the Impact of Delivering Mental Health Services in NYC After-School Programs

Presenting: Gerald Landsberg, Stephanie Smith-Waterman & Erica Adhoot

Contributing: Ana Maria Grigoras

## Introduction

The Partnership for After-School Education's (PASE) program, Partners in Healing has addressed the emotional and social needs of young people within after-school settings through the provision of emotionallysupportive services (primarily group and individual counseling) by social work interns and trained after-school staff. The model also included providing agencies, staff and interns with mental health training, on-site technical assistance and community networking with mental health providers. The program reach has expanded over the five years since its inception and to date, over 15,000 youth and families at 54 sites have been served. Fifty-two social work interns have participated in the program and almost 200 program directors and staff have received training and support through their participation. From September 2006 through April 2007, a total of 1,070 youth and families received services directly from New York University Social Work Interns placed at 14 participating agencies.

## **Evaluation Methodology**

Partners in Healing has offered a complex intervention model based on the theoretical framework converging positive youth development and prevention services. The evaluation embraced a mixed model of quantitative and qualitative data collection, analysis, synthesis and reporting. The evaluation design increased the number of participants in the in-depth study (from 82 youth in 2005-2006 to 420 youth in 2006-2007) and offered more sophisticated assessment tools (including the Strengths and Difficulties Questionnaire; intake and exit assessments; and pre- and postyouth surveys examining both pro-social and mental health perspectives) to assist in the exploration of youth mental health needs, treatment plans and outcomes. Key quantitative research questions included: What was the impact of Partners in Healing on the pro-social attitudes and behaviors of students receiving services? What were students' perceptions of the quality of the helping relationship with staff? Did participation in the after-school program have a positive impact on students' mental health?

The presentation will provide a brief review of key data collected from youth and social work interns, and provide a picture of the primary population served, key presenting problems, environmental stressors and treatment focus. Additional qualitative results gathered through focus groups and interviews with agency staff, interns and participating youth will shared.

## **Findings**

The program evaluation documented positive changes in both pro-social beliefs and attitudes of participating youth, including finding new ways to cope, using non-violent conflict resolution techniques, and achieving more responsible academic behaviors. Mental health improvements related to learning how to manage anger, getting along better with others, worrying less, and experiencing a decrease in impulsivity. The youth themselves expressed that they need safe places to learn and socialize with friends, and connect with caring adults. In addition, agencies benefited as a result of their participation in the program, and were able to serve more youth, heighten the attention to mental health within their agencies, and for staff, increase their sensitivity to the issue youth are experiencing, explore behaviors more fully and learn new techniques for positive interventions.

### **Real-Life Application**

There have been a variety of lessons learned from youth-serving agencies about effective treatment. Groundwork, Inc has sustained mental health delivery in after-school in part through their participation in Partners in Healing. Serving youth and families of the East New York community, Groundwork provides a unique service delivery model that is geographic-based, youth-focused and built on a collaborative management framework.

Some of the key benefits, day-to-day challenges and opportunities of incorporating new forms of youth mental health service delivery in urban after-school settings will be shared. Groundwork will explore briefly explore the impact of creating mental health awareness and creating a positive impact on the larger school and local community; address the special needs of at-risk youth in after-school; and finally, how to offer holistic, emotionally-supportive services to youth.

## Conclusions

Partners in Healing has touched the lives of thousands of families through the work of on-site social work interns, agency social workers and trained staff in after-school programs. The program has offered youth an informal and stigma-free environment surrounded by social work interns and staff who are trained to engage in new ways and offer more individual support as needed and there have been recognizable positive outcomes for participating youth and agencies. Students have developed new skills, gained a sense of empowerment, experienced increased self-esteem and have been grounded in the power of positive relationships with adults around them.

After-schools are increasingly viewed as safe havens for youth who are vulnerable to a wide variety of pressures that negatively impact their development. While programs like Partners in Healing have proven to be effective, youth remain in desperate need of care and more must be done.

This presentation concludes with future recommendations to stakeholders in the field focused on strengthening positive youth development initiatives. After-schools must hire on-site social workers and other mental health professions to assist in developing and strengthening appropriate support structures and services. Mental health funding streams must expand to include progressive youth-development frameworks. Experts within the fields of education, mental health, afterschool, policy experts, and other stakeholders need to connect strategically to spearhead the national after-school mental health movement. A formal advocacy campaign is necessary to promote this promising area of practice. In addition, social work schools need to enhance their training in the area of youth development and addressing the social and emotional needs of young people. All of these efforts should be complimented by ongoing evaluations that assist in documenting best practices, clarifying effective models and pushing for larger-scale change.

## Session 9 >> 1:45-2:15 pm >> Room 11 The Community Youth Development Study: Testing the Communities that Care Prevention System

Presenting: Eric Brown

Contributing: J. Hawkins, Michael Arthur, Abigail Fagan, Sabrina Oesterle, John S. Briney, Koren Hanson, Megan M. Baldwin, Robert D. Abbott, Kevin Haggerly & Richard Catalano

#### Introduction

Public health research suggests that reducing risk and enhancing protection are effective strategies for preventing adolescent behavior problems (Mrazek & Haggerty, 1994). Despite the growing number of prevention programs that have been evaluated and found to be effective, communities and schools continue to use approaches to prevention with little or no evidence of effectiveness (Ennett et al., 2003; Hallfors & Godette, 2002). Consequently, the development and testing of strategies for disseminating effective interventions has emerged as a priority for prevention researchers and practitioners (Spoth & Greenberg, 2005).

**Communities that Care** (CTC; Hawkins & Catalano, 2002) is a prevention planning and service delivery system designed to mobilize communities to identify elevated levels of risk factors and depressed levels of protective factors in communities' youth populations and implement tested-effective preventive interventions that target these risk and protective factors. As a catalyst for community mobilization, a prevention coalition is developed to include broad representation from multiple sectors of the community. Through training and technical assistance, CTC guides the prevention coalition and key stakeholders in the community to develop infrastructure (e.g., workgroups), processes (e.g., implementation monitoring), and a common vision to effectively realize advances in prevention science technology. Over time, repeated assessments of epidemiologic risk and protective factor data are used to evaluate the effects of the community's prevention service system and guide future prevention planning.

The Community Youth Development Study (CYDS) is a large-scale community-randomized field trial of the CTC system. Aims of the CYDS include examining the efficacy of CTC communities to: (a) adopt a sciencebased approach to prevention in communities, (b) improve collaboration among community sectors around prevention issues, (c) use epidemiologic data to prioritize risk and protective factors and select tested-effective preventive interventions that address those factors, (d) reduce levels of targeted risk factors, and (e) reduce initiation and prevalence of adolescent delinquent behaviors, risky sexual behavior, and substance use.

#### Methodology

#### **CYDS** Design

Communities in the CYDS consist of 12 matched pairs of communities located in seven states (i.e., Colorado, Illinois, Kansas, Maine, Oregon, Utah, and Washington). Eligibility criteria for inclusion in the study consisted of not having selected tested-effective prevention programs to address prioritized risk factors according to community leaders interviewed in 2001and securing letters of support from community leaders agreeing to random assignment of communities and to all CYDS data collection activities. In 2002, one community from each matched pair of communities was assigned randomly to intervention or control condition. The 24 CYDS communities consist of small- and medium-sized incorporated towns with an average population of 14,646 (range = 1,578 to 40,787). On average, 89% of the population members are European American, 3% are African American, 10% are of Hispanic origin, 12% are between the ages of 10 and 17, and 37% of students are eligible for free or reduced price lunch.

The design of the CYDS includes multiple baseline and postintervention assessments of student outcomes, risk and protective factors; measures of prevention service system characteristics; and indicators of CTC system and prevention program implementation fidelity. Specifically, the CYDS includes: (a) a nested extended cross-sectional design assessing community levels and trends using repeated anonymous biennial population-based surveys of 6th-, 8th-, 10th-, and 12th-grade students; (b) a nested extended cohort design consisting of annual surveys of a panel of 4,407 students from 5th to 9th grades; (c) repeated measures of community-level indicators of prevention service planning and delivery by representative samples of community key informants; (d) repeated pre-post documentation of community prevention resources and tested-effective program exposure via surveys with prevention service providers; (e) annual assessments of CTC implementation via surveys of CTC prevention coalition board members; and (f) continual assessment of prevention program implementation fidelity.

### Results

Early results from the study have found full implementation of the five phases of the CTC system in the 12 intervention communities; formation of a viable prevention coalition in each of the 12 intervention communities; development of a community action plan that matches tested-effective preventive interventions with community-specific profiles of risk and protective factors; and high-fidelity implementation of a diverse array of parent-training, after-school, and school-based prevention programs in intervention communities. Results of multilevel analyses incorporating the nested design of the study have shown significant (p < .05) increases in adopting a science-based approach to prevention and collaboration, lower levels of targeted risk factors among students, and reduced initiation of delinquent behaviors among students in intervention communities.

#### Conclusion

An effective prevention service delivery system that can link prevention-science knowledge to practice is needed. The CYDS is the first randomized controlled trial of the Communities that Care prevention planning and service delivery system. Results CYDS analyses have found hypothesized short-term effects on community prevention system outcomes and student risks and behaviors. We continue to track these outcomes in the current study. Plans for the continued evaluation of CTC, including plans to assess the long-term sustainability of the CTC system, have been developed.

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# Session 10 >> 1:15-2:15 pm >> Room 12

## Symposium

## Academic Functioning and Youth Involved in Residential Care

#### Chair: Alexandra L. Trout, Discussant: Elizabeth M. Z. Farmer Presenting: Katy Casey, Michael Epstein, Annette K. Griffith, Jessica L. Hagaman, Robert Reid & Alexandra L. Trout

There are currently over 100,000 youth served in residential programs in the United States. Commonly regarded as a "last resort" placement, these settings provide services to high-risk populations with a broad range of difficulties. Previous research on youth involved in residential care has provided a comprehensive overview of behavioral, mental health, and family characteristics, however, very little is known about academic functioning. This is an important area, however, as poor academic skills can lead to a variety of negative outcomes (e.g., antisocial behavior, school dropout). Therefore, the purpose of this symposium is to expand what is known about the academic functioning of youth involved in residential care.

The symposium will be divided into three separate papers. The first paper will provide information about a literature review examining the academic status of children involved in out-of-home care. Discussion will focus on overall findings and quality of the studies. The second paper will provide descriptive information on youth entering a residential program. It will focus on academic functioning but will also provide information on basic demographics and behavioral and mental health characteristics. Comparisons will be made based on special education status. The third paper will examine how the academic functioning and predictors of academic functioning change from admission to departure. The goal of this symposium is to contribute to the knowledge on academic functioning of youth involved in residential care and to recognize factors that may be useful for identifying youth with greater levels of need.

## Academic Status of Youth in Out-of-Home Care: A Review of the Literature

# Alex L. Trout, Jessica Hagaman, Katy Casey, Robert Reid, & Michael H. Epstein

Acknowledgements: This research was supported by Grants H325D040020 from the U. S. Department of Education, Office of Special Education Programs.

## Introduction

The purpose of this review was to examine the available literature describing the academic status of youth in out-of-home care. Although much is known about the behavioral and mental health characteristics of this population, questions remain regarding the specific academic functioning. Without knowledge regarding the academic functioning of youth in out-of-home care professionals are limited in their abilities to work together to provide and direct, sound, school-related services to this at-risk population. In our search of the literature, we found no research reviews focusing on the academic functioning of children and youth in out-of-home care. To address this shortcoming, we reviewed the literature to identify the characteristics of the children and youth studied, evaluate student academic performance and school functioning, and determine the quality of the published academic status research conducted with children and youth in out-of-home care.

## Method

*Initial selection.* An electronic database search was conducted (June 1940 to June 2006) to identify all published articles on the academic status of children and youth in out-of-home care. Due to the varying terminology for out-of-home placements, we included all settings identified by the U.S. Department of Health and Human Services in their definition of out-of-home care (see Child Information Gateway, 2007). All articles identified in these searches were reviewed for possible inclusion using the following criteria: the study was conducted and published in a journal in the United States, the academic status data were from school age youth, and the youth must have been served in an out-of-home placement. Upon completion of the initial screening, 203 articles met criteria.

Spoth, R. L. & Greenberg, M. T. (2005). Toward a comprehensive strategy

community health and well-being. American Journal of Community

for effective practitioner-scientist partnerships and larger-scale

Psychology, 35(3-4), 107-126.

*Final selection.* Graduate students screened the 203 articles using the criteria stated above. This screening resulted in 27 articles meeting the final selection criteria. An ancestor search was then conducted. From this search, an additional 26 articles were found and reviewed. Two were accepted for inclusion resulting in 29 articles.

*Coding protocol.* A coding protocol was created to report key characteristics (e.g., participants and setting, academics, school functioning) to allow for a quantitative description of the findings. Across all categories, interrater agreement ranged from 85% to 100%, with a mean of 94% agreement.

## Results

*Participants and setting.* The included studies reported information on 13,401 participants. The mean weighted age was 12.9. Male participants outnumbered female participants and the majority of participants were Caucasian. The studies included 3,036 students with disabilities. The mean weighted IQ was 87.9 (WISC-III; Wechsler, 1991).

With respect to type of out-of-home placement, the most frequently reported was foster care, followed by residential, kinship, group home, and "other." Nine different formats were used to describe previous placement (e.g., percent of participants with previous out-of-home placements, range of placements).

Academics. Across the 13 academic areas reported (i.e., reading not otherwise specified [NOS], reading comprehension, reading recognition, math NOS, math reasoning, math calculation, writing, spelling, social studies, science, language, literature, and not specified/general academic area) reading NOS, not specified/general academic functioning, and math calculation were the most frequently evaluated. Of the data sets describing academics according to grade level, all but one reported one-third or more of the population performing below grade level. Likewise, of the reports describing standardized scores the majority reported students performing in the "low average" range. Percentile scores revealed similar findings, averaging in the low-to-low-average range across all reports. For data sets reporting GPA, the summed mean weighted GPA was 2.36. Both data sets that reported student grades suggest that the majority of students reported grades within B to C ranges. *School functioning.* Data on school functioning was reported in 12 data sets. Overall, few studies reported school functioning data. Results from the available data suggest that these youth report multiple school functioning risks, including frequent changes in school settings, high grade retention, and elevated levels of suspension and school dropout.

#### Discussion

*Participants and setting.* Many descriptive variables (e.g., race, gender) were not regularly reported in the literature. The lack of descriptive information leads to difficulty in generalizing research findings. Future researchers investigating the academic status of this population should consider collecting and reporting marker variables (i.e., basic demographic and background information) to increase the chance for successful replication and to promote confidence in the generalization of findings.

*Academics.* Studies included in the review consistently suggest that children in out-of-home care performed below grade level and in the low-to-low-average range on academic achievement measures. Moreover, teachers of children in out-of-home care typically identified them as academically at-risk. These findings suggest that these youth will likely require more intense academic instructional programs and support services to address these risks.

*School functioning.* When compared to nationally represented school age children across these factors, this population demonstrates higher levels of school functioning risk. These findings highlight the need to focus on school functioning data (e.g., attendance and dropouts) as they are indicators of success in school (U.S. Department of Education, 2006a; U.S. Department of Education, 2006b) and may help direct future programming (e.g., vocational training, special education services, transition services).

## **Summary**

Results suggest that overall; children in out-of-home care demonstrate several academic risks across placement settings and academic areas. However, despite an increase in attention, significant limitations in the published literature exist. For example, incomplete reporting of student information, inadequate research on specific academic skill sets, and limited numbers of studies reporting school functioning behavior narrow our understanding of the specific academic strengths and limitations of this population, and further hinder our abilities to develop targeted intervention programs. Further, research examining specific skill deficits and school functioning variables is recommended.

## References

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- Wechsler, D. (1991). Wechsler intelligence scales for children. (3<sup>rd</sup> ed.). San Antonio, TX: Psychological Corp.

# The Academic Functioning of Youth Admitted To Residential Care

#### Presenting: Jessica L. Hagaman

Contributing: Alex Alexandra L. Trout, Kathryn Casey, M. Beth Chmelka, Catherine DeSalvo, Robert Reid & Michael H. Epstein

Acknowledgements: This research was supported by Grants number H325D040020 from the U. S. Department of Education, Office of Special Education Programs, and R324B070034 from the U.S. Department of Education, Institute for Education Science.

### Introduction

While studies suggest that children in residential care are largely a heterogeneous population, little is known about their academic functioning at admission to residential care. Previous research has primarily focused on the mental health, family history, and behavior of this population. This study sought to begin to address the gaps in the research by examining the characteristics of youth as they entered a residential care program. Specifically, intake data on 127 youth were evaluated to assess academic, behavioral, mental health functioning, and subgroup (e.g., special education) differences at admission.

### Method

*Participants.* Participants were 127 youth (53 girls and 74 boys) admitted to the Girls and Boys Town (GBT) residential program in Omaha, Nebraska.

**Demographics.** Data on demographic characteristics were collected from intake files collected at entry: (a) age at admission, (b) gender, (c) race/ethnicity, (d) medication status, (e) court involvement, (f) IQ, (g) age at first placement, (h) number of previous placements, (i) funding type, (j) legal status, (k) referral source, (l) permanency plan, and (m) special education status.

*Academics.* Academic achievement was measured at intake using the Woodcock-Johnson Test of Achievement, 3<sup>rd</sup> Edition (WJ III; Woodcock, McGrew, & Mather, 2001). For the purpose of this study, seven subtests were administered to provide a comprehensive, yet concise measure of student functioning: (1) Reading Fluency, (2) Calculation, (3) Spelling, (4) Writing Fluency, (5) Reading Comprehension, (6) Applied Problems, and (7) Academic Knowledge.

**Behavior.** Data on behavior were collected from the Child Behavior Checklist (CBCL; Achenback & Rescorla, 2001) completed by caregivers at admission to GBT. For this study, the three total scores (Internalizing, Externalizing, and Total Problems) were used.

*Mental Health.* Mental health was evaluated at admission using the *National Institute of Mental Health Diagnostic Interview Schedule for Children-IV* (DISC-IV; Shaffer, Fisher, Lucas, Dulcan, & Schwab-Stone, 2000). For this study, the disorders were grouped into one of seven categories (i.e., any diagnosis, substance abuse, disruptive behaviors, anxiety, depression, other, and comorbid diagnoses) using a modified grouping method.

**Procedure.** First, at entry, GBT admission counselors interviewed youth and their primary caregivers obtain a youth and family history (e.g., demographic information, mental and physical health). Primary caregivers were asked to complete the CBCL and youth were asked to complete the DISC-IV self-assessment. Second, following the intake interview, youth were referred to one of four data collectors for academic assessment. Each student was administered the WJ III individually.

*Data analysis.* First, descriptive data were run on demographic data and to determine the mean and standard deviation for each subscale of the WJ III and CBCL. Second, scores on the WJ III and CBCL were broken

into distributions according to the manuals (e.g., below average, average, above average). Third, chi-square analyses were conducted for the DISC-IV. Fourth, comparisons were made between youth with disabilities and youth without. Independent samples *t*-tests were conducted on continuous variables (e.g., IQ and age) to establish mean differences between groups and chi-square analyses were conducted on nominal variables (e.g., race and gender) to assess the differences between groups. Finally, effect sizes were calculated to assess the magnitude of the difference between groups.

## **Findings**

**Demographics.** Of the 127 participating youth, the majority were male (58%) and Caucasian (53%), followed by African American (22%), and Other (e.g., American Indian; 25%). Youth were admitted to residential treatment at an average age of 15.3 (SD = 1.53) and had attended an average of 5 schools (SD = 1.98) prior to GBT. Just over 26% were identified with a disability (e.g., learning disabled, behavior disorder). Children with disabilities were more likely to be male Caucasians who were mental health referred.

*Academics.* A majority of the youth entered with significant academic delays (e.g., roughly 50% in the low average ranges) in at least one basic subject area (e.g., reading fluency, math calculation, academic knowledge). Children with disabilities entering care demonstrate elevated academic risks compared to their peers without disabilities.

**Behavior.** A majority of youth (i.e., 79%) entered GBT with externalizing behavior in the borderline and clinical ranges (e.g., rule-breaking, aggressive behavior). Youth with disabilities were more likely (i.e., effect size = .35) to present in the clinical range on externalizing behaviors than their non-disabled peers.

*Mental health.* Overall, DISC-IV results indicate several mental health risks. Specifically, the majority of children (54.3%) self-reported at least one area of risk, with the most frequently reported risks identified as either disruptive behavior (31.7%), anxiety (24.4%), or substance abuse disorder (22.8%). When statistical comparisons were made between children with and without disabilities, no significant differences were found.

#### Conclusions

The present findings reveal that children entering residential care have many risks across behavioral, mental health, and academic domains. As the child-welfare systems continue to develop services to address the needs of children in care, continued research investigating alterable risks such as academic functioning will play an important role in identifying the necessary resources. In addition to the social, emotional, and behavioral risks of this population, significant academic deficits will likely present considerable challenges to youth as they move through the system and eventually apply for employment or post-secondary education. To better address the needs of children in care, it is critical to continue to address educational needs, specific areas of strengths and limitations, and the existence of subpopulations within the system to develop the services and supports necessary to promote academic gains.

## References

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## Academic Functioning of Youth In Residential Care: Changes Over Time

#### Presenting: Annette K. Griffith

Contributing: Alexandra L. Trout, Jessica L. Hagaman, Michael H. Epstein, Beth Chmelka & Ronald W. Thompson

Acknowledgements: This research was supported by Grant H325D040020 from the U. S. Department of Education, Office of Special Education Programs.

### Introduction

Youth in residential care often present a broad range of difficulties in the home, community, and school settings (Frensch & Cameron, 2002). Although much work has been done to examine behavioral, mental health, and family risks, little attention has been paid to their school functioning (Trout, Hagaman, Casey, Reid, & Epstein, in press). Research has shown, however, that poor academic functioning is a significant risk factor for negative long-term outcomes. Specifically, poor academic skills have been related to antisocial and criminal behavior, and to school drop-out and failure. These deficits not only hinder school success, but negatively impact their choices for competitive employment and opportunities for post-secondary education. In order to provide comprehensive services that address all youth needs, more information needs to be known about the academic functioning of youth in residential care. This study begins to address this question by examining archival file data to determine: (a) how the level of academic functioning of youth changed from the time they enter residential care until the time that they depart, and (b) how factors that are predictive of a youth's academic functioning change over time from admission to departure.

## Method

*Participants.* Archival file review data were obtained for 328 youth who entered the Girls and Boys Town (GBT) residential program in Omaha, Nebraska between Fall 2004 and Spring 2005.

*Measures: Academic functioning.* Academic functioning was assessed using the California Achievement Test (CAT; CTB Macmillan/ McGraw Hill, 1992). The CAT is designed to assess basic academic skills. The overall grade level and three subtests scores were reviewed: (a) Total Reading, (b) Total Math, and (c) Science. CAT data were obtained from the time of intake and the time of departure.

**Predictor variables.** Academic functioning at both admission and departure was predicted using demographic variables (e.g., gender, ethnicity, age at admission), educational variables (e.g., special education status, IQ), level of problem behavior as measured by the Total Behavior scores of Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2001), and presence of a DSM-IV diagnoses as measured by the National Institute of Mental Health Diagnostic Interview Schedule for Children – IV (DISC-IV; Shaffer, Fisher, Lucas, Dulcan, & Schwab-Stone, 2000).

**Procedure.** Data were obtained using an archival file review. Files were reviewed by graduate students and GBT data analysts and data were transcribed onto a coding form to allow for systematic recording and data entry. To ensure a minimum 80% reliability was maintained, a second data collector independently coded every fifth file and a point-by-point evaluation of inter-rater agreement was calculated.

**Data Analysis.** Data were analyzed in two phases. First, a series of paired sample *t*-tests were used to examine changes between CAT scores at the times of intake and departure. Cohen's d effect sizes were also conducted to determine the size of the differences from admission to departure. Second, a series of multiple regression analyses were run to identify variables (e.g., demographics, educational variables, behavior, metal health) that were predictive of CAT scores at the times of admission and departure.

## Results

**Changes over time.** To assess the changes in levels of academic functioning across time, four paired samples *t*-tests were run to examine each of the subscales of the CAT assessment (e.g., Total Reading, Total Math, Science) and the overall CAT grade level. Each of the analyses indicated that youth made statistically significant gains from the times of admission to departure with effects sizes ranged from .48 to .97.

**Predictors.** A series of multiple regression analyses were run to examine variables predictive of CAT scores at the times of admission and departure. Analyses indicated that at the time of admission, IQ, ethnicity, special education status, level of problem behavior, and the presence of a DSM-IV diagnoses all uniquely contributed to models predicting Total Reading, Total Math, and Science CAT scores. However, at the time of departure, only the variables IQ and ethnicity continued to contribute to the models.

## Discussion

Results indicated that youth made significant improvements in their levels of academic functioning while in residential care and that changes were seen in the factors that were predictive of academic functioning from the times of admission to departure. Specifically, in this data set, alterable factors such as level of problem behavior and mental health functioning no longer were predictive of academic functioning at the time of departure. Although these findings are preliminary and not based on a controlled study, they do suggest that youth who are at-risk may benefit academically while in residential care and that factors which may have a negative impact on academic functioning (e.g., behavior, mental health) may be mediated.

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# Session 11 >> 1:15-2:15 pm >> Salon C

## Symposium Methods for Understanding Parent Preferences, Patient Utilization and Outcomes

#### Chair: Graham J. Reid; Discussant: Melanie Barwick Presenting: Don Buchanan, Graham J. Reid, Jeff St. Pierre & Juliana I. Tobon

There are a number of different steps children and youth, and their families go through in their involvement with the mental health system. Understanding these steps requires different methodological approaches and accessing different sources of information. We present a series of studies relevant to these steps. First, Donald Buchanan of McMaster University will present a method for using family and patient input to improve consumer health information. Choice-based conjoint analysis, a methodology widely in marketing research, is applied in determining parents' preferences for parenting courses and information resources. Second, Graham Reid of the University of Western Ontario will present methods for examining patterns of services utilization within children's mental health agencies. This study applied multi-level latent class cluster analysis as a new method of examining visit data, which are routinely collected but rarely analyzed. Finally, Jeff St. Pierre of the Child and Parent Resource Institute will present longitudinal outcome data for children and youth with extreme socio-emotional dysfunction examined using two different analytic approaches. This study showed how non-linear regression models can overcome limitations of traditional pre-post measurement evaluations, and lead to different policy implications. These three papers present various ways to analyze data derived from parent ratings and administrative records. Presentations will highlight data analytic choices and methods, and demonstrate their application using data from families involved with the children's mental health system.

## Using Family and Patient input to Improve Consumer Health Information in Child & Youth Mental Health

## Presenting: Don Buchanan Contributing: Charles E. Cunningham, & Ken Deal

Parts of this research have been funded by the Research Development Fund at Hamilton Health Sciences, the Ontario Early Years Challenge Fund, the Provincial Centre of Excellence for Child and Youth Mental Health, The Canadian Institute for Health Research, and the Jack Laidlaw Chair in Patient-Centered Medicine. We would also like to acknowledge this project has been made possible by the entire team at the Patient-Centered Care Research Unit, McMaster University.

#### Introduction

More than 90% of parents referred to child and youth mental health services in Ontario indicate they would like more information about their child's mental health problems (Brief Child and Family Phone Interview data, 2007). Despite this preference, few parents receive information. One method for delivering this information in a cost-effective manner is parent training courses, and workshops. While considerable evidence exists demonstrating the effectiveness of parent training, clinicians often report poor enrolment and attendance at these courses.

One approach to improve delivery and utilization of information is consumer involvement in the design of the information products. This practice is used widely in the development of consumer goods and services in the marketplace. A leading methodology for determining consumer preferences is choice-based conjoint surveys (Ryan, Scott, Reeves et al.). This methodology describes two or more products by in terms of their features or attributes. Participants then select the product they would most prefer. By varying the combinations of attributes presented, the overall importance of individual attributes can be determined. As well, novel combinations of attributes can be tested against consumer preferences in market simulations.

#### Method

We will present selected results from three separate studies. The first study examined parental preferences for consumer health information in a convenience sample of 300 parents whose child or youth was attending an outpatient clinic at a children's hospital. The second study gathered parent preferences about parenting programs from a community sample of 300 parents of kindergarten students in an urban community, and featured over-sampling in low socio-economic neighborhoods. The third study examined information preferences of 1200 parents whose children were waiting for services at a number of child and youth mental health agencies across Ontario.

Using Sawtooth Software's Choice Based Conjoint module (version 2.6.7, 2001) we composed partial profile surveys. Attributes were selected using several methods, including literature search, consensus building by an expert panel, and focus groups with client groups. Surveys were administered using portable computers and paper and pencil surveys.

### Results

Findings of the studies have been reported previously, and the focus of the presentation will be on how the findings were used to improve information tools and the delivery of clinical services.

The results of the consumer health study led to the development of a rating scale for consumer health information that uses both professional's ratings of resources. This rating scale was then utilized to develop usable tools to assist health professionals in guiding their patients to high-quality information about their child's mental health problems. Two national organizations, the Canadian Academy of Child and Adolescent Psychiatry and the Canadian Pediatric Society have endorsed and participated in this project.

The results of the study of parenting preferences led us to simulate parent preferences for various times we offered courses. These results suggested that adding courses on Saturday mornings would increase utilization by parents. This hypothesis was supported by increased enrollment in Saturday morning courses when they were offered.

The study of information preferences of parents whose child was waiting for mental health services led to changes in how information was presented to parents. Resources were grouped according to whether their focus was on background information, or on step-by-step guides.

#### Discussion

Embedding research units within clinical service delivery units is one suggested strategy for increased knowledge translation and transfer between the academic community and practitioners. This strategy, in combination with techniques used in marketing and product design, has been successfully used to develop consumer health information products for parents of young people with mental health problems.

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# How to Examine Patterns of Service Utilization within Children's Mental Health Agencies

Presenting: Graham J. Reid & Juliana I. Tobon Contributing: Barrie Evans, Alan Leschied, Jeff St. Pierre, Vicky Wolfe, Jeff Carter, Shannon Stewart & Evelyn Vingilis

This project was supported by a grant from the Green Shield Foundation, Canada.

#### Introduction

In a study we recently completed of families seeking mental health services for their children, close to one-fifth had been receiving services more than one year earlier, yet they were seeking out additional services (Reid et al., 2006). These children/families might be considered to have "chronic illness" and need ongoing care. Our current models of psychological care are based on an acute-illness model. That is, services are provided only in times of extreme need, and children/families usually receive treatment for a brief period. This could be contrasted with an ongoing care or "chronic illness" model; for example, attending regular clinic appointments for diabetes. But, there is no evidence base for this approach to the treatment of mental health disorders among children. Chronic care models developed for physical health problems have important components that can reduce relapse and improve health status. This gap exists despite data on the natural history of psychopathology showing that problems such as Attention-Deficit Hyperactivity Disorder are really chronic conditions (Torpy, Lynm, & Glass, 2007).

A first step in considering a chronic illness model for children's mental health is to understand existing patterns of service use (e.g., dropout, acute, episodic) among children using mental health services. There are no previous studies of children's mental health services within agencies that have conducted analyses on patterns of services use similar to those conducted in our study. The present study is an innovative way to analyze these data. We present analyses of data from one mental health agency in London Ontario. We will examine data from two additional children's mental health agencies in Ontario, with each agency contributing data from about 400-600 clients, and compare patterns of use across agencies.

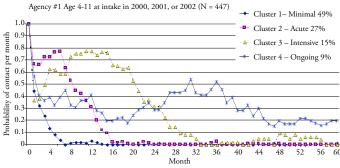
## Method

Children with: (a) At least 5 years of potential visit data and (b) Age 4 to 11 years at time of first visit were identified. To help control for variation that may be due to policy/legislation changes, we only examined data since 2000. Visit data (i.e., date and type of each visit) were re-categorized to reflect whether or not the child (or the parents/ guardians) had a face-to-face (as opposed to telephone) contact during a given month. For each client, a "Month 1" was computed (i.e., month of the client's first recorded visit). We then computed whether or not the client had at least 1 visit per month for the subsequent 5 years. We viewed 1 visit per month as the upper limit of reasonable continuity of care during active treatment; studies with adult populations have used this time period (Junghan & Brenner, 2006). The intensity (i.e., number of sessions per year) and type (i.e., outpatient, residential) of services were also computed.

#### Results

From one mental health agency in London Ontario, we abstracted data from 447 clients meeting the study criteria. A 4-cluster solution from a multi-level latent class cluster analyses (LCA) was the selected, as it was an improved fit over a 3-cluster solution. A 5-cluster solution was rejected as it yielded 2 clusters reflecting on-going service use, which did not appear substantively different from each other. Figure 1 shows the following clusters: 1, "Minimal care" (49%); 2, "Acute" (27%); 3, "Intensive" (15%); and 4, "On-going" (9%).





The average number of out-patient and residential visits for each cluster in each of the 5 years are presented in Figures 2 and 3. Cluster 1, "Minimal care" (49%), had the lowest average number of outpatient visits in the first year and no visits thereafter. Cluster 2, "Acute" (27%), had a high average number of outpatient visits in the first year and few visits thereafter. Cluster 3, "Intensive" (15%), had the highest average number of outpatient visits in the first as well as the second year and received both out-patient and residential care during year 3 and some visits thereafter. Cluster 4, "Ongoing" (9%), had a low average number of outpatient visits in the first and second years, with increased levels of out-patient services for the next 3 years; interestingly this group went on to have the highest average days in residential care during the third year.

Figure 2 Average Number of Out-Patient Visits per Year by Cluster for One Children's Mental Health Centre in London Ontario

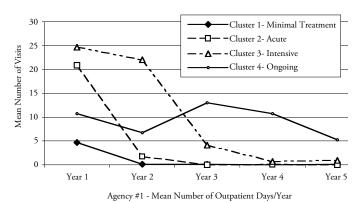
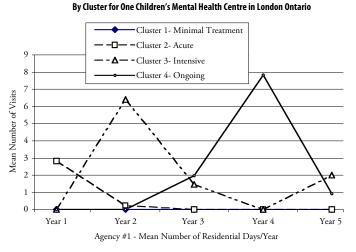


Figure 3 Average Number of Days in Residential Care Per Year



These data show, first, that the problem of children/families receiving minimal amounts of care is reflected in the most common pattern of service use (49%), and, second, that 24% of children had patterns of ongoing care lasting more than 1 year. This project provides a new method of examining visit data. These data are routinely collected. However, as a member of our advisory board stated, "[Children's mental health centres] are great at storing data but are abysmal at using it." An examination of service use patterns within agencies can: (a) help agencies refine service delivery systems to better meet the needs of their client populations and (b) start a process of developing new models of service delivery.

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## How Can Data Collection and Analysis Choices Aid Outcome Evaluations?

Presenting: Jeff St. Pierre

Contributing: Steve Cook, Alan Leschied, Christine Cullion, Andrew Johnson & Shannon Stewart

#### Introduction

Effective evidence-based practice requires careful attention to the course of disorder through longitudinal investigation. Intervention efficacy research designs focusing on two data points (pre- and post-treatment), limit understanding of long-term versus short-term treatment effectiveness. Furthermore, longitudinal designs must be combined with exhaustive efforts to achieve high return rates, as the same factors that predict attrition may also predict poor long-term outcomes in high risk populations (de Graaf, Bijl, Smit, Ravelli, and Vollebergh, 2000). We present interim results from a long-term follow-up study, in which a structured telephone interview is used to track child and family functioning at three points in time, while "wait list" movement is analyzed on a subsample. Using non-linear (quadratic) regression models, we demonstrate the importance of longitudinal analytic methods, and highlight the clinical and research utility of a standardized telephone interview measure.

#### Method

*Sample.* This study includes 94 children and youth (aged 7 to 17; 77 boys, 17 girls), who received inpatient treatment at a regional mental health centre in London Ontario. Approximately 76% of our sample met "pervasiveness of impairment" criteria predictive of chronic service usage (Hodges, Xue, and Wotring, 2004).

*Instruments.* The *Brief Child and Family Phone Interview* (BCFPI; Cunningham, Pettingill, and Boyle, 2004) was used to measure child symptoms (internalizing and externalizing), impairment (child functioning) and family adjustment. This measure is reliable (Cronbach's alphas ranging from .75 to .86 on broadband scales), and as seen below, demonstrates the capacity to screen for clinical problems and measure change in symptom reports over time. Given that only one in three clients returned our mail-out questionnaires at follow-up, the BCFPI holds promise due to its mode of administration, which significantly reduced attrition at follow-up (75% successful data collection).

Procedure. Families were administered the BCFPI at intake, approximately eight months post-discharge, and again at over two years post-discharge. We analyzed a sub-sample (n = 54) of BCFPI reports obtained on two separate occasions prior to admission, due to a long wait time.

#### Results

Figure 1 reports mean changes from pre-admission (wave 1), to post-discharge (wave 2) to follow-up (wave 3). All variables were analyzed within separate non-linear (quadratic) regression functions, with 'number of months post-discharge' used as the predictor variable (see Table 1 and Figure 2). The youth symptom trajectories indicate that on average, inpatient treatment had a significant impact (as they demonstrate significant negative slopes), with symptoms of maladjustment beginning to re-occur between the short-term and long-term follow-up conditions (as demonstrated by significant positive quadratic components).

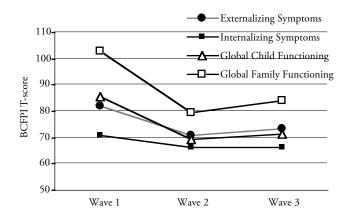
The collection of two data points pre-treatment is also recommended to begin to quantify shifts across different groups of clients, such as wait list gains or deterioration. The aggregate results on the sub-sample indicated the slope of improvement pre-admission was slight compared to the large symptom change reported by caregivers during the period of intensive treatment (figures not presented in this summary).

Data choices. Had we collected data only once post-discharge, the T scores in Figure 1 would still indicate several statistically large and clinically relevant treatment effect sizes, regardless of which time period was chosen (e.g., wave 1 to wave 2 externalizing scores, d = 1.0). By collecting data at three points in time, however, we are now able to chart impact relative to the developmental cost and course of inpatient and outpatient supports, which directs service provision choices. As apparent from Figure 2, we must also remain interested in analyzing for clients with vastly different outcomes.

#### Discussion

Presently, changes in functioning during different stages of support were analyzed with a relatively brief standardized phone interview. The BCFPI data demonstrated sensitivity to treatment outcomes, and data attrition was minimized. In Ontario, two brief measures are used (BCFPI, Child and Adolescent Functional Assessment Scale-CAFAS) at intake in children's mental health agencies. Present results demonstrate the advantage of collecting measures at four points in time: referral, start of treatment, post-treatment, and follow-up; especially for complex cases seen in a tertiary care setting. This provides evidence that the decision to collect data at only two points in time (pre-post), can lead to limitations in understanding treatment sustainability. Managers and funders within the system of care should study efforts to collect multiple repeated measures. Analysis of longitudinal (curvilinear) change may have policy implications for those children and youth who deteriorate while waiting for service and those who fail to maintain gains following discharge from acute or residential services. Halliday-Boykins, Henggeler, DeLucia, Rowland (2004) provide a description of how youth symptom trajectories can be used to differentiate chronic service users from treatment responders with families and children experiencing a combination of inpatient and outpatient services over time. More detailed analyses of this dataset will be forthcoming, using multilevel modeling techniques to further appreciate those factors that predict positive outcomes over time.

#### Figure 1 **Changes in BCFPIT-scores over Three Years** for a Sample of High Need Children and Youth in the System of Care



#### Table 1 Linear and Non-Linear (Quadratic) Regression Results for a Sample of High Need Children and Youth in the System of Care

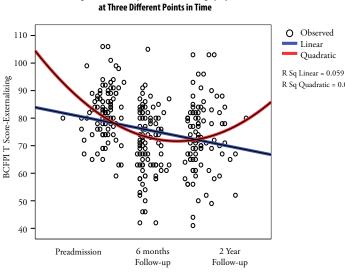
	Linear Model		Qui	!	
Variable	$B^{a}$	$R^2$	$B^{a}$	$B^2$	$R^2$
Externalizing Symptoms <sup>b</sup>	-0.193	0.059	-0.437	0.011	0.099
Internalizing Symptoms	-0.137	0.022	-0.163	0.001	0.022
Global Child Functioning <sup>b</sup>	-0.342	0.108	-0.682	0.016	0.155
Global Family Functioning <sup>b</sup>	470	0.081	-0.917	0.021	0.113

Figure 2

Changes in Parent Reported Externalizing Symptoms

<sup>a</sup> Unstandardized Regression coefficients are reported

<sup>b</sup> Changes are statistically significant p<.001



## O Observed Quadratic

R Sq Quadratic = 0.099

## References

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# Session 12 >> 1:15-2:15 pm >> Salon D

## Symposium Unregulated or Unmonitored Residential Services: The Challenge to Ensure Quality Services and Protections Part II

Chair: Lenore Behar, Discussant: Robert M. Friedman Presenting: Howard Davidson, Sarah Steverman, Brian Lombrowski & Maia Szalavitz

## The Challenges of Changing Public Policy

Residential programs that serve youth with emotional/behavioral/ educational/substance abuse problems offer expectations that the programs will provide rehabilitation or treatment. Some residential programs fail even where there is adequate regulation and/or accreditation and monitoring. Oversight is not foolproof and problems can and do occur in such programs. However, regulation and monitoring provide some assurances that standards are met for health, safety, human rights, and quality of education and treatment services. Such oversight provides also documentation and corrective actions when problems occur.

The responsibility for licensure for health and safety and for assuring the quality of services has historically been a state responsibility. States regulate/license a wide range of services, including restaurants, nursing homes, barber shops, and professional practices, with the purpose of ensuring health, safety, or quality. There appears to be little variation across state lines of these types of licenses. However, states handle the responsibility of regulating residential services for youth differently in terms of what they require of the programs. They also differ in terms of the kinds of programs that are exempt from licensure requirements. The exemptions may include residential programs that do not receive public funds, those that are tied to religious organizations, or those that do not use the term "residential treatment" but rather call themselves "emotional development programs," "therapeutic schools," or use other terms that are not part of the licensure picture in the state.

Addressing the problem of unregulated or unmonitored residential facilities requires multiple approaches. Parents, the legal community, the child advocacy community, the state governments, the federal government, and the media all have a role in the change process. The issues are complex and changes in public policy are sometimes slow. Also, as with any issue, there are forces for change and forces against change.

In 2006, the American Bar Association passed a resolution addressing privately operated residential treatment facilities for youth (assuming that publicly operated programs are regulated), which states:

That the American Bar Association urges state, territorial, and tribal legislatures to enact laws that require the licensing, regulating, and monitoring of residential treatment facilities that are not funded by public or government systems, but are privately-operated overnight facilities that offer treatment to at-risk children and youth under

- Halliday-Boykins, C.A., Henggeler, S.W., DeLucia, C., and Rowland, M.D. (2004). Heterogeneity in youth symptom trajectories following psychiatric crisis: Predictors and placement outcomes. *Journal of Consulting and Clinical Psychology*, 72, 993-1003.
- Hodges, K., Xue, Y., & Wotring, J. (2004). Outcomes for children with problematic behavior in school and at home served by public mental health. *Journal of Emotional and Behavioral Disorders*, 12, 109-119.

age 18 for emotional, behavioral, educational, substance abuse, and social issues and problems, including strenuous athletic, mental health, and tough love programs. This legislation should:

- 1. Require licensure of, or otherwise regulate, private residential treatment facilities by defining clearly which programs must comply with the statute and impose minimum legal requirements to operate and maintain them, including standards regarding staff qualifications and residents' physical and emotional safety, educational, mental health, and other treatment needs.
- 2. Require government monitoring and enforcement of the operational standards outlined in the statute.
- Promote the preferred use of appropriate in-home and communitybased prevention and intervention programs for at-risk children and youth by requiring enhanced governmental support that provides families with better access to these programs.

The discussion of the ABA resolution includes the findings of studies by the Center on Children and the Law, and reports in a special issue of the journal, Family Court Review, which focused on youth at risk and its relevance to the topic of residential treatment. Discussion also includes how the ABA and the ABA Center on Children and the Law plan to impact on their audience, which includes judges, attorneys, mediators, and professionals in mental health and human services.

The National Conference of State Legislatures is an organization dedicated to serving the legislators and their staffs in the states, and the commonwealths and territories. "NCSL provides research, technical assistance and opportunities for policymakers to exchange ideas on the most pressing state issues." State legislators have asked NCSL for assistance on the issue of licensure and NCSL has advised states where new laws are being considered. NCSL has worked with legislators as they review current statutes and monitoring practices and identify programs to which these oversights apply. The discussion of NCSL's role will include strategies under consideration by states and will review challenges and opportunities identified by state policymakers.

In addition to the ABA and NCSL, both well-established national organizations, a relatively new organization is working to create change in public policy concerning residential treatment. The Community Alliance for the Ethical Treatment of Youth (CAFETY) is a volunteer, youth-driven effort that focuses on the protection of the human rights of youth in residential programs. This organization is working to increase awareness of inadequately regulated or monitored facilities that use harmful, punitive, or aversive practices. CAFETY's work includes efforts to increase accountability of residential programs. They promote legislation that affirms the human rights of youth and of those with disabilities to exist free from abuse and mistreatment. CAFETY is spearheading a "Care, not Coercion" Campaign, in support of federal and state legislation through engagement in public education efforts, outreach, grassroots advocacy and organizing, and alliance-building.

Public policy is also influenced by those who champion a cause through the media. A noted author has done considerable investigation of residential programs for youth and published a book, described by *Psychology Today* as

"An alarming exposé of the burgeoning business of boot camps and drug rehab centers that promise to reform troubled teens. Often sadistic and rarely successful, many of these programs are very similar to cults, relying on humiliation, isolation, brainwashing and other maltreatment, Szalavitz, a journalist and *Psychology Today* contributor, reports..."

The investigations in this book focus on how parents, in the absence of guidance or knowledge, deal with a child who has behavior, alcohol or drug problems. The programs are examined through the eyes of the children who endured them. The discussion includes the way panic-stricken parents are manipulated into sending their children to residential programs.

The discussant will raise issues of how the multiple forces for change can coalesce, how others can help bring about these changes in public policy, and how sound research can contribute to these efforts.

# Session 13 >> 1:15-1:45 pm >> Salon G Findings from the Multi-Site Evaluation of Independent Living Programs for Youth in Foster Care

#### Presenting: Maria Woolverton

Contributing: Mark Courtney, Andrew Zinn, Erica Zielewski, Roseanna Bess, Karen E. Malm, Maria Woolverton, Matthew Stagner & Michael Pergamit

#### Introduction

Results from research over the past three decades suggest that youth aging out of foster care encounter numerous challenges to living selfsufficiently. Many have limited education and employment experience, relatively poor mental and physical health, and a relatively high likelihood of experiencing outcomes such as homelessness, incarceration, and nonmarital pregnancy. Independent living programs were developed to assist these youth. In 1985, federal funds were first provided to states to help adolescents develop independent living skills. Funding for independent living programs was reauthorized indefinitely in 1993. The Foster Care Independence Act of 1999 amends Title IV-E to create the John Chafee Foster Care Independence Program (CFCIP), giving states more funding and greater flexibility in providing support to youth making the transition to independent living. In addition, the legislation requires that rigorous evaluations of promising independent living programs be conducted. Specifically, the legislation states that "To the maximum extent practicable, the evaluations shall be based on rigorous scientific standards including random assignment to treatment and control groups" (Title IV-E, Section 477 [42 U.S.C. 677], g, 1).

In response to this legislation, the Department of Health and Human Services contracted with the Urban Institute and its partners—the Chapin Hall Center for Children and the National Opinion Research Center—to conduct an evaluation of selected programs funded through the CFCIP, the "Multi-Site Evaluation of Independent Living Programs Serving Youth in Foster Care." The goal of the evaluation is to determine the effects of independent living programs funded under CFCIP in achieving key outcomes for participating youth, including increased educational attainment, higher employment rates and stability, better interpersonal and relationship skills, fewer non-marital pregnancies and births, and reduced rates of delinquency and crime.

Four independent living programs were selected for evaluation after an initial evaluability assessment phase. The selected programs encompass a set of critical independent living services and represent a range of program types. The programs include an intensive case management and mentoring program in Massachusetts, an employment services program in Kern County, California modeled on TANF work development assistance, and a tutoring/mentoring program and classroom-based life skills training program, both serving youth in Los Angeles County. This paper will include a presentation of final results from two of the evaluation's four study sites – the Los Angeles Life Skills Training (LST) Program and the Los Angeles Early Start to Emancipation Preparation (ESTEP) Tutoring Program.

#### Methodology

The evaluation consists of two primary components: an impact and a process study. In order to determine the short and long-term effects of independent living programs on key outcomes noted in the legislation, a total of 1,400 youth have been assigned to intervention and control groups and are being surveyed at three points over the course of the evaluation. In-person interviews with youth obtain information on youth characteristics, program interventions and services, moderating factors, and intermediate and longer-term outcomes. First follow-up interviews with each youth are conducted one year after the baseline interview and second follow-ups are conducted two years after the baseline interview.

The youth interview questionnaire was designed primarily by using questions from existing surveys. The sources were selected in order to provide questions that had been used heavily and would provide for good possibilities to compare with other samples. Four surveys provided the bulk of the questions. The Midwest Evaluation of the Adult Functioning of Former Foster Youth (The "Midwest Study") and the National Survey of Child and Adolescent Wellbeing (NSCAW) provided questions related to child welfare and provide comparison samples of foster youth. In particular, the Midwest Study provides a good comparison sample of foster youth aging out of care. The National Longitudinal Survey of Youth—1997 cohort and the National Longitudinal Survey of Adolescent Health (AddHealth) provided many of the other questions and provide for comparisons with nationally representative samples of adolescents aging into their twenties. Special attention to the questionnaire design and selection of items was made so that the core questionnaire could be used with youth referred to independent living services at each selected site and so that the same questionnaire could be used in each round, with minor variations across rounds.

Sample sizes for the impact evaluation in the two Los Angeles study sites were approximately 450 youth each, with half of the youth in each site referred to the service being evaluated (treatment group) and half referred to "services as usual" (control group). Youth in treatment and control conditions were interviewed shortly after referral and random assignment, and follow-up interviews occurred one year and two years later. Response rates for the baseline interviews were 97% for the Life Skills Training sample and 96% for the ESTEP Tutoring sample. At the second follow-up interview point, 88% of the baseline participants in the LST sample were retained and 90% of the ESTEP-Tutoring baseline participants were retained.

For the process study, researchers visited the sites to observe the programs and conduct interviews and focus groups with staff, youth and other stakeholders. In-person interviews were conducted with program administrators, community advocates, and directors of community provider agencies. Focus groups were conducted with youth, independent living program staff, and other agency staff responsible for referring youth to the programs.

### Findings

Findings to be discussed include results from both the process and impact evaluations in two of the four sites participating in the Multi-Site Evaluation. Baseline characteristics of youth in the study sites (including mental health status), and issues related to program take-up and services receipt, as well as evaluation challenges, will also be discussed. Consistent with the experimental evaluation design, the primary analytic strategy for assessing program impact was an Intentto-Treat (ITT) analysis of differences in observed outcomes between the treatment and control groups as they were originally assigned. Where relevant, results from extensions and additions to the ITT analyses will also presented.

## Conclusions

Findings from this evaluation will be discussed in terms of implications for the planning and delivery of services to youth aging out of foster care. Issues for future evaluations in this area will also be discussed.

# Session 13 >> 1:45-2:15 pm >> Salon G *"It's Scary out There"—Youth with Mental Health Needs Speak about Transitioning to Adulthood*

Presenting: Sarah Kaye Faraldi & Ann Geddes

#### **Transitioning to Adulthood**

Developmentally, transition-age youth (TAY) between the ages of 16 and 24 crave independence from parents as they strive to achieve adult milestones. They value friends and romantic relationships and want to be similar to their peers. The transition period from adolescence to adulthood is especially difficult for youth with mental health needs. Emotional/behavioral difficulties can impair abilities to achieve successful adult outcomes. Delayed psycho-social development can place youth with mental health needs behind their peers. Because youth want to fit in, social stigma against mental illness can create a barrier to accessing services to assist during the transition.

Listening and Learning from Families and Transition-age Youth was launched by the Maryland Coalition of Families for Children's Mental Health in spring 2006. The Coalition represents families across Maryland who are caring for a child with mental health needs. The need for a careful look at the availability of services and supports for TAY became apparent when the Coalition noted numerous desperate calls from families regarding their children leaving school or turning 18 years of age. The Listening and Learning project was designed to capture the experiences and perspectives of youth and their families.

A qualitative approach was most appropriate to give voice to this underrepresented population. Open-ended questions were posed in a semi-structured interview format during focus groups conducted at six locations around the state. Responses represent 11 counties and Baltimore City—50% of the jurisdictions in the state. Groups were held in centrally located and accessible locations, refreshments were served, and youth were offered \$20 appreciation for their participated. Characteristics of the youth in our sample are summarized in Table 1. Common themes around identified needs and supports are presented on the following page.

#### **Identified Needs**

Participants identified special needs in six domains:

*Mental Health Treatment.* Transition-age youth need health care coverage to access mental health services. Parents expressed frustration with their changing role in the treatment process, particularly service providers excluding parents in order to maintain confidentiality.

*Transition Preparation.* Families were confused about where to go for information or assistance. They would like one coordinated place

to learn about options regarding benefits, housing, education, and employment.

*Life Skills and Social Life.* Many parents thought their youth were socially isolated. Youth often indicated that they were engaged in high-risk behavior

#### Employment.

Families identified several barriers to obtaining and maintaining employment, and low-paying jobs that do not provide sufficient income or adequate benefits.

#### Housing. Most

youth were still living at home with their family. Parents reported feeling hopeless about their young adult becoming independent. Identified barriers included finances,

Table 1
Participant Data

	N	%
Sex		
Male	45	64%
Female	25	36%
Educational setting		
Public schools	39	53%
Non-public	26	36%
Residential	29	40%
Educational attainment		
Graduated or expect to graduate	39	76%
Dropped out	12	24%
Mental health services		
Therapy	73	100%
Medication	68	93%
Psychiatric hospitalization	43	59%
Employment		
Working	18	25%
Needs supported employment	42	58%
DORS	13	18%
Health care/benefits		
Receiving SSI	23	32%
Rejected for SSI	7	10%
Receiving medical assistance	59	81%
Family's private insurance	34	47%
Living arrangements		
Family or foster family	47	64%
Independent living	5	7%
Supported living or TAY program	21	29%
Homeless	5	7%

psychosocial concerns, and program availability.

*Education.* High school and post high school services are not tailored to youth with mental health needs.

#### Policy Recommendations

Participants articulated several policy supports that could ease the transition to adulthood:

*Ensure health care coverage.* Medicaid coverage could be extended to age 21. Maryland Children's Health Insurance Plan could be extended to age 25. Private insurers could be required to allow extension of coverage to age 25.

*Align the definition of TAY across state agencies.* Currently, the age of adulthood is 18 according to the Department of Social Services, 18 to

the Department of Health and Mental Hygiene, 21 to the Department of Juvenile Service, 21 (or graduation) to education, 21 to Division Of Rehabilitative Services, and 21 to Developmental Disabilities. A unified age of adulthood that considers the unique developmental time period and special circumstances of youth with mental health needs could follow young adults through age 24.

**Build a system of care for TAY.** A system of care for TAY would be youth-driven and family-guided, involving youth and their families in planning implementation and evaluation of services. It would use

## Session 14 >> 1:15-2:15 >> Salon H Symposium Natural Helpers in Behavioral Health Care

#### Chair: Mareasa Isaacs Presenting: Henrie M. Treadwell, Britt Rios-Ellis & Maggie Sanchez

Individuals and families from culturally diverse communities often utilize natural helpers for assistance in behavioral health issues and navigating the complexities of mainstream helping systems. This session will examine the role of natural helpers in behavioral health care, strategies for measuring their impact and effectiveness, and models that incorporate natural helpers (for example, promotoras, indigenous Alaskan Natives, inhome family workers, peer support) in the mainstream provider system.

## Community Health Workers: Bridges to Well-Being for Communities

#### Presenting: Henrie M. Treadwell

Acknowledgements: Our thanks go to the W.K. Kellogg Foundation for their generous recognition of Community Health Workers and their support of our Community Voices initiative.

## Introduction

Community Health Workers (CHWs) have proven their value in assisting medically underserved and unserved residents gain access to and navigate the health care system to improve individual and community health outcomes. Their efforts have demonstrated a return on investment, delivery of patients into the health care system, effective and appropriate utilization of health services, and increased health coverage among individuals previously without health coverage. CHWs play a particularly significant role in guiding vulnerable populations toward health and social services.

Over the past decade, the Community Voices: Health Care for the Underserved program funded by the W.K. Kellogg Foundation has placed its attention on solutions to the vexing problem of how to provide services for those presently underserved. Thirteen sites were designated as Learning Laboratories in underserved communities of the United States. Each of these sites had a common problem, which is a large number of low-income residents, many of whom were minorities and immigrants, and were unable to access the health care system. The idea behind the Community Voices program was to work with the community to plan and undertake local, culturally appropriate improvements to strengthen the medical and dental safety net for those left out of the system. A different type team led each of the thirteen Learning Laboratories from academic medical or dental centers to city public health departments, and from community-based organizations to hospitals. Every one of the sites applied different approaches to finding ways to improve their system; however, there was one common thread for all sites. It was found that community health workers were vital to improving the health care system. an individualized approach to accommodate a wide range of skills and levels of functioning through a wraparound model. It would include the vocational, education and residential services identified by families. Interagency coordination would help families access programs from multiple service systems.

## Reevaluate organizational structure within the Mental Hygiene

*Administration.* Currently, TAY are served by adult service systems. It may be more appropriate to organize services for these youth with children services. A carved-out system specifically geared toward TAY may be the best option for addressing their unique developmental needs.

### Community Health Workers as Connectors to Health and Well-Being

While each Community Voices site across the country engaged workers primarily in as the frontline who would connect vulnerable populations to health care services, an important development in this process has been the persistent encounter with community mental health issues. Areas in which CHWs could help are shown in Table 1, and an overview of selected programs is provided in Table 2.

#### Table 1 Areas Where CHWs Could Help

CHWs	Outreach and Enrollment
	CHWs can find uninsured people and get them enrolled in
	Medicaid, Child Health Plus, and Family Health Plus.
	Orientation and Navigation
$\checkmark$	CHWs can educate people on the importance of having health
	insurance and orient them in the health care system.
$\checkmark$	Quality Assurance
	CHWs can be a critical linkage between providers and patients in assuring the delivery of quality care
$\checkmark$	Health education disease management
$\checkmark$	Community health workers are better communicators than physicians who do not have the time or the skill set to engage patients in self-management.

#### Table 2 Community Voices

Community Voices Learning Laboratory sites invested significant time and resources to develop Community Health Worker models to increase health care access for the underserved.

Denver Using the "Return On Investment Model", Denver Health Community Voices demonstrated that CHWs are financially sustainable Health: in the health care system. Using the adapted "Gold Mine" (an Return on integrated sales database) software, CHW activities were tracked and Investment linked to selected program costs and financial and client utilization data. Model Based on the outcomes from an 18-month study, the hospital system realized a level of savings equal to the salary of a CHW. An intervention study of 1,241 men used a retrospective cross-over design to analyze utilization rates, patient charges, and reimbursement rates. The study found an increase in primary and specialty visits, a decrease in urgent care emergency room visits, and a decrease in the total patient charges. Changes in utilization in this return on investment also resulted in a reduction in uncompensated charges. CHW outreach efforts in a free pregnancy testing program for underserved women brought new clients into the health care system, many of whom were Medicaid eligible, and generated new revenue for Denver Health. An analysis of the hospital reimbursements for baby deliveries and the total service charges illustrated a net gain for the hospital.

Denver Health is moving towards sustaining CHWs through the health system's core operating budget.

Ingham	Issuing health insurance cards in Ingham County brought nearly
County	60% of uninsured residents into the health system. CHWs also helped
	patients to navigate the system and utilize services. CHWs overcame the
	challenges of identifying the uninsured, enrolling them, and promoting
	appropriate utilization of health care benefits.
	Ingham County leveraged local investments with Medicaid funds to
	create a community system of outreach programs. The county serves as
	the primary funding source, while the United Way and the Kellogg
	Foundation serve as secondary sources. Twenty-one full-time CHW
	positions were created through community-based organizations. These
	systems are reimbursed through braided contracts that were negotiated
	with community organizations. The single contract specifies all the
	program and reporting requirements of various funding partners,
	including information that is necessary for the health department to
	determine Medicaid costs associated with CHW work.
Molina Health	In health profession shortage areas, CHWs are members of field case
Care of New	management teams that establish medical homes, improve access to
Mexico	service, increase efficiency, and reduce costs for medical care. A one-
	year pilot study illustrated that interventions for five cases led to a
	savings of \$70,676.00.
	Molina Health Care contracts with their provider network for the
	delivery of medical and other services, some of which is paid for on a
	capitation basis. The University of New Mexico is responsible for
	recruitment, training, and start-up payroll for the CHWs who function
	as field case managers. Through a monthly capitation mechanism, the
	university is reimbursed by Molina Health Care for returning referrals
	to CHWs. Molina refers its high-risk patients with medical behavior
	and psycho-social needs to Care Coordination for field case
	management services.
New York	Medicaid managed care organizations use a portion of their capitated
	payments to employ CHWs. In addition to support outreach and
	coordination activities performed by CHWs, hospitals and health
	systems can seek reimbursement for Medicaid administrative costs.
	In New York City, Community Premier Plus targeted the population
	in northern Manhattan and the Bronx, and with the help of CHWs, the
	organization has helped improve quality measures for asthma and
	diabetes. This program received the highest rankings for quality and
	member satisfaction of Medicaid health plans in 2004 by the NY State
	Department of Health.

## De Blanco Y Negro A Colores: Meeting the Mental Health Needs of Underserved Latinos

**Presenting: Britt Rios-Ellis** 

Contributing: Melissa Mercado, Laura D'Anna, Liany Arroyo & Silvia Rodriguez

#### Introduction

Latinos are the largest minority in the U.S. today, representing 13.7% of the population. Throughout the United States, Latinos are more likely than any other racial/ethnic minority to be uninsured or underinsured, and are less likely to use health services when available (49% compared to 25% of Asian Pacific Islanders). Two of the most influential factors contributing to Hispanics' reluctance to use health services are cost and lack of culturally and linguistically appropriate services. When the lack of appropriate services is combined with poor mental health status within the Latino community, the deficiency of accurate information and problems related to legal status and documentation, and cultural beliefs associated with mental health issues, Latinos often experience greater marginalization and virtual inability to access mental health services. Promotores, often referred to as community health education and networking information needed to navigate the complex system of mental health services in the United States.

### Methodology

The De Blanco y Negro a Colores: Entendiendo la Depresión Project represents the culmination of several efforts pertaining to Latino mental health. Community participatory research techniques, grounded in the Community Health Outreach Model, were used to guide the development of the project and related evaluation. Formative data collected through focus groups at the targeted sites led to the project focus being directed on depression as participants stated they felt a need to understand basic concepts, treatment options, and referral issues. The Institute for Hispanic Health (IHH) of the National Council of La Raza (NCLR) selected three community based organizations with which to work on this project: Abriendo Puertas in Miami, Clinica Familia La Fe in El Paso, and Tiburcio Vasquez in Hayward/Union City, California. At the education session (charla), participants were asked to complete a demographic in addition to the Patient Health Questionnaire (PHQ-9) to measure their level of depressive symptoms.

The promotores were trained in basic mental health issues with an emphasis on depression. Mental health and mental illness were clearly defined and depression-related risk factors, signs and symptoms were presented. In addition, promotores were taught Latino-specific myths associated with depression as well as the somatic symptoms most often linked to the presentation of depression among Latinos. In addition, promotores were taught ways to promote mental health status. Furthermore, the promotores were carefully instructed in effective educational techniques and charla delivery and provided ample time to rehearse prior to actually delivering it to their peers. Finally, the promotores were trained in basic evaluation rationale and techniques and provided with the opportunity to practice administering both the informed consent and required instrumentation. Given the lower literacy level of some of the participants, promotores were briefed on verbally administering all forms to participants who needed assistance.

In an effort to ensure that those demonstrating any level of depressive symptoms, however minimal, were referred to culturally and linguistically competent mental health services, the IHH staff worked with the sites to assemble a list of service contacts. The telephone numbers acquired were then called by IHH staff in Spanish to determine whether or not they were able to be seen by a Spanish speaking mental health care provider and the length of time it took to get an appointment. Only the contact information for referral agencies that could provide participants with an appointment with a Spanish speaking mental health care provider within one week of the trial call was provided to participants.

## Results

#### **Demographic Characteristics**

The sample consisted of 380 participants from three distinct sites; El Paso, Texas (n = 173), Miami, Florida (n = 43), and Union City, California (n = 164). The majority of the participants was female (76%) and the mean age was 48 years with a range from 20 to 96 years. Spanish was the primary language for 88% of the participants, and the majority (73%) was not born in the U.S. Among those who were foreign born, duration of residence within the U.S. varied with 40% living in the U.S. for less than 10 years, 29% for 11 to 20 years, and 31% for greater than 20 years. Evaluation of differences in time in the U.S. revealed that those from El Paso had lived in the U.S. for a far greater period of time (34.8 years) than had Miami based (12.5 years) and Union City based (11.9 years) participants, respectively.

#### Distribution of Depression-Related Symptoms within the Sample (N = 303)

A total of 303 individuals answered all nine questions on the PHQ-9. Reliability analysis indicated that the PHQ-9 scale had a high alpha of .91 among this sample. The mean score for the sample was low (4.32) with a range from 0 to 24. Using the standard depression categories associated with the PHQ-9 score, participants were distributed as follows: 53% reported no depression symptoms; 14% reported minimal symptoms, just over 7% reported symptoms consistent with minor depression, 3% indicated symptoms that are reflective of "major depression, moderately severe," and only 2% appeared to be at potential risk for "major depression, severe." These distributions are shown in Table 1.

Table 1
Distribution of Depressive Symptoms (N=303)

PHQ-9 Score	Provisional Diagnosis	Proportion of PHQ- 9 Responders	Proportion of Sample
<u>&lt;</u> 4	No depression- related symptoms	66%	53%
5-9	Minimal Symptoms	18%	14%
10-14	Minor Depression, Dysthymia, Major depression, mild	9%	7%
15-19	Major depression, moderately severe	4%	3%
<u>&gt; </u> 20	Major depression, severe	3%	2%

Participants were also asked whether or not they believed they were at risk for suffering from depression, to which 47% of the sample responded affirmatively. Finally, 26% of participants indicated they had a family member that had been diagnosed with depression.

The presentation will discuss the development of De Blanco y Negro a Colores: Entendiendo la Depresión, key points to consider if working with promotores, and the Community Health Outreach Model. In addition, additional results of the project-specific evaluation will be discussed.

## Hispanic Service Council & RAICES /Family and School Support Team (FASST)

### Presenting: Maggie Sanchez

#### Introduction

Promotoras are community members that have familiarity with local resources and understand their neighborhood's social issues. They promote healthy living and encourage community residents to access needed health and human social services. Typical engagement and outreach functions to be incorporated into the Promotora's role include but are not limited to:

- providing cultural mediation between their communities in the health and human services systems;
- providing informal counseling and social support;
- providing culturally and linguistically appropriate mental health education; individual health concerns, school system processes and specific learning disabilities;
- assuring people obtain the services they need;
- building individual and community capacity;
- providing referrals and/or follow-up services;
- conducting home visits during evenings, and/or weekends;
- attending family support plans
- attends community meetings; and
- · advocating for individual and/or community needs.

This is often accomplished by building trust between residents and local service providers and community agencies. Promotoras often act as effective navigators and links for families using traditional or managed health and human service systems. This has especially been the case with low-income immigrant communities where access to resources is limited due to language or other cultural barriers. Because of their knowledge of the local community, promotoras are more often able to make personal connections with families than are professionals by conducting home visits to parents during non-traditional working hours. Once such connections are made, successful outreach to community residents often includes much needed health education on a variety of topics and guidance in navigating the health and human social service system.

While most outreach efforts target families in need of services, promotoras can also educate service providers by sharing their knowledge of the community, especially with regard to cultural understandings. They encourage providers to understand and respond to clients and their communities in a culturally appropriate manner. The work done by promotoras and community service providers can help to strengthen families and communities by using a strength-based approach, focused on identifying and enriching family strengths and obtaining resources in the community that have been identified as "deficient within their communities" through the direct and on-going involvement of the family.

The para-professional outreach practice increases the cultural competence of service systems by including workers who are able to develop relationships with community residents based on common cultural understandings. Ideally, promotoras and other service providers and community agencies work to integrate local beliefs within their efforts thereby encouraging community participation and linking with informal community supports. This is particularly beneficial for predominantly Spanish monolingual populations where families rarely turn to outside professionals for various concerns with health-care, mental health, academic and/or behavioral needs with their children or other related concerns, but instead seek out peers or authority figures within their own social network. Culturally competent approaches such as the promotoras exemplary practice are an important way to address access to services and adherence to treatment for Hispanic/Latino families because they include aspects such as bilingual/bicultural staff, user friendly information about the U.S. health and human service system and provides an ethnic match between providers and families.

#### Methodology

Locally, the incorporation of promotora outreach workers into existing school-linked case management teams was shown to be effective in increasing involvement of Spanish monolingual/limited English children under age 10 with SED and their parents. The RAICES/Promotoras Project, funded by NIDRR, developed and tested a service provision method that incorporated promotoras into existing school-linked Family and School Support Teams (FASST) in an effort to more effectively serve K-5 students with SED and their families. The main product of the RAICES/Promotoras project was a Training Curriculum designed to train FASST teams that incorporate promotoras with knowledge and skills related to the system of care philosophy, implementation of wraparound principles, cultural competence, intensive case management and various activities centered on health and human social service outreach and community engagement as practiced by promotoras.

## Results

Cultural responsiveness in such services has been demonstrated to decrease barriers, improve retention in services, increased compliance with treatments and within social programs as well as increases positive client outcomes. Increased satisfaction of Hispanic/Latino families with services has been linked to a key person or professional who helps to navigate the system of services, locate information, coordinate services, provide transportation, interpret, act as an intermediary, help find financial assistance, and offer emotional support.

## Session 15 >> 1:15-1:45 pm >> Salon I The Art and Science of Fidelity Assessment: Priming the Canvas

### Presenting: Jody Levison-Johnson, Rusti Berent & Thomas Jewell

## Introduction

Communities across the United States strive to integrate the methodological aspects of conducting objective wraparound fidelity evaluations with the broader programmatic and continuous quality improvement (CQI) efforts that can be informed by such activities. Many questions remain largely unanswered for individual communities, such as:

- 1. How can fidelity evaluation team members garner support and buy-in from the broad range of necessary stakeholders at all levels (i.e., system leaders, administrators, supervisors, families, youth, and front-line staff)?
- 2. How can we ensure that accurate and timely feedback is given to stakeholders based on the findings, and are there strategies that work better (or worse) than others to ensure that changes are made based on the feedback?

Finding answers to these important questions—and hearing the lessons learned along the way—will help communities as they endeavor to use fidelity assessment for research, programmatic and clinical purposes. This paper will highlight work in Monroe County, NY which begins to answer these critical questions.

## Methodology

This paper will first describe our experiences prior to receiving cooperative agreement funding that included quantitative fidelity assessment of an innovative wraparound program, the Youth and Family Partnership (YFP). Coordinated Care Services, Inc. (CCSI) was engaged by the Monroe County Department of Human Services to provide an evaluation and quality improvement process for this program. The evaluation demonstrated substantial cost savings to Monroe County while also showing functional improvements for families. Not surprisingly, the data reflected that the largest challenge was fidelity to the wraparound practice model. Using these data, cross-systems program staff, administrators and leadership worked together to develop quality improvement processes to address these concerns. These efforts have been successful in creating a collaborative learning environment and moving practice closer to fidelity, the art behind the science.

Building on this experience, in 2005, Monroe County received cooperative agreement funding to develop ACCESS, a countywide integrated system of care (SOC) for children with emotional and behavioral challenges. With the evaluation resources available through ACCESS, the evaluation workgroup, comprised of a diverse group of community stakeholders (family members, providers, county representatives, evaluators), made the decision to adopt the more robust Wraparound Fidelity Index 4 (WFI-4) as part of the local evaluation to assess the child and family team practice model for congruence with SOC values (Wraparound Evaluation and Research Team, 2006).

As a result of attending an intensive seminar on using evaluation to implement and sustain wraparound fidelity, evaluation workgroup members learned that there is no standard protocol for implementing the WFI-4. Instead, sites must develop their own study design and methods to fit local conditions. Many methodological issues needed to be addressed including the overall design, sampling, and data collection, as well as preparation of the protocol for the Institutional Review Board. At the suggestion of staff from the Wraparound Evaluation Research Team, other communities who had used the WFI-4 were contacted to gain different perspectives. To address findings related to garnering support and buy-in from staff and stakeholders during the planning phases, we will share processes and lessons learned from the ACCESS evaluation workgroup which highlight the need to develop inclusive forums for planning, dialogue and decisionmaking in systems of care. We will highlight discussions and decisions made including whether to link WFI-4 data with the national evaluation data, merits of a longitudinal vs. cross-sectional study, sampling and data collection plans and preparation of a protocol for IRB review that had a crystal clear focus on continuous quality improvement.

We will also address findings related to garnering support and buy-in from staff and stakeholders for the implementation phase, providing feedback to wraparound programs, and ensuring a meaningful and timely CQI process. Specifically, we will describe several established practices that support the collection and discussion of fidelity information that have helped facilitate cooperation and collaboration. These practices include integrating planning and findings discussions into ongoing program meetings (as opposed to establishing a separate forum) and compiling and presenting data to program leadership, administrators and staff for discussion and formulation of possible responses. These practices will serve as the foundation for broader reporting and discussion of WFI findings.

## **Discussion and Conclusions**

Findinas

In system of care initiatives, the need for inclusive planning, explicit data review and defined quality improvement processes is essential. Conducting wraparound fidelity assessment to promote effective operationalization of system of care values and principles into practice and subsequently using the data to inform clinical and programmatic changes is a challenging endeavor. One must be mindful at all times to create synergy between the strict scientific method and the less stringent - more artful - aspects of this work, and seek balance between these two approaches. The criticality of these efforts cannot be overstated. For communities to truly assess their progress toward real integration of system of care values into practice, hard questions must be asked in the context of relationships grounded in honesty, respect and the commitment to excellence. These dialogues must effectively encourage both the evaluator and program perspectives in planning and developing effective fidelity design and data collection processes as well as attributing meaning to results and formulating possible clinical and programmatic responses. One without the other is short-sighted and will not yield the growth necessary for systems of care to succeed and sustain.

The Youth and Family Partnership experience allowed Monroe County to develop a strong foundation for this process. The infusion of evaluation resources as a result of cooperative agreement funding provides an opportunity to deepen this process and provide more meaningful measures of fidelity and richer continuous quality improvement efforts. This work has served to solidify the partnerships within the evaluation workgroup and provides a solid basis for the group to come together again once data collection has begun. This will help us ensure that the process is proceeding as planned and consider how we can build on our existing foundation to analyze, interpret, and use the data for continuous quality improvement...effectively blending both art and science.

## References

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## Session 15 >> 1:45-2:15 pm >> Salon I The Art and Science of Fidelity Assessment: Paint by Number—Completing the Picture

### Presenting: Joan Kernan, Marie Morilus-Black & Reva Fish

## Introduction

Family Voices Network of Erie County (FVN) is currently in the 4th year of a 6-year Substance Abuse and Mental Health Services (SAMHSA) Children's Mental Health Services grant. FVN contracts with six agencies in Erie County to provide wraparound care coordination to youth and their families experiencing serious emotional challenges. Wraparound is a care management planning process that results in a unique set of community services and natural supports that are individualized for a child and family to achieve a positive set of outcomes (Walker et al. 2004). FVN decided early on to require the agencies to measure 'fidelity' adherence to wraparound principles. After researching various fidelity measures our community chose to participate as a pilot test site for the Wraparound Fidelity Index version 4.0 (WFI4) being conducted by the Wraparound Evaluation and Research Team (Bruns, Suter, Force, Sather, & Leverentz-Brady, 2006). As a pilot site and for a nominal fee we received the WFI4 instruments, interviewer training and administration guide, data entry forms and SPSS<sup>©</sup> code. We also hired and trained family members to conduct the interviews. A subset of families enrolled in FVN from each agency were called and asked to participate in the WFI4 interview. A process evaluation has informed our system of care of areas which need improvement. For example, this information has resulted in changes in the training curriculum for care coordinators. Families and youth were shown results and made suggestions for improvements to the system of care. To measure whether these improvements are making a difference a second pilot of the WFI4 will be conducted in the spring of 2008. Institutional Review Board approval was obtained to conduct this study.

## Method

The participants in this study included youth (N = 33), caregivers (N = 105), and care coordinators (N = 105 interviews with 31 care coordinators) for families receiving wraparound services in six human services agencies in Erie County, NY. The average length of participation in wraparound services was 7.7 months (SD = 5.3).

#### Measures

The WFI4 is a conversational interview tool that assesses adherence to the ten principles of wraparound. The ten principles are organized according to the four phases of the wraparound process which include (1) engagement, (2) plan development, (3) plan implementation and (4) transition. Interviews are conducted by telephone with the care coordinator (also referred to as the wraparound facilitator), caregiver and youth aged 11 or older. Responses from each interview result in a total score, ranging from 0 (*low adherence to wraparound philosophy*) to 2 (*high fidelity to wraparound philosophy*). An overall fidelity score is also calculated by combining the scores of the three respondents.

#### Procedures

Because of time constraints and the pilot nature of this study, a convenience sample of families enrolled in services for an average of four to eight months were contacted by telephone and asked to participate. If the caregiver agreed to be interviewed, permission was requested to also interview the youth. If youth assent was obtained the youth was interviewed. Once the caregiver and youth interviews were completed, the family's care coordinator was interviewed by phone. An informed consent process stressed that all interview data was confidential, no personal identifiers would be reported, and the services that the family received would not be affected.

#### Main Outcome Measures

Individual mean scores per item, mean subscale scores by wraparound phase, and the total mean WFI4 score by respondent group.

#### **Findings**

Internal consistency of our data shows that the WFI4 item summaries by respondent were acceptable although somewhat less so than the national pilot dataset. Our *wraparound facilitators* coefficient of .675 compared to the national dataset of .73; our *caregiver* coefficient of .84 compared to the national dataset of .89, and our *youth* coefficient was .83 compared to the national dataset of .88.

The mean WFI4 Total Fidelity Score was 81% (*SD* = 9.0) and individual respondents' mean total fidelity scores were:

- 88% (SD = 8.4) for care coordinators (resource facilitators),
- 76% (*SD* = 14.7) for caregivers,
- and 73% (*SD* = 15.2) for youth.

Mean scores for Phase 4: Transition were 81% (*SD* = 18.2) for care coordinators, 63% (*SD* = 22.6) for caregivers, and 62% (*SD* = 28.8) for youth.

#### Discussion

This study suggests that perception of fidelity to wraparound philosophy varies greatly between the care coordinator and the caregiver/youth. Mean scores were particularly low for Phase 4: Transition, for all three respondent groups. This suggests general agreement that transition planning is not happening according to wraparound principles. This became a focus of the Management Team, the FVN committee responsible for implementing wraparound quality improvements. The Management Team has made "transition" a mandatory topic for all child & family teams to discuss at each monthly meeting, to begin preparing families and youth for that time when they are transitioned from services. In addition, as a result of this study, the training curriculum for care coordinators now includes a separate section on transition planning.

A limitation of this study was that only those participants who answered the phone call and agreed to participate were included in the sample. There was no mechanism to offer participation to families who did not have a phone or missed the phone call from the interviewer. Further, only youth whose caregiver agreed to participate were included. In addition, only care coordinators who had a family agree to participate were called for an interview.

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# Session 16 >> 1:15-2:15 pm >> Salon J

## Topical Discussion Using Data from the Children's Mental Health Initiative

Presenting: Philip Leaf, Christine Walrath, Phyllis Gyamfi, Robert Stephens & Melissa Azur

## Introduction

Since 1993, the Comprehensive Community Mental Health Services for Children and Their Families program, or Children's Mental Health Initiative (CMHI), has funded 126 sites across the United States to establish systems of care programs for children and adolescents with serious and emotional disturbances. The National Evaluation of the CMHI is a comprehensive data source that provides immeasurable opportunities for researchers to investigate issues related to children's mental health and systems of care. This topical discussion will provide a forum for interested and current users of the national evaluation data to discuss key issues in the field and how these issues may be addressed with existing data sources. The session will be interactive and will also serve as an avenue for individuals to develop collaborative relationships.

## **Issues to be Discussed**

The Chair will begin the topical discussion by introducing promising directions in the field of child mental health services research as well as current governmental and funding agency priorities around children's mental health issues. The discussion will focus on those issues that can be examined in the National Evaluation data. Participants will be encouraged to share their ideas about directions for future research. Participants will then split into two breakout groups. One group will target individuals interested in using the National Evaluation data. This group will have a facilitated discussion on what type of data are available, potential research questions of interest, and how the data can be accessed. The second group will target current users of the National Evaluation data. This group will have a facilitated discussion about cross-cutting methodological and analytical issues of interest. The session will end with a brief summary of issues discussed. Information gained from the session will be used to facilitate on-going collaborative relationships between new and current data users.

## **Who Should Attend**

Researchers, program evaluators, and current and interested users of the National Evaluation data would benefit from this session.

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# Session 17 >> 2:30-3:00 pm >> Room 11

## The CMHI 14 Years Later:

## Who Has Been Served and How Have Their Characteristics Changed?

Presenting: Christine Walrath, Lucas Garazza & Robert Stephens Contributing: Melissa Aszur, Philip Leaf, Richard Miech & Keri Jowers

## Introduction

Since 1993, the Comprehensive Community Mental Health Services for Children and Their Families Program (CMHI) has funded 126 communities across the United States and its territories to develop comprehensive, family driven and youth guided, community-based, culturally appropriate systems of care for children with serious emotional disturbance and their families. A congressionally mandated national evaluation effort began in 1994, and has been accumulating systematic data collection across funded communities since. The CMHI represents the largest continuous federally funded children's mental health services initiative to date, and the national evaluation efforts have resulted in the largest related data source. Given the longevity of this initiative and the importance of its goals and objectives, it is critically important to understand the characteristics of the children referred into the CMHI since its inception - if and how those characteristics have changed over time. The national evaluation baseline data set, due to its size and scope, provides the unique opportunity to address this question with robust and statistically sophisticated analytic approaches.

## Methods

## Participants

The current study was conducted with two sub-samples (exploratory, n = 7,611 and validation, n = 7,615) randomly drawn from an overall sample of N = 15,226. The data were derived from baseline information collected as part the national evaluation between 1994 and 2007 from up to 96 communities across the United States initially funded between 1993 and 2004. These funding years encompass four funding phases of the National Evaluation. Children were included in the current study sample(s) if they had valid data on age, gender, referral source, race/ethnicity and CBCL internalizing and externalizing problem behavior scores.

Children in the two sub-samples were quite similar in their characteristics. Specifically, the majority of children in both sub-samples were male (66.6% and 66.1%) with an average age of approximately 11.8 years (11.87 and 11.82). Slightly more than one-half of the children in each sample were White (53.1% and 53.4%), nearly one-quarter were Black (24.8% and 24.1%), and approximately 12% were Hispanic (12.3% and 12.8%). Mental health was the most common source of referral in each sub-sample (28.4% and 29.2%), followed by schools (21.0% and 21.2%), child welfare (13.0% and 13.0%), justice (14.0% and 13.3%), and the family (12.3% and 12.4%). Children in both samples had comparable internalizing and externalizing problems in the clinical range. Finally, there was equal representation of sites across funding phases in both sub-samples.

#### Indicators

The child demographic data (age, race/ethnicity, and gender) were collected from caregivers at the child's intake into services. Referral source was obtained via record review. The Child Behavior Checklist internalizing and externalizing problem scores (CBCL; Achenbach 1991) were also collected from caregivers at intake into service.

## **Design and Analysis**

Using hierarchical linear modeling (HLM) we examined the relationship between externalizing and internalizing CBCL scores, a group of demographic characteristics, and time. We were particularly interested in distinguishing two time trends, one associated with the year in which the site was funded and the other with the year of a child's intake within the site. To enhance inferential accuracy the dataset was subdivided into two sub-samples at random: one was used for exploration and model formulation while the other was reserved to evaluate the final model. In the final HLM, the CBCL score for each child in a given site is a function of a set of demographic characteristics (gender, age, race/ ethnicity, and referral source) and the year of intake of the child within the site (i.e., enrollment cohort). This cohort trend, however, varies by site. In particular, the average score in the site's initial year (the intercept) is a function of the site's initial funding year. Finally, sites' averages of individual level predictors were also included as site level predictors to ensure independence between the individual and group level errors. All the procedures were implemented using R 2.5.1 (R Development Core Team, 2007) and the nlme package (Pinheiro et al., 2007).

## Findings

CBCL internalizing and externalizing average scores have increased across the funding phases of the CMHI. Specifically, there is a significant and positive linear trend in the initial site average of CBCL scores, both externalizing and internalizing, by site funding year (p < 0.01). The estimations of the rate of change by funding year for internalizing and externalizing scores are similar (0.30 [95%CI 0.11-0.49] and 0.20 [95%CI 0.06-0.41], respectively). Thus, sites funded 1 year apart are expected to have a 0.30 point difference in the initial average internalizing scores of their children; and over the 11 years covered in these analyses, there is a 3.3 point difference between the initial average internalizing score for sites funded the first year versus sites funded the last year. It does not appear, however, that an average cohort trend exists related to CBCL scores. After the initial year of funding, sites' average CBCL scores follow different trajectories as the sites serve successive cohorts of children. These trajectories can be described as multiple linear trends with different slopes (whose variation is estimated as 0.51 and 0.42, for internalizing and externalizing scores respectively).

Age, race/ethnicity, and referral source are significant predictors of children's CBCL externalizing and internalizing scores (p < 0.01). CBCL scores increase with age at a decreasing rate, and at age 12 for internalizing and age 10 for externalizing (using point estimates) the relationship reversed. Generally, children from races/ethnicities other than White have lower externalizing and internalizing scores. For instance, Black children are estimated to have 3.18 (95% CI 2.43 - 3.93) lower internalizing score and 1.21 (95% CI 0.48 - 1.94) lower externalizing score than White children. Gender is a significant predictor of externalizing scores (p < 0.01), but not of internalizing scores. Girls are estimated to have a 1.77 (95% CI 1.25 - 2.30) higher externalizing score than boys at baseline. Finally, children referred from sources other than a mental health are, in general, estimated to have lower CBCL internalizing and externalizing scores. That is particularly the case for school and child welfare system sources, which are estimated to refer children with 1.79 (95% CI 0.96 - 2.61) and 3.01 (95% CI 2.09 - 3.93) lower internalizing scores, and 1.69 (95% CI 0.89 - 2.50) and 2.34 (95% CI 1.45 - 3.23) lower externalizing scores, respectively.

Finally, there is no evidence of association between differences in site scores and differences in a site's demographic composition.

## Conclusions

Current findings for data collected across years of CMHI funding suggest that problem behaviors (both internalizing and externalizing) among children referred for services have increased in conjunction with funding year. Children referred into sites funded in later funding phases have higher average CBCL internalizing and externalizing scores. In addition, CBCL scores are largely a function of children's demographic characteristics; however, there is no indication that site score differences are related to demographic characteristics. Furthermore, there does not appear to be a consistent average relationship across cohorts of referral into service (i.e., referral in the first year, second year, third year, etc.) and CBCL scores. Interpretations and implications for these findings will be discussed including discussion of planning around appropriate service system infrastructures for providing services to children with increasingly severe problem behaviors as well as the implications for various racial/ ethnic groups to be referred into service with lower levels of problem behavior than Whites.

#### References

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- R Development Core Team (2007). R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. ISBN 3-900051-07-0, URL http://www.R-project.org.
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# Session 17 >> 3:00-3:30 pm >> Room 11 Engaging and Recruiting Counties in an Experiment on Implementing Evidence Based Practice

Presenting: Lynne Marsenich Contributing: Patricia Chamberlain & C. Hendricks Brown

#### Introduction

Despite the increasing availability of well-validated interventions, about 90% of public systems do not deliver treatments or services that are evidence-based (Rones & Hoagwood, 2000). If only about 10% of childserving public agencies are early adopters of EBPs, a passive dissemination approach to implementation will almost assuredly lead to long delays in bringing such programs to practice. Thus, it seems important to find the best ways to actively assist in non-early adopting systems to increase their motivation, willingness, and ability to adopt, implement, and sustain such models. The current paper describes a theory-driven randomized trial designed to evaluate two methods of implementation of an evidencebased treatment into publicly funded child service systems in non-early adopting counties throughout the State of California.

The current paper describes the results from the initial phase of the study, including procedures for randomizing counties to study conditions and timeframes, methods for recruiting participation from county leadership, and reactions to randomization from county leadership.

## Method

#### **Overview of Study Conditions**

Two methods of implementation are contrasted in the study: Standard implementation of MTFC that engages counties individually (IND) and Community Development Teams (CDT), where small groups of counties engage in peer-to-peer networking with technical assistance from local consultants. Participating counties in both conditions receive funds to train staff to implement MTFC and receive ongoing consultation for one year, which is a sufficient time for them to become well-versed in using the MTFC model.

#### Sample

California is comprised of 58 counties. Of these, 18 counties were excluded from the study for various reasons. The 40 remaining counties were targeted for recruitment into the study.

#### **Design and Timeframe**

Counties were matched on demographic factors and then were divided into six demographically equivalent clusters: two with six counties and four with seven counties. Each of these six comparable clusters was assigned randomly to one of three time cohorts (n = 12, 14, and 14, respectively), dictating when training towards implementation would be offered.

#### **Design Adaptation**

Some counties were unable or unwilling to participate at their randomly chosen time. To address this issue, the design protocol was adapted to allow for an additional step to help maximize the efficiency of study resources while remaining sensitive to real-world county limitations. That is, procedures were created whereby the "vacancy" left by such a county was filled by a county in the succeeding cohort that was assigned to the same IND or CDT condition as the vacated slot.

#### Recruitment

County mental health, child welfare and juvenile justice directors were recruited to participate because studies have shown that successful incorporation of research-based interventions require changes in existing policies, procedures and practices. Initial contact was made through a letter from CiMH staff inviting participation into the study. The following week an e-mail was sent from the study's principal investigator notifying county leaders of the cohort and condition to which they were randomly assigned.

Participation was encouraged through personal telephone contact made by CiMH staff in which the benefits of participation were described. In addition it was explained that agreement to participate in the study did not indicate agreement to implement MTFC.

**Contact logs.** Initial contacts were made with system leaders to recruit them into the project and each of these contacts was logged. All subsequent correspondence between system leaders and study staff (including research staff, CiMH, and TFCC staff) was tracked and maintained in an electronic contact log developed for the study. The contact log was completed by the study staff member who was involved in each of the communications and included: (a) the county with whom contact was made; (b) type of contact (i.e., telephone, email, in person, letter, fax); and (c) nature of the contact (i.e., related to recruitment, assessment, timing issues, implementation). The written responses for

these contacts were then reviewed by an independent coder, not related to the study, who verified the accuracy of each of the coding decisions by the entering study staff.

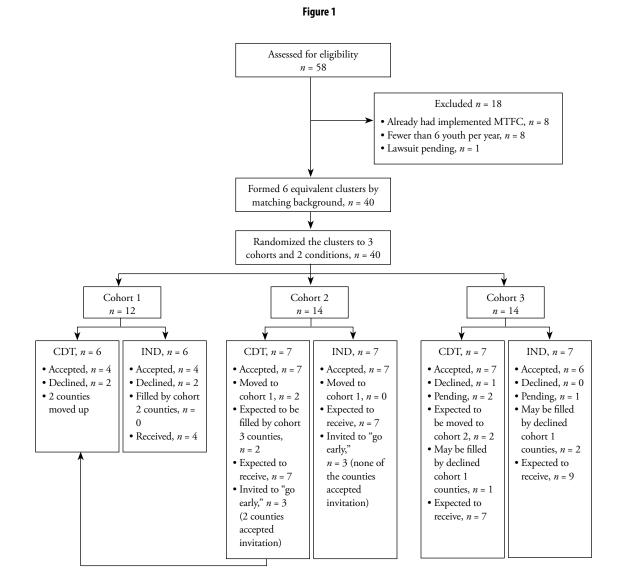
#### Results

At the end of the first year of the study, recruitment status for each county was defined as: (a) recruited; (b) declined; or (c) pending. See attached diagram. During the first year, 32 of the 40 eligible counties (80%) were recruited to participate in the study. For consenting counties, there was an average of 23 days (range, 0-83; median = 18) from the time that the first recruitment call was made until a signed consent to participate was obtained and an average of 5.41 contacts were required to accomplish this (range, 1-15). Thus far, five counties have declined to participate, four within Cohort 1 (IND = 2; CDT = 2) and one within Cohort 3 (CDT). Declining counties had an average of 13.8 contacts (range, 9-22). Reasons for declining included staffing shortages, new leadership, and system reorganization. The declining counties will be re-contacted, along with the pending counties, during 2008 to see if their circumstances have changed to permit their participation.

## Conclusion

Given the success in achieving a good initial level of participation in this study (i.e., 80% of counties consented to participate), early indications suggest that this design can be maintained across multiple cohorts. Further, the initial experience suggests that these types of randomization designs are feasible and that they have the potential to provide high quality information about the effectiveness of using specific strategies to improve implementation. Given the increasing frequency with which communities are considering the adoption of EBPs, it is anticipated that other opportunities will occur for future studies such as this with states, territories, and national governments who are interested in supporting the adoption of empirically based practices and programs.

### References



Rones, M., & Hoagwood, K. (2000). School-based mental health services: A research review. *Clinical Child & Family Psychology Review*, 3, 223-241.

## Session 18 >> 2:30-3:00 pm >> Room 12 The National Behavior Research and Coordination Center: Overview and Year 2 Findings

Presenting: W. Carl Sumi & Michelle Woodbridge Contributing: Mary Wagner

## Summary

Although research conducted in the last several years suggests some potentially promising approaches to behavior interventions, much of it lacks the rigorous, experimental base that is the "ideal method" (National Research Council 2002, p. 109) for determining the true efficacy and effectiveness of interventions. A commitment to increasing the scientific rigor of education research and, thus, its potential for improving practice and student outcomes has been codified in the Education Sciences Reform Act of 2002. This law has sparked the reorganization of federally sponsored education research and the formation of the Institute of Education Sciences (IES) and its What Works Clearinghouse—an entity charged with screening education research to identify studies that meet standards of scientific rigor, including an experimental design, and, therefore, whose results can be trusted to identify "what works" in improving student outcomes.

In 2004, the Office of Special Education Programs (OSEP) funded four Behavior Research Centers (BRCs) and the National Behavior Research Coordination Center (NBRCC) to investigate the effectiveness of interventions for children with serious behavior problems. Since then, the funding has transferred to the National Center for Special Education Research in the Institute of Education Sciences (IES). The BRCs, in collaboration with NBRCC, are conducting randomized clinical trials of behavioral interventions that were found to be efficacious in previous research. The four BRCs are located at the University of South Florida (in collaboration with the University of Colorado at Denver), Vanderbilt University (in collaboration with the University of Minnesota and Virginia Commonwealth University), the University of Washington, and the University of Oregon. The purpose of this presentation is to describe how the NBRCC is coordinating, synthesizing, and conducting analyses across the BRCs and present baseline findings from the first two years of the project which includes complete baseline and posttest data for core participants. The following are descriptions of the four BRCs and the NBRCC.

#### **University of Washington BRC**

The University of Washington BRC is evaluating the Check, Connect, and Expect (CC&E) program. CC&E is based on the theory that relationships with school staff, reinforcement of clear expectations and social behavior, and engagement in school activities contribute to improved academic and social outcomes of students. Therefore, the intervention focuses on improving students' positive relationships and prosocial behavior via increased school staff reinforcement and feedback.

## **University of South Florida BRC**

The University of South Florida BRC team is evaluating the Prevent-Teach-Reinforce (PTR) intervention. PTR is modeled after a positive behavior supports approach and is a team process through which an individualized intervention is developed and implemented. PTR is based on the theory that well-conducted functional behavioral assessments and sound positive behavior support plans for children with severe behavior problems will: (a) decrease the occurrence of maladaptive target behaviors, (b) increase the occurrence of appropriate prosocial behaviors, and (c) consequently produce positive outcomes in the areas of behavior, academics, and lifestyle changes for the child and family.

### **University of Oregon BRC**

The University of Oregon BRC is evaluating the First Step to Success intervention, a 3-month process that incorporates three components in an effort to improve the behavior and academic performance of students with severe behavior problems. Components include: universal screening using the Systematic Screening for Behavior Disorders (SSBD) tool, a school component, and a family-based intervention.

#### Vanderbilt BRC

The Vanderbilt BRC's secondary-level, classroom-based intervention is directed toward students receiving special education services in selfcontained classrooms and toward students in general education classrooms who are at risk. Components include: (1) academic tutoring in reading; (2) teacher self-monitoring of classroom management; (3) the Good Behavior Game for improving students' classroom behavior; and (4) behavior consultants in classrooms 3-5 hours per week. These interventions are based on the theory that student behavior is directly affected by classroom environment and practices. Training and motivating teachers to engage in practices known to improve the classroom environment will result in improved student behavior and learning.

#### National Behavior Research and Coordination Center

The NBRCC is funded to work closely and effectively with the four BRCs to:

- **Develop and implement a data coordination plan**—determine uniform measures of context, implementation, participation, outcomes, and satisfaction appropriate to the interventions being tested.
- **Develop and implement a data synthesis plan**—develop and support BRC staff in the use of a Web-based data system that will collect core data from each site which will be used in the cross site analyses.
- **Develop and implement a data analysis plan**—determine research questions regarding the context, implementation, participation, outcomes, and satisfaction of each intervention; how these factors compare across interventions; and how these factors vary for students, settings, and schools with different characteristics.
- *Develop and implement a dissemination plan*—develop a multifaceted dissemination plan to bridge the research-to-practice gap by reaching diverse practitioner, policy, consumer, advocacy, and research communities.

## **Data Collection**

A comprehensive battery of data collection instruments are being used to assess the efficacy of the interventions being tested by the BRCs. Each BRC collects their data and transmits the data sets to the NBRCC via a secure internet site. Data collection instruments are separated into four categories and outcomes will be presented during the presentation:

- **Student level**—basic demographics, school records, office discipline referrals, the Social Skills Rating System (Teacher version), Woodcock Johnson-III Letter Word subtest, oral reading fluency, and observations of academic engaged time.
- *Classroom level*—classroom/teacher survey and the Classroom Atmosphere Rating Scale.
- **School level**—school characteristics survey and the School-wide Evaluation Tool.
- Implementation level—social validity and alliance measures.

## Conclusion

This presentation will describe IES-funded research using randomized control group designs to investigate the efficacy of four school-based interventions for children with serious behavior problems. The presentation will begin with a discussion of the purpose of the National Behavior Research Coordination Center and a brief review of the four BRCs. Following this there will be a description of the coordination center's research design, analyses plan, and dissemination plan and complete baseline and posttest data for core participants from the first two years of the project.

## References

# Session 18 >> 3:00-3:30 pm >> Room 12 School-Based Mental Health in Underserved Communities

**Presenting: Julie Owens** 

# Contributing: Erin Girio, Caroline Murphy, Lauren Richerson & Lina Himawan

Acknowledgements: Funding was received from: Health Resources and Services Administration's Quentin Burdick Program for Rural Interdisciplinary Training (D36HP03160), Ohio Department of Mental Health Residency and Training Program (Grant #s OU-05-26 & OUSP 06-12), Logan-Hocking School District, Ohio Department of Youth Services via Hocking County Juvenile Court, R. Alvin Stevenson Fund of the Columbus Foundation (Grant # TFB03-0260 STE), and Holl Foundation.

## Introduction

This presentation will describe treatment outcome data associated with a school-based mental health program that transports evidence-based treatments (EBTs) for disruptive behavior problems (DBPs) to schools in rural, underserved communities in an Appalachia region. Using a quasi-experimental design and hierarchical linear modeling analyses, we examined trajectories of change in child symptoms, functioning, and grades. Participants were 117 children in kindergarten through 6th grade. The treatment group included 91 children (78% male) from five schools who were consecutively referred to the intervention program. The waitlist group included 26 children (73% male) from three schools in which program implementation was delayed for one year. Treatment outcome was measured via parent and teacher ratings of child symptoms and functioning, and satisfaction surveys. The socioeconomic status of the families in the sample is representative of the local region and is significantly lower than that typically represented in youth treatment outcome studies. Thus, these data offer optimism about successfully implementing EBTs in the context of challenging conditions.

## Method

The intervention program included a daily report card procedure (Pelham, 2002), year-long collaborative teacher consultation (Sheridan, Kratochwill, & Bergan, 1996), and behaviorally-based parenting sessions (Barkley, 1997). Clinicians were on-site at the elementary schools 15 to 20 hours per week. To assess change in symptoms and impairment, parents and teachers completed the Disruptive Behavior Disorders (DBD) Rating Scale (Pelham et al., 1992) and the Impairment Rating Scale (Fabiano et al., 2006) in the fall (pre-treatment), winter (midtreatment), and spring (post-treatment). A quarterly grade point average was calculated using a 4-point scale based on participants' grades in Spelling, Writing, Reading, Math, Science, and Social Studies. Treatment potency was documented through clinician's tracking of the frequency and type of contacts that the clinician had with parents, teachers, and children, and through documentation of the teacher's fidelity with daily report card intervention procedures. Anonymous satisfaction surveys were completed by parents and teachers at the end of the academic year.

## Findinas

Data were analyzed using Hierarchical Linear Modeling (HLM) procedures. The dependent variables were child symptoms, impairment, and GPA. Time was treated as a continuous variable, coded as Time 1 (-2), Time 2 (-1) and Time 3 (0).

Level-1: 
$$\gamma_{ij} = \pi_{0j} + \pi_{1j}$$
 (Time)<sub>ij</sub> + e<sub>ij</sub>  
Level-2:  $\pi_{0j} = \gamma_{00} + \gamma_{01}$  (Treatment Group)<sub>j</sub> + r<sub>0j</sub>  
Level 2:  $\pi_{1j} = \gamma_{10} + \gamma_{11}$  (Treatment Group)<sub>j</sub> + r<sub>1j</sub>

The slope  $(\pi_{1})$  of time provides an estimate of change over time (i.e., treatment outcome). For symptoms and impairment, negative coefficients indicate reduction in symptoms and impairment over time. For GPA, positive coefficients indicate improvement in grades over time. With treatment group coded as 0, the significance of  $\gamma_{10}$  indicates whether the treatment group made marked improvement over time (i.e., the slope is different from zero), and the significance of  $\gamma_{11}$  indicates whether the trajectory of the treatment group differs significantly from the waitlist group (see Table 1). According to teacher reports, children in the treatment group made significant improvements in two of four symptom domains, in classroom functioning, in the student-teacher relationship, and in overall functioning (see Table 1). For the majority of these variables, the trajectories of improvement were significantly different from those of the waitlist children. Quarterly GPAs of the treated children did not change over time; however, the trajectory was significantly different from the waitlist group; GPA for the waitlist group declined significantly over time. According to parent report, children in the treatment group made significant improvements in all symptom domains and on four of six indicators of functioning; however, the between-group differences did not reach statistical significance.

#### Table 1 HLM Coefficients Depicting Treatment Outcome Based on Parent- and Teacher-Rated Symptoms and Impairment

	Teacher Ratings		Parent Ratings			
Variable	<i>T</i>	W	Group	<i>T</i>	WZ	Group
variable	Treatment	waitlist	Comparison	1 reatment	Waitlist	Comparison
DBD Ratings						
Inattention	07†	.18*	<i>p</i> < .01	08*	.01	ns
Hyper/Impul	13**	.07	p < .05	12**	18*	ns
Opp/Defiant	.02	.13†	<i>p</i> < .09	14**	.00	ns
Conduct	07*	.09	p < .05	06**	01	ns
IRS						
Peers	19	.08	ns	24*	04	ns
Teacher/Parent	25*	.54*	<i>p</i> < .01	53**	13	ns
Academics	21†	.37†	p < .05	12	.06	ns
Classroom/Family	25*	.12	ns	42**	.03	<i>p</i> < .09
Self-Esteem	18†	35†	ns	12	06	ns
Overall	32**	.46*	<i>p</i> < .01	37**	11	ns
GPA	.04	24**	p < .01	N/A	N/A	N/A

Note: ns=nonsignificant; DBD = Disruptive Behavior Disorders; Hyper/ Impul=Hyperactivity/Impulsivity; Opp/Defiant = oppositional defiant symptoms; IRS = Impairment Rating Scale; GPA = grade point average † p <.10, \* p <.05, \*\*p <.01.

National Research Council. (2002). Scientific research in education. R. J. Shavelson & L. Towne (Eds.). Washington, DC: National Academy Press.

## Conclusions

Treatment outcome results provide optimism that EBTs can retain their effectiveness when transported to underserved communities. In addition, our data substantiate several purported benefits of school mental health programming. Although the magnitude of the effect sizes found in this study were smaller than that typically observed in efficacy trials for children, they were respectable when compared to other EBTs implemented by community members, traditional child psychotherapy studies, and some common medical treatments. We will highlight the demographic and cultural characteristics of the sample and setting in explaining the magnitude of effect sizes obtained. These data have implications for interpreting and documenting treatment outcomes in school mental health programs, and for advancing the dialogue about adequately serving children in underserved communities.

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# Session 19 >> 2:30-3:30 pm >> Salon C

# Symposium

# From Paper to Performance: Implementation Research and the Wraparound Process

#### **Chair: Dean Fixsen**

Presenting: Rosalyn M. Bertram, Eric J. Bruns, Kathy Cox, Julie Farr, Becca Sanders, April K. Sather, Leyla Faw Stambaugh & Janet S. Walker

Wraparound is a complex process that requires that family members, providers, and key members of the family's social support network collaborate to build and implement a creative plan that responds to the individualized needs of the child and family. To implement wraparound successfully at the child and family level, significant effort is also needed at the system and organizational levels. This symposium will focus on the complexity of wraparound implementation through three presentations: (1) a pilot test of a new measure of the level of system and community support for wraparound implementation, (2) a review of existing implementation research on wraparound, and (3) results from a national follow-up survey about wraparound implementation across the 50 states, four territories, and the District of Columbia. The discussant, a national leader on implementation research, will provide comments on the state of wraparound implementation research and the usefulness of the current results.

# Assessing System-wide Conditions for Wraparound Implementation: The Community Supports for Wraparound Inventory

Janet S. Walker & Becca Sanders

#### **Overview**

This session describes findings from the pilot test of the Community Supports for Wraparound Inventory (CSWI), a measure of the systemlevel implementation support for wraparound. A total of 283 participants from seven wraparound communities around the nation participated in the pilot test. (Analyses from all seven sites will be presented at the session. This summary is based on analyses from six sites.) Analyses of the data from the pilot study provide evidence of the measure's reliability. Additionally, local evaluators and other community representatives report that the CSWI data and feedback process has been relevant and helpful. The CSWI is a survey tool that assesses the adequacy of the implementation context for *wraparound*, a team-based planning process intended to provide individualized, coordinated, family-driven care to meet the complex needs of children with severe emotional and behavioral difficulties. In 1999, it was estimated that as many as 200,000 wraparound teams were at work, and it is likely that this number is increasing.

Achieving broad scale, high quality implementation of wraparound has proven to be difficult, however. Practical experience has shown that the successful implementation of creative, individualized wraparound plans at the team level requires extensive support from the larger system context (or policy and funding context) within which the teams operate. The CSWI was designed to be used by researchers—to determine the impact of contextual features on fidelity and outcomes of the wraparound process—and community evaluators—to provide information about system support that can be used as an input to strategic planning for sustainable wraparound implementation.

The CSWI draws heavily on the products of research on the implementation context of wraparound conducted by Walker and Koroloff, (Walker & Koroloff, in press) which led to the development of an initial assessment of system support for wraparound. Subsequent revision of the assessment was undertaken as a collaborative activity coordinated by the National Wraparound Initiative (NWI). The version of the CSWI used in the pilot study includes 40 items in six themes: *community partnership, collaborative activity, fiscal policies and sustainability, access to supports and services, human resource development and support*, and *accountability.* Each item offers two "anchor" descriptions, one for "least developed system support" and one for "fully developed system support." Respondents rate their community on a 0-4 scale where 0 corresponds to *least developed,* 2 to *midway*, and 4 to *fully developed.* 

## Method

A local coordinator in each participating community worked with the wraparound collaborative to inform the community about the CSWI, build enthusiasm for participation, and create a list of potential respondents for the assessment. The coordinator was instructed to include on the list members of various stakeholder groups who typically have knowledge about implementation, possibly including: members of the project's community team (i.e., the group that oversees and guides the collaboration); people directly employed by the project (e.g., facilitators of wraparound teams or care coordinators, supervisors, family partners, etc.); current or former recipients of services; and staff and administrators from public and private agencies who are part of the collaboration (e.g., child welfare, school systems, mental health provider agencies), and other community stakeholder groups. The local coordinator completed a spreadsheet with each potential participant's name, email address, phone number and role within the project. For each respondent, the local coordinator also indicated if he or she was employed by the project and whether or not this person would be considered a "key respondent" (i.e., someone who had a high level of knowledge about program implementation).

The research staff created an online version of the CSWI for each site. After receiving the contact list, each potential participant was emailed an invitation to participate, along with information about the CSWI and about how data was being safeguarded. Potential participants could choose to decline participation. If they did not decline, they were automatically sent reminders either until they completed the survey or until data collection was ended. At that point, people who did not respond were categorized as providing no response.

## Results

The mean response rate across sites among nominated respondents with valid email addresses was 61%. Among those nominated as "key" respondents, the mean response rate was 81%. Across respondents, the number of years in wraparound ranged from less than .5 to 28, with a mean of 3.7. Across sites, respondents reported having had the following roles connected to wraparound (either current or in the past): family or youth on team, 17.2%; natural support on team 12.3%; parent partner/family advocate, 5.0%; facilitator/care coordinator 18.3%; other professional on team, 58.6%; wraparound supervisor/coach 4.2%; manager/administrator, 31.0; higher level administrator/policy maker, 5.8%; researcher/evaluator, 2.6%. (Total percentages sum to more than 100% due to people having had multiple roles over time.)

With respect to the performance of the measure itself, the analysis asked the following questions: Within sites, did there seem to be agreement between respondents about the level of development for each item? And did the respondents seem to be differentiating between the items, providing different scores for different items? Between sites, did there appear to be different overall levels of development in the implementation context?

Within sites, there did indeed appear to be a fairly high level of agreement about the ratings for the items within themes. This was assessed in two ways. For each theme, a reliability coefficient of for raters was calculated based on Cronbach's alpha. Across sites the mean of these reliability coefficients ranged from .83 to .93, with a grand mean of .88. Inter-rater agreement was also calculated by performing a principle components analysis on the ratings for items within themes. The variance accounted for by the first component can be interpreted as representing inter-rater agreement. The mean percentage of variance accounted for by the first principle components ranged from 52.2% to 72.1%, with a grand mean of 63.3%. Total CSWI scores ranged from 41.6 to 107.2 (see Figure 1).

Theme scores by site are presented in Figure 2 below. The reliability coefficient for the individual themes (across sites) to the total scale was .980.

Figure 1 Total CSWI Scores by Site

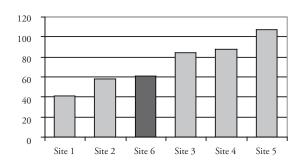
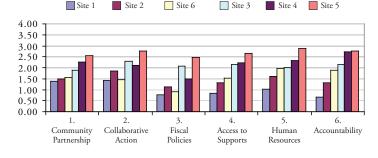


Figure 2 Theme Scores by Site



# Conclusions

The pilot test of the CSWI has provided evidence of the measure's reliability. Within communities, there is typically a fairly high level of agreement about where greatest progress has been made, and where most work remains to be done. Different communities show variation both in the overall level of implementation support and in particular items indicating areas of strength and challenge. Previous studies of system and organizational support for wraparound implementation have shown that greater levels of such supports are associated with higher wraparound fidelity scores.

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# Core Implementation Components and the Wraparound Literature: Building a Research Agenda

Rosalyn M. Bertram, Julie Farr & Kathy Cox

## Introduction

At the 2007 annual meeting of advisors to the National Wraparound Initiative (NWI), the evaluation and research workgroup (seven researchers from universities in Canada and the USA) chose to pursue analysis of wraparound literature through a lens suggested by the National Implementation Research Network (NIRN).

Prior to analysis it was assumed that much work had been published regarding model definition and model fidelity. It was also assumed that there would be core implementation components (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005) that had not been well addressed or that were overlooked in wraparound literature. Advisors believed that such analysis of wraparound literature could inform the field and suggest future steps for a wraparound research agenda.

## Method

Using the NIRN monograph (Fixsen, et.al., 2005), a grid of core implementation components was developed at the University of Missouri-Kansas City School of Social Work to focus MSW student culminating projects. This grid was reviewed and accepted by the NWI research and evaluation group to focus analysis of wraparound literature. Initial review of this literature focused solely upon peer-reviewed publications. Because much had been published since 2000, the search first examined more recent literature, and later examined literature from the previous decade. A third search sought to identify papers published in conference proceedings from major research and practice conferences that had not yet developed into peer reviewed publications. Then, through NWI, state and local reports on specific wraparound programs were solicited, analyzed and added to the NIRN grid.

One member of the research team and her research assistant reviewed publications separately and, based upon core implementation components most addressed, placed each publication in the NIRN grid. These separate analyses were then compared and differences of placement of literature in the grid were discussed until there was agreement. This analysis was then shared with the entire NWI research and evaluation group advisors who could recommend overlooked literature or similarly question and resolve placement of literature in the grid.

As of this submission, the team has compiled and reviewed over 70 publications. Our next step is to review state and local reports in this manner and assign them to relevant categories in the NIRN-informed grid. We continue to expand search parameters analyzing and adding publications as they are identified. A final level of analysis will include sharing results of this effort with the NIRN for recommendations of overlooked literature and to similarly question and resolve placement of literature within the core implementation component grid.

## **Findings and Implications**

This effort by the NWI research and evaluation group will provide meaningful guidance for development of a wraparound research agenda. Though this analysis is not yet complete, trends are evident and may inform next steps to in a research agenda that grounds the wraparound model in implementation research. Below, we list some of the findings to date:

• As anticipated, definitions of the model (*n* = 14) and model fidelity (*n* = 10) received the most attention.

- Core implementation components that have not received attention include evaluation of training methods and of model purveyors (consultants). Recently receiving attention but almost as overlooked has been examination of stages of implementation (n = 4).
- Implementation factors related to organizational context were addressed descriptively in 1990s publications, while more recent publications have presented in group case studies.
- Target population has been asserted rather than systematically studied. This may be due to how wraparound emerged as an alternative to more restrictive, categorical responses to child behavior problems. More recent publications describe efforts to use wraparound with incarcerated mothers, in child welfare and juvenile justice.
- Perhaps because of the manner in which wraparound emerged as an alternative to categorical, expert models of practice, there has been limited discussion of alternative models except for an important publication comparing it with MST.
- Model theory base received some attention in the 1990s (*n* = 3) but less so since 2000 (*n* = 2).
- Focus upon defining the model's theory of change is only now emerging (*n* = 2).
- No systematic attention has been devoted to defining knowledge and skills necessary to implement the model though there is evidence of attention to this in more recent publications focused upon supervision.
- However, supervision of wraparound implementation has received limited attention (*n* = 4), most of it recently, by a handful of authors.

Outcomes were more frequently discussed in 1990's publications, but less so since 2000, though this is a current area in which search for additional literature is focused. There are certainly state and local site reports that will address outcomes.

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# The State Wraparound Survey, 2007: An Update on Wraparound Implementation Across the United States

## April K. Sather, Eric J. Bruns & Leyla Faw Stambaugh

## Introduction

This research was conducted by the University of Washington Division of Public Behavioral Health & Justice Policy, in partnership with researchers at the Duke University Medical Center. The survey is a follow-up to a survey conducted in 1998 by Duke University and the Georgetown National Technical Assistance Center for Children's Mental Health. The purpose was to update estimates on the number of youth served using the wraparound process, and understand how wraparound implementation is being supported in different places across the country.

## Methods

A 17-item survey about implementation of wraparound in the state and methods for supporting its implementation was mailed to Children's Mental Health Directors in all 50 states and 5 territories. Respondents could complete the survey on-line, via hard copy, or via email. For this update to the original 1998 study, wraparound was defined more specifically, using language based on model specification work of the national Wraparound Initiative (Walker & Bruns, 2006).

## Results

Thus far, 45 states, territories, and federal districts (i.e., the District of Columbia) have returned the survey, compared to 1998, when 49 out of 55 states and territories responded. (For convenience sake, we will refer to responding states, territories, and districts as "states" in this report.)

Of the states who have responded to the survey thus far, 84.4% (n = 38) reported having some sort of wraparound program in their state. This is compared to 88% in 1998 (n = 43). Of the 38 states reporting a wraparound initiative, 37 gave estimates of the number of children served statewide. Among states that could provide estimates, a total of 76,919 children are estimated to be served by wraparound, in a reported 741 unique programs across the United States. The number of children served per state ranged from 66 to 13,110, and the number of children served per program ranged from 9 to 9,461.

In 2006/07, 57.8% of states with wraparound projects (n = 22) reported that wraparound is a statewide effort, as opposed to being overseen by one or more specific jurisdictions (42.1%; n = 16). This is a decrease from 1998, when 81.3% of states (n = 35) with some type of wraparound initiative reported that wraparound was a statewide effort.

The agencies most frequently involved in implementing wraparound efforts were, in order of frequency: (1) Mental Health (100%); (2) Child Welfare (89%); and (3) Juvenile Justice (89%). The agencies most often identified as taking the lead role in wraparound efforts were: (1) Mental Health (92%); (2) Child Welfare (50%); and (3) Juvenile Justice (26%).

Seventy-six percent of states used terms other than "wraparound" to describe their programs. The most common terminologies used for wraparound-type initiatives were: (1) Child & Family Teams (34% of states had at least one program that used this term); (2) Care Coordination/Coordinated Services (14%); (3) Individualized Treatment Plan (Individualized Service Agreement) (14%); and (4) Team (Family) Decision Making (14%). Other reported terms included: Children's System of Care Initiative, Family Centered Practice, Intensive Community Based Treatment and Supports, and Family Support Teams.

The 2006/07 survey showed a 13% increase in use of written standards for wraparound, increasing from 40% in 1998 to 53% in 2006/07. In the current survey, 71% of states who report having wraparound in their state also report that there are in-state resources available for wraparound training. 97% of states reported having some sort of in-service training in the last 5 years, compared to 86% in 1998.

## Discussion

This paper presents initial results of a follow-up survey of the scope and nature of wraparound implementation nationally. Similar to 1998 results, 84.4% of states reported wraparound efforts. However, the overall estimated number of youth served nationally is lower than the 1998 estimate of 200,000. This is likely due to the more stringent definition of wraparound used in the more recent survey, which was provided in order to ensure that estimates of wraparound reflect implementation of a more specific model, such as that defined by the National Wraparound Initiative (Walker & Bruns, 2006).

Interestingly, the percent of states that reported having statewide wraparound efforts has decreased from 81% in 1998 to 58% in 2007, but the percent reporting state standards for implementation has increased to over 50%. Several states that report having only locally-implemented wraparound efforts nonetheless reported having state standards. Finally, availability of in-state technical assistance to support wraparound has increased, with over 70% of states reporting having such resource. All these results likely reflect the recent efforts to better specify the wraparound process and recent emphases on achieving fidelity to the recently specified model (Bruns, Suter, & Leverentz-Brady, 2006).

### **Implications & Conclusions**

Extrapolating from current results leads us to an estimate of approximately 900 wraparound programs nationally, serving approximately 90,000 – 100,000 youth and their families. As mentioned above, this number is lower than 1998, which is likely due to the more stringent and specific definition of wraparound that is now available and that was used in this survey. If accurate, this would mean that only about 1-2% of the estimated 5-8 million youths with a serious emotional disturbance nationally (Costello, Messer, Bird, Cohen, & Reinherz, 1998; Friedman, Katz-Leavey, Manderscheid, & Sondheimer, 1998) are engaged in a wraparound process.

Interestingly, fewer states report statewide wraparound efforts, but more report existence of state-level standards and in-state resources to support wraparound. It may be that localities are more likely to oversee wraparound efforts in 2007 than in 1998, but that states are more likely to be in the business of overseeing adherence to standards of quality than overseeing all aspects of implementation. It may also be that states implementing overarching systems of care initiatives are less likely to equate these state efforts with "wraparound" in 2007 than in 1998, because of better understanding about the distinction between wraparound and systems of care that has been generated in the past decade (Stroul, 2002).

In general, results from the State Wraparound Survey are one part of a broad research agenda to better identify national trends and challenges regarding wraparound implementation. In addition, more research is needed on best practices in overseeing high-quality implementation at state and local levels that yield improved outcomes for youth and families.

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# Session 20 >> 2:30-3:30 pm >> Salon D

# The Role of Residential Care in the Evolving Mental Health Service Systems

## Chair: Kamala D. Allen, Discussant: Gary Blau Presenting: Jonathan Brown, Sarah Hurley, & Henry T. Ireys

At least 50,000 children and adolescents lived in psychiatric residential treatment facilities for some part of 2003. Although lengths of stay in residential care have dropped considerably during the last decade, many youth will continue to enter and be discharged from these settings during the next 10 years. However, until quite recently, residential treatment has been viewed as largely separated and independent from the concepts and practices typically associated with the system-of-care approach. Recent efforts, such as the Building Bridges Summits, aim to integrate residential services into community-based systems and to ensure that important system-of-care concepts are adopted more systematically by residential treatment facilities.

This symposium examines key policies, practices, and trends related to these efforts. Specifically, it includes presentations on (1) standards that states use to monitor and license residential facilities for youth, (2) trends in discharge outcomes from one set of residential centers, and (3) preliminary findings from a study of the role of residential care as perceived by key leaders in the field and a large sample of facility directors. The discussant will place findings from these studies into a national context and discuss their implications for the continued evolution in child mental health service systems.

# Trends in Outcomes for Youth Served in Residential Treatment: 1996-2006

Presenting: Sarah Hurley

## Introduction

**Symposium** 

Some mental health professionals view residential treatment as necessary but usually ineffective. In the best scenario, youth and families are provided with home- and community-based services that ameliorate behavioral problems, or at least provide support for parents to cope with these difficulties, rendering residential treatment unnecessary. Findings from outcome studies of residential treatment services have not been universally positive; several studies have suggested that residential treatment may not be effective in producing long-term positive change in youth (Lyons & McCullough, 2006). Providers and other advocates for children's mental health have struggled with defining an appropriate place for residential treatment within the system of care.

Even with a somewhat tarnished reputation, the demand for residential treatment has remained high. A key driver of the sustained demand is state and federal funding guidelines, which are instrumental in limiting options to more traditional treatment settings, including residential. In addition, multiple provider coalitions who are invested in providing residential treatment continue to influence the purchasing decisions of governmental entities, often encouraging them to fund residential treatment at the expense of more effective services.

Examination of trends over the past 10 years in length of stay, outcomes at discharge, and long-term outcomes resulting from residential treatment may provide further understanding of the role of residential treatment within the system of children's mental health care. These trends may shed light on changes in residential treatment during a decade of increasing emphasis on home- and community-based services from many stakeholders to address children's mental health issues. This information may also suggest further areas of exploration needed to both understand and improve the effectiveness of residential treatment services.

## Methodology

Data were drawn from the electronic medical records database system of a large behavioral health provider in the Southeast US. Operating a full continuum of care that includes residential treatment, communitybased group homes, treatment foster care, and intensive in-home services, the provider has tracked outcomes on more than 4250 youth who have received residential treatment services since 1994. The present study examines youth discharged between July 1995 and June 2006 (based on agency fiscal years), with outcomes measured at discharge and one year post-discharge. Discharge outcomes include location at the time of discharge and type of discharge (stepdown to less restrictive program, disruption to more restrictive setting, exit from the agency). One-year post-discharge outcome measures include placement stability (location at the time of follow-up; out-of-home placement during the follow-up period), school status, and contact with legal authorities.

## **Findings**

Among youth discharged from residential treatment, average length of stay has decreased slightly from approximately 183 days in FY 1996 to 180 days in FY 2006. The number of youth discharged to a less restrictive setting has decreased slightly during that time from 75% in FY 1996 to 69% in 2006. The trend for long-term outcomes was somewhat more positive during the decade, with more youth reported as placed at home with their families at the end of the period (61% in 1996; 68% in 2006) and substantially fewer reported as experiencing an out-of-home placement during the follow-up period (56% in 1996; 36% in 2006). More youth were reported to be in school, graduated from high school, and/or pursuing a GED at the beginning and end of the study period (75% in 1996; 87% in 2006), and fewer youth were reported to have contact with legal authorities during the follow-up period (30% in 1996; 22% in 2006).

# Conclusion

The present study examines trends across a period of significant change within this agency; it was during this time that the agency implemented a full continuum of care. These results suggest that youth who receive residential treatment within a continuum of care often achieve positive outcomes up to a year following discharge. Although this conclusion is not generalizable beyond this particular agency, the findings point to the need for further work on the predictors and correlates of positive long-term outcomes for youth following residential treatment. In order to improve the quality and effectiveness of services, it is essential to understand the elements of treatment, as well as the characteristics of youth, that are contributing to desirable outcomes.

Recent work on outcomes for youth in residential treatment and intensive in-home services suggests that less restrictive services tend to achieve slightly better outcomes than residential treatment, even for similar youth. (Barth et al., in press). This is consistent with a previous study that found substantially better long-term outcomes for youth

Monday –

who received both residential and intensive in-home services, compared to those that received residential treatment alone (Hurley, Goldsmith, & Lord, 2004). Trends observed in the current study are important because they seem to indicate that positive outcomes following residential treatment may be enhanced through the integration of residential treatment within a broader system of care. Further study is needed concerning the effectiveness of stepping youth through the system of care to increasingly lower levels of service, and how such movements impact long-term outcomes.

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# Perspectives on the Changing Role of Residential Treatment in the System of Care

Presenting: Jonathan Brown Contributing: Tara Krissik

## Introduction

The role of psychiatric residential treatment centers (RTCs) in the child and adolescent mental health service system is evolving as a result of growing support for home and community-based services, increased emphasis on measuring quality, and the spreading expectation that families should be involved in designing and monitoring child mental health services. However, policymakers, advocates, and program administrators have little systematic information about the ways in which RTCs are responding to these changes. For example, few studies have quantified the extent to which RTCs have adopted system-of-care provide non-residential care or have identified the funding mechanisms and characteristics of the RTCs that have expanded the types of non-residential services they offer. In addition, there is little information on how many RTCs have adopted polices for shared decision-making with families or strategies for periodically assessing the appropriateness of residential placement. Better information on these issues may help to understand how RTCs can become better integrated in the child and adolescent mental health service system and how system-of-care practices can be adapted for residential settings.

In order to is examine the evolving role and practices of RTCs in response to changes within the child and adolescent mental health services system, this project is (1) quantifying the extent to which RTCs provide non-residential services; (2) identifying the funding mechanisms and characteristics that promote or discourage RTCs from offering non-residential services; (3) determining the extent to which RTCs adopt family-driven youth-guided practices; and (4) quantifying the extent to which RTCs seess the appropriateness of residential placement.

## Methodology

This study is combining qualitative and quantitative methods to achieve its goals. Key informant interviews are being conducted with a diverse group of RTC directors, child mental health advocates, policymakers, youth, and caregivers in order to gather information about the organizational, financial, and clinical factors that promote and impede the development of nonresidential RTC services and the integration of RTCs into community-based mental health service systems. The interviews also are gathering information about what services families wish to receive from RTCs and what role families wish to play in the operation of RTCs. Finally, informants are identifying exemplary RTCs that have expanded services to include nonresidential care and are well integrated within the continuum of community-based services; additional information will be gathered on these RTCs.

Data from a survey of a representative sample of 300 RTC directors will be used to quantify the extent to which RTCs are delivering nonresidential services and identify the mechanisms used to support the development of non-residential care. In addition, RTC directors are reporting what they view as the challenges to diversifying services, what strategies are used to assess the appropriateness of residential placement, and whether families are partners in RTC decision-making and oversight.

## **Findings**

Preliminary results will be available in February 2008. We will discuss the findings in the context of national and state policies that promote home and community-based mental health services and seek to decrease out-of-home psychiatric care. We will report the promising practices that RTCs use to deliver nonresidential services, summarize the factors that promote or impede the development of these services, and discuss the role of families. Feedback from conference attendees may be incorporated in a series of issues briefs that will report the project's findings.

## Conclusion

The information derived from this project will have direct relevance to ongoing efforts to develop better links between residential care and community-based services. In addition, it will help identify whether RTCs that use practices usually associated with the system-of-care model remain a small part of the residential treatment world or whether they reflect an industry-wide trend. Finally, it will provide an inventory of promising best practices that residential settings may wish to adopt as they broaden they types of services they offer.

# State Regulation of Residential Facilities for Children

Presenting: Henry T. Ireys Contributing: Judith L. Teich

## Introduction

A recent Congressional hearing on unregulated out-of-home placements for youth with serious behavioral or emotional disorders raised but did not deal directly with the question: What strategies do states actually use to monitor psychiatric residential treatment facilities overall? There is little national information to answer this question. As a result, policymakers and program administrators face major difficulties in determining both the effectiveness of current policies and the potential need for new policies that are responsive to emerging trends in child mental health care.

Most states have begun to build the legislative, regulatory, and programmatic foundations for transforming the mental health system for children and adolescents by strengthening community-based systems of care. However, in the immediate future, young people will continue to enter psychiatric residential facilities, especially children and adolescents whose families cannot find or do not have the resources to obtain needed community services. The goal of this study is to provide new information on state practices related to monitoring these facilities.

One of the major challenges in conducting research on residential care involves the lack of standard definitions of terms such as psychiatric residential facility, residential treatment center, and group homes (Fleishman, 2004). States have adopted widely discrepant terms for essentially similar institutional entities and, conversely, operate facilities with similar names that provide markedly different sets of services.

# Methodology

Criteria for identifying facilities included in the study were designed to be broad enough to capture the range of state-regulated residential facilities that serve children, including facilities that (1) were regulated by any state agency; (2) offered varied sets of residential services; and (3) focused on diverse subgroups of children and adolescents with mental illness. The criteria excluded facilities for children who were homeless or had physical disabilities; inpatient psychiatric hospitals or units; nursing homes; detention centers and community shelters; residential substance abuse treatment programs (unless the program was specifically for dually diagnosed children); and individual foster care homes.

Internet searches were conducted for all states to identify (1) a list of facility types that met the study's criteria; (2) areas for which regulations existed, such as regulations for facility characteristics, licensing standards, and program services; and (3) state officials who potentially could serve as primary contacts. This contact person was sent one or more questionnaires, depending on the number of facility types in the state. Useable information was provided by 41 states (80%): 38 states completed at least one questionnaire, and three states indicated that they did not license facilities that met study criteria. Additional information about study methods is in Ireys et al. (2006).

# **Findings**

States differ in the mix of methods they use to regulate facilities. Typical methods include on-site inspections and visits, documentation of staff qualifications and training, record reviews, resident interviews, mandates to report critical incidents, and requirements for resident-tostaff ratios and minimum education levels for facility directors. All states use at least several of these methods, but no state uses all of them. The oversight and regulatory environment for residential facilities for children with mental illness is complex in most states because several agencies, each with a different mission and function, are involved in licensing the facilities, reviewing complaints against them, funding the services they provide, and monitoring them through announced and unannounced visits. For 47% of all facility types covered by the survey, licenses or certifications are required from more than one agency. For 22% of facility types, complaints are reviewed by three or more agencies. Depending on the state, these agencies include departments of children and families (including welfare agencies), state and local mental health agencies, departments of health, and various other state agencies.

Respondents indicated that state laws require 90.1 % of all facility types in the study to provide individual counseling, 85.9% to provide group counseling, and 71.8% to provide family counseling. In addition, 81.7% are required to manage medications for residents and 73.2% to dispense medications.

Most facility types (88.7%) are required to develop a comprehensive discharge plan, and about half (49.3%) are required to provide medications or a medication plan at discharge. About a quarter of facility types (22.5%) are required to conduct discharge interviews or satisfaction surveys. A small proportion of facility types (7%) are required to provide follow-up home visits after discharge.

## Conclusion

Policymakers, advocates, and others interested in strengthening the oversight of psychiatric residential care settings for youth will need to understand the substantial variation across states in their use of regulatory methods. Also, these facilities face a complex regulatory environment. In most states, several agencies are likely to be involved in licensing, regulating, and reviewing complaints against residential facilities. Facilities also may have multiple reporting requirements because they have multiple funding sources.

Despite this complex regulatory picture, there may be opportunities to strategically alter specific regulations, especially regulations that guide inspections of residential facilities or the breadth of program services. For example, a bill introduced in Congress in 2005 would authorize grants to states to expand their capacity to conduct inspections of child residential treatment facilities. In addition, legislatures in some states may be willing to require residential settings to periodically re-evaluate the need for continued residential care, to include family members in discharge planning, or to make post-discharge home visits. Finally, families, advocates, and providers may be able to work with representatives of residential settings to craft a set of standards to which facilities will voluntarily adhere, thus avoiding the need for an extensive regulatory foundation for monitoring the quality of care.

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# Session 21 >> 2:30-3:30 pm >> Salon G

# Symposium The Massachusetts Transition Age Youth Arrest Study

#### Chair: Maryann Davis Presenting: Maryann Davis, Bernice Gershenson & Michael Pullmann

Late adolescence and young adulthood are the ages in which arrests and offending behavior are most common in the general population. However, adolescents with serious mental health conditions are at even greater risk of trouble with the law during the transition to adulthood years, compared to their same age peers, with cumulative arrest rates as high as 64% by age 25. Knowing when that risk is greatest, for whom, and for what is critical to crafting policies and services that can help prevent or reduce offending. The preponderance of criminology studies are based in males because of their high offending rates compared to females. Little is known about arrests or offending in girls in mental health systems. This symposium describes a study of justice system involvement during the transition years (13-24) in a statewide cohort of youths who had received public adolescent mental health services during the mid 1990s. Analyses focus on gender differences in patterns of arrest. Findings provide some guidance for policy, practice, and future research in this area. A brief introduction will be provided, followed by a basic description of the methodology, followed by a paper describing basic gender differences in offending patterns, and gender comparisons of within-individual longitudinal arrest patterns, called developmental trajectory modeling. This will be followed by a second paper focusing on the relationship of intensive adolescent mental health services during late adolescence and arrest patterns in young adulthood in females.

# MTAYA Study Introduction

## Presenting: Maryann Davis

The mental health needs of youth in juvenile justice systems have recently become a focus of considerable concern (e.g. Grisso, Vincent, & Seagrave, 2005). It has been estimated that of the roughly two million youth under the age of 18 who come into contact with juvenile justice systems each year, nearly two-thirds have either symptoms of or risk factors for serious mental health problems (Teplin et al., 2002). This is consistent with results of studies following youths with serious mental health conditions through adolescence and into adulthood that found high rates of arrest and trouble with the law (e.g. Davis et al., 2004). Recognition of the consequences that can sometimes follow from failing to address mental health issues has led to a growing consensus that youth entering juvenile justice facilities should be screened for symptoms of mental illness (Grisso et al., 2005). However, prevention of arrest has not been a major focus of adolescent mental health systems.

Arrest rates in the general population are high during adolescence and young adulthood. In comparison to the general population or with those who have non-mental health disabilities, arrest rates among those with mental health disorders are markedly higher even when controlling for socioeconomic status (Vander Stoep et al., 2000).

Interventions for limiting justice system involvement among youth with serious mental health conditions during adolescence and young adulthood are critical. Crafting such interventions, however, requires more detailed knowledge than is currently available regarding who is at risk and at what ages risk is highest. Among the important next steps in this line of research, then, is refinement of the empirical knowledge base regarding justice system involvement of youth who use mental health services. A logical starting point for this effort is determining risk of offending among youth in mental health systems across the developmental course and by gender. Indeed, criminological research has consistently found substantial gender differences in rates and patterns of offending, and in criminogenic risk factors. For example, victimization histories are more prevalent among female than male offenders (Cauffman et al., 1998), and incarcerated juvenile girls are almost 1.5 times more likely than boys to have a non-conduct psychiatric disorder with impairment, (Teplin, et al., 2002). There is also evidence among general offenders that there may be fewer and less variant longitudinal patterns of offending among females than males (D'Unger et al., 2002). These findings suggest that gender is likely to affect most dimensions of justice system involvement and may have important intervention implications.

Using statewide administrative databases we examined justice system involvement between ages 7 and 24 of intensive public adolescent mental health service users. Our principal objective was to further knowledge about age and gender effects on arrest risk in this population during adolescence and young adulthood in order to support practice and policy reform.

## References

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# **MTAYA Study Methods**

## Presenting: Bernice Gershenson

## Sample

Participants consisted of a statewide cohort of 1,519 youth born between 1976-1979 who received adolescent case management services from the Massachusetts Department of Mental Health (DMH) sometime during 1994-1996. The cohort consisted of 781 males (51%) and 738 females (49%). The cohort was identified in the database as 74% White, 8% African-American, 8% Hispanic, 5% Other, and 6% Unknown. There were no gender differences in race/ethnicity ( $\chi^2$  (df = 4) = 3.0, p > .10). Race/ethnicity was not further analyzed. In 1994-95, eligibility criteria for child DMH services included being under age 19 and having a diagnosable psychiatric condition with functional impairment in two or more domains lasting (or expected to last) at least a year. However in 1996, DMH standardized their criteria further to define functional impairment as having a score of 80 or higher on the Child and Adolescent Functional Assessment Scale.

#### **Data sources**

The DMH administrative database contained information regarding individuals' mental health service use, psychiatric diagnosis, insurance/ health coverage, and sociodemographic characteristics. The DMH cohort was constructed by first extracting those in the DMH database born between 1976 and 1979, then extracting from that group those who had received a DMH adolescent case management service between 1994 and 1996. A total of 1,519 participants met these inclusion criteria. Age at which DMH services were initiated was not recorded in the DMH database, and thus the receipt of case management services at the time sampled does not eliminate the possibility of service receipt at other times.

Arrest data were obtained in July 2005 from the state's Criminal History Systems Board and Department of Probation which manage the Criminal Offender Record Information (CORI) for criminal and juvenile courts respectively. CORI data include arrestees' birth year, gender and information on their juvenile and adult arraignment histories in all non-federal courts in Massachusetts. Each arraignment record contained charge, court, date of arraignment, and final disposition. The crossmatching between the CORI and DMH data was accomplished using a specially created unique identifier. We included in our analyses all arrests occurring before participants' 25<sup>th</sup> birthdays.

## **Gender Differences in Transition Age Arrests**

Presenting: Maryann Davis Contributing: Steven Banks, William Fisher, Bernice Gershenson & Albert Grudzinskas

## **Analytic Approach**

Our cross sectional analyses entail between-gender comparisons of arrest patterns within age groupings. Arrest rates were calculated by age and gender, and cumulative arrest rates and age of first arrest were calculated for all youths. In addition, first arrest risk was calculated by dividing the number of youths arrested by the number of youths at risk. Pearson Chi Square tests were used to compare arrest rates in independent groups. *T*-tests were used to test independent means. The McNemar test was used to examine age affects on arrest rates within gender (paired comparisons).

Our longitudinal analyses use *developmental trajectory modeling* to group individuals' patterns of offending over time (trajectories) into "clusters" of those whose trajectories are similar, and to describe the trajectories. Trajectory analyses identify periods of greatest risk, proportion of population at risk, and factors that differentiate individuals in different clusters (such as types of charges, age of first arrest). Males' and females' trajectories were analyzed separately and then combined to determine whether there are clusters that are unique to one gender or the other. Trajectory analyses were conducted on those with multiple years of arrest (30% of all females and 57% of all males).

## Results

*Arrest Onset.* Overall, 58% of the DMH population had at least one arrest by age 25. This rate was significantly higher in males than females (69% *vs.* 46%;  $\chi^2$  (*df* = 1) = 79.13, *p* < .001). Within arrestees, arrest onset was earlier in males (mean onset difference 1.31 yrs, 95% *CI* = .93-1.71, *t*(*df* = 878) = 6.65, *p* < .001). Arrest rates among those never

before arrested were higher in males than in females from ages 13-18 ( $\chi^2 p < .009$ ) but were not significantly different from age 19-24 ( $\chi^2 p > .10$ ). Within gender, arrest onset during the ages that adolescent mental health services typically cover (ages 13-17 yrs) revealed that few arrestees experienced first arrest before age 13 (9% of males, 2% of females), whereas 65% of male and 55% of female arrestees had first arrests at ages 13-17, and 26% of male and 44% of female arrestees had arrest onset at ages 18-24.

**Arrest Rate.** The proportion of males arrested at each age was significantly higher than the proportion of females ( $\chi^2 p < .001$ ). There were no significant age effects on female arrest rates between ages 16-23 (McNemar, p > .10). Male arrest rates peaked at age 18, with a rate that was greater than male arrest rates at every other age (McNemar, p < .05; p < .005 for all ages but 17, p = .044 for 17). Many youths were arrested multiple times (58% of all DMH males, 30% of all DMH females). Many were arrested as adults (males; 57%, females; 36%), with 68% of males and 48% of females with adult arrests having their first arrest as minors.

**Charge Type.** Arrested males accumulated more serious violent, serious property, drug, and public nuisance charges by age 25 than arrested females (t(df = 738) p < .001). There were no gender differences in the proportion of total charges that were serious violent or public nuisance (t(df = 878), p > .10), but a higher proportion males' charges were drug or serious property (t(df = 878), p < .05).

*Trajectories of charge frequency.* Within gender trajectory analyses of those individuals with 2 or more ages with an arrest revealed four female trajectories and 5 male trajectories. To compare these trajectories, the sample was combined, and the starting values for each of the 9 total trajectories were entered. The best model, using the Bayesian Information Criteria, yielded 8 trajectories, with 1 of these groups uniquely male, and 2 others with males over-represented. The most common trajectories were those with few charges per year, the most concerning patterns contained the smallest proportions of individuals. The uniquely male pattern was among those most concerning. Typically, peak charge frequencies in trajectories with significant peaks, occurred during ages 18-21.

#### Discussion

Any study reporting crime in a population with mental health conditions should be interpreted with caution so as to be reasonably informative without needlessly adding to stigma. While the arrest rates were high in this sample, arrest rates are high in the general population at these ages, thus, local direct comparison to a general population is needed before conclusions can be drawn. Thus, these findings should not be interpreted to mean that adolescents with serious mental health conditions are more violent than their peers.

The findings presented more than justify current concerns of public mental health systems regarding juvenile and criminal justice system involvement of their adolescent clienteles. As in the general population, male justice system involvement is greater than that for females; proportionately more males are arrested at each age and by age 25, and the most concerning trajectory pattern was uniquely male. However, almost half of the female adolescent mental health population had an arrest by age 25, and most by age 18, females had the same proportion of charges that were violent, and gender did not play a role in the risk of arrest onset after age 18. Thus the justice system involvement of males *and* females in the adolescent public mental health population is concerning. Further, these similar arrest characteristics suggest that males and females in this population share many risk factors for arrest and recidivism that will be important questions for future research.

Our longitudinal analyses demonstrate that risk levels and timing are quite varied within this population. Only a small proportion of this population shows a pattern of elevated charge frequencies. However, since about a quarter of both males and females charges were for serious violent crimes, even low frequency charges are concerning. Again, while there were marked gender differences in the trajectories, few patterns were unique to males or females, suggesting the presence shared risk factors.

Since many youth begin offending after mid-adolescence and into adulthood, and many re-offend at those ages, our findings suggest that both child and adult mental health services have an opportunity to prevent arrest onset in those not yet arrested, and to reduce further offending in those already arrested, regardless of with which system, justice or mental health, youth were first involved.

# Transition-Aged Mental Health Services and Risk of Adult Arrest

#### Presenting: Michael Pullmann Contributing: Maryann Davis

The relationship between mental health services and arrests is largely unexplored. Naturalistic studies, such as the current study, cannot determine whether a type of service contributes to the likelihood of getting arrested. Youths referred to certain services may be referred there because of characteristics related to offending risk. However, it is important to examine whether youths accessing specific types of services are at increased risk of subsequent offending so that high risk individuals can be identified in these services and offending prevention or reduction interventions can be applied. This study examined the relationship between receipt of specific types of services at ages 16-18 (Massachusetts adolescent services end at age 19), and subsequent arrests at ages 19-24.

## **Methods**

The sample consisted of 414 females who were born in 1978 or 1979 and had received publicly funded mental health services through the Massachusetts Department of Health at any point during their lifetime up to 25 years old. We obtained information on their publicly funded mental health services from 1994 through 2002 and on their juvenile and adult criminal history in Massachusetts. Two-hundred and ninetytwo (71%) were White, 33 (8%) were African American, 31 (8%) were Hispanic, 7 (1.7%) were Asian, 12 (3.6%) were some other race, and 39 (9.4%) were missing data on race. Concerning arrests, 213 (51%) had no criminal history, 58 (14%) had been arrested between 12-19 years old, but not older, 59 (14%) had been arrested between 19-24 years old, but not younger, and 84 (20%) had been arrested both between 12-19 and 19-24 years old. In regards to services, 96 (23%) received residential treatment at least once 16 to 19 years old, and 116 (28%) received inpatient hospitalization at least once from 16 to 19 years old.

A series of crosstabulations with  $\chi^2$  tests for significance were run, examining the relationship between service receipt between 16-19 years old (i.e. transition-aged services) and arrests between 19-24 years old (i.e. adult arrests). These were repeated, stratifying the sample by those who had or had not been arrested between 12-19 years old (i.e. juvenile arrests). Finally, a stepwise logistic regression was run, predicting adult arrests based on transition-aged service use, juvenile arrests, race, and adult service use.

## Results

Table 1 depicts the findings from the crosstabulations. The findings indicate a very strong relationship between juvenile arrest and adult arrest, with nearly 59% of those who had an adult arrest also having a juvenile arrest, as compared to 21% of those who did not have an adult arrest also having a juvenile arrest, (OR = 5.23,  $\chi^2 = 57.9$ , p < .001). In other words, adult offending was 5.23 times more likely for those

 Table 1

 Chi-square Tests of the Relationship between Independent Variables and Adult Arrest

	Arrest 19-24	Not arrested 19-24	$\chi^2$	p
Arrest 12-19	58.7	21.4	57.90	<.001
Received residential treatment 16-19	27.3	21.0	2.05	.096
Arrested 12-19	23.8	29.3	.54	.294
Not arrested 12-19	32.2	18.8	4.90	.023
Received inpatient hospitalization 16-19	29.4	27.3	.20	.369
Arrested 12-19	26.2	25.9	.002	.562
Not arrested 12-19	33.9	27.7	.861	.220

females who were arrested as juveniles when compared with those who were not. Receiving residential treatment during the transition years was not significantly related to adult offending, with 27% of those with adult arrests having received transition-aged residential treatment, as compared to 21% of those not arrested, however this relationship approached significance ( $\chi^2 = 3.96$ , p = .096).

We believed that the relationship between transition-aged services might be moderated by whether the person had been arrested as a juvenile, so crosstabulations were run while stratifying juvenile arrest. Findings indicated that there was no relationship between transitionaged residential treatment and adult offending for those with a history of juvenile arrests; nearly 24% of those with adult arrests and 29% of those without adult arrests had juvenile arrests. However, for those who had not been arrested as juveniles, transition-aged residential treatment was strongly related to increased adult offending. 32% of those with adult arrests received residential treatment, as compared to nearly 19% of those without adult arrests (OR = 2.05,  $\chi^2 = 4.9$ , p = .023). For those without juvenile offenses, adult offending was 2 times more likely if the person had transition-aged residential treatment than if they had not. Another way of looking at this data in more detail is depicted in Figure 1. This figure reveals that those with a juvenile arrest moderated the relationship of transition aged treatment with adult arrest. Those with a juvenile arrest were very likely to have an adult offense (between 54% and 61%).

100

80

60

40

20

0

18.8

.00

However, those with no juvenile offense differed, with those who had residential treatment being much more likely to experience an adult arrest. We found no significant relationship between the receipt of inpatient hospitalization and adult arrests, both overall and when stratifying by juvenile arrest.

## Discussion

These findings indicate that the relationship between transition-aged

residential treatment and adult arrests may be moderated by juvenile arrests. That is, those females who had a transition aged residential treatment but did not have a juvenile arrest are more likely to offend in adulthood. There are several possible reasons for this. It may be that residential treatment acts as a protective shelter for those who are likely to offend. Upon discharge from residential treatment in their adult years, they may have the opportunity to offend. Similarly, residential treatment may act as a proxy variable for severity of behavioral health problems; however, inpatient hospitalization, which could also be considered an indicator of severity, was not related to adult offending. Or, it may be that the institutional nature of residential treatment, and the social learning that occurs through extended interaction with many people that have severe behavioral health problems, increases a person's proclivity to offend. This presentation adds to the existing literature and suggests future directions for research.

Figure 1

**Caregiver Reports versus Actual Grades** 

(N = 76)

Received Residential Treatment

16 through 18 years old

Juvenile Arrest

--- No

-Yes

54.1

32.2

1.00

# Session 22 >> 2:30-3:30 pm >> Salon H

# Topical Discussion Developing a Culturally and Linguistically Competent Workforce

## Presenting: Jannina Aristy & Janice Cooper

## Introduction

This session provides a practical approach to making operational a culturally and linguistically competent (CLC) workforce in children's mental health. An overview spanning a decade of administrative, policy and programmatic strategies in CLC and workforce development is presented. Key CLC and workforce concepts, challenges and solutions are explored. These include: guiding principles and unique characteristics, multi-level stakeholder engagement, the role of guidelines, plans, research and evaluation.

## **Background of facilitators/panelists**

Jannina Aristy: Facilitator/Discussion Leader is a Principal Consultant with Fieldstone Alliance, and she is the Vice-President, Board of Directors, Federation of Families for Children's Mental Health.

Janice Cooper, PhD., Panelist, is Senior Research Associate at the National Center for Children in Poverty and she co-directs Unclaimed Children Revisited. She is a member of the New York State Office of Mental Health Multi-Cultural Advisory Committee.

## Topics to be addressed

### **The Problem**

Reports continue to systematically highlight the inadequacy of the workforce in its capacity to meet the mental health needs of constituents across ethnic and racial boundaries. Resolving this crisis will require the involvement of multiple stakeholders, addressing issues at multiple layers, responding with multiple impact strategies at multiple levels (local, state and national). It will also require a major reform inclusive of broader insurability, payer options, and legislation. Of equal importance, is to facilitate opportunities that promote dialogue.

## **Potential Solution**

An effective multi-pronged approach to reduce or eliminate disparities in access and outcomes through workforce development holds promise. Aristy and Cooper propose an approach that develops the workforce in mainstream provider and participant organizations, builds with specialty multi-cultural specialty provider organizations and establishes sustainable *specialty provider networks*. Additionally, strategies to enhance individual and organizational capacity aimed at supporting of CLC's constitute critical building blocks that must be incorporated. *Know-how* and implementation factors are taken into account.

## **Challenges and Opportunities**

Several challenges impede implementation. First, varying service systems require different types of capacity building supports. Yet, most mainstream provider organizations remain oblivious to such distinctions, lack appropriate training and capacity to deliver CLC services, and, despite the proliferation of tools, guidelines and standards in the field, employ a cookie-cutter, one size fits all approach. Second, an increasing rich array of CLC providers and their organizations serve as safety net but remained outside of the mainstream health care. They often possess weak organizational capacity, rudimentary reimbursement mechanisms, face organizational racism, and often unfair credentialing and licensure standards, all which hinder their ability to contribute to the service array. Third, paraprofessionals, interpreters and families present another layer of key contributors to the workforce and source of workforce transformation. But they remain diffuse, unorganized and ineffective. Finally, state and federal fiscal policies often run counter to addressing the workforce challenges presented.

Opportunities to develop a CLC prepared workforce include: state and federal policies that enhance workforce development including specific legislation and administrative rules; targeted financing, grant funding and base funding; initiatives that target educational institutions; and, community-based strategies that promote public ownership of reducing disparities. In addition, opportunities for evaluation and outcomes management related to quality improvement provide concrete ways to advance the case for a CLC-prepared workforce. Factors that data in the service of advancing a more CLC workforce include: state and local efforts that foster the role of family members and youth as evaluators; agency policies that promote tying performance goals to CLC related benchmarks; and accountability measures at the system levels that link outcomes and resources.

## **Discussion Format and Level of Participation**

This context will set the stage for session participants to contribute to a discussion about a wide-range of considerations. Presenters will use a combination of learning approaches including a presentation followed by a facilitated interactive dialogue and discussion while promoting peer learning opportunities. Participants will have the opportunity to engage around the following areas:

- Factors that contribute to the workforce crisis in mental health, and the impact of an ineffective workforce on children, youth and families
- The differential workforce challenges experienced by mainstream providers and *specialty providers*
- Challenges presented to mainstream systems and their providers as a result of an increase demand for services within the context of inadequate CLC structures, processes and overall CLC capacity
- The role of other client and systemic driven factors influencing access and quality care
- Challenges experienced by mainstream providers and organizations as they serve an increasingly diverse LEP population base
- Creative strategies for increasing Title VI compliance, including possible research implications
- Use of various approaches to assessing workforce status, needs and capacity, including leading the availability, use of assessment tools, and their value added
- Implementation of CLC workforce development strategic plans
- Applicability of standards and guidelines in workforce development and their impact on both the mainstream and *specialty provider* workforce
- Capacity building strategies targeting the mainstream workforce, including training, certification, and credentialing
- The role of *specialty or diverse providers*, organizations and networks as key stakeholders of the workforce, their benefits and advantages, and their role in the elimination of disparities
- Capacity building strategies aimed at enhancing individual provider and organizational effectiveness that results in specialty provider integration into mainstream health care
- · Targeted programs supporting certification, licensure and credentialing

- The role of multilevel stakeholders and systems in advocacy and systemic reform
- The role of academia and licensing bodies along with advocacy and leadership in transforming systems
- The overall absence of cultural competence in academic instruction, training and certification
- Factors that impact a culturally competent research agenda related to workforce development, and retention (e.g. the role of CLC, provider concordance)

The lessons learned from this session will further contribute to

Session 23 >> 2:30-3:30 pm >> Salon I Symposium

# Evidence-Based Practice Implementation in a Child-Welfare System of Care: Examination of a Statewide System Change

#### Chair: Gregory A. Aarons, Discussant: David Chambers Presenting: Gregory A. Aarons, Danielle L. Fettes & Lawrence A. Palinkas

Implementation of evidence-based practices in systems of care is a complex process. Mixed quantitative-qualitative research methods can address difficult design issues and have the potential to not only quantify results, but also to richly describe and depict challenges in the implementation process. This symposium describes an NIMH supported mixed-methods study of a statewide evidence-based practice implementation in Oklahoma. The "SafeCare" evidence-based practice for reducing child neglect is being implemented in a statewide randomized effectiveness trial. The present study provides an in-depth look at implementation process and outcomes by examining bi-directional effects of evidence-based practice implementation on the organizations and providers that make up the service system and the impact of organizational and provider factors on implementation fidelity and outcomes. We will first describe the SafeCare intervention and service system context. We will then give an overview of the theories, background, and design of the implementation study. Next we will describe how mixed-methods are integrated in the study design and give examples of how they are utilized in the study. Finally, we will present some preliminary results from qualitative and quantitative analyses. Final discussion will focus on the challenges and recommendations for conducting theory driven and empirically sound implementation research in systems of care.

# Researching Implementation of Evidence-Based Practice: Intervention, Context, and Study Design

## **Presenting: Gregory Aarons**

## **The Intervention**

SafeCare, originally known as Project 12-Ways (Lutzker, 1984; Lutzker & Bigelow, 2002), is a parent-mediated intervention designed to reduce child abuse and neglect. The 12-Ways/SafeCare model has been in use in University-based projects in rural Illinois since 1979, and more recently in University-based projects in Los Angeles (Lutzker, 1984, Lutzker, Tymchuk & Bigelow, 2001). The model has been described and studied in over 60 scientific publications. Project 12-Ways was designed primarily for families with preschool or school-age children involved in the child welfare system due to neglect, physical abuse or both. The model grew out of the behavior analysis field, and is manualized, highly structured and uses

elevating the workforce discussion and potentially promote a series of local and state dialogues on how to best address the workforce crisis in participant localities.

## Who Should Attend

Family members, youth, professionals, paraprofessionals of various disciplines in health, human services and social services arenas, workforce development specialists, researchers, those interested in the elimination of disparities, representatives of the system of care.

classic behavioral intervention techniques (e.g., ongoing measurement of observable behaviors, skill modeling, direct skill practice with feedback, training skills to criterion). It consists of a number of modules that focus on specific parent behaviors and conditions in the home that lead to child neglect. As adapted for the present study, the modules focusing on child neglect and parent-child interactions are highlighted.

## State of Oklahoma—Children's Services System

Our NIMH supported implementation study (PI: Aarons) is conducted in tandem with a NIMH effectiveness trial (PI: Chaffin) of SafeCare in the Oklahoma Child Welfare system. The effectiveness trial is a 5-year cluster-randomized field trial in the context of the Oklahoma statewide family preservation/family reunification (FP/FR) service system. The FP/FR service system is divided into six regions, and regions are served by four subcontracted agencies with services provided throughout the state by 21 teams providing comprehensive home-based services (CHBS). The teams are assigned to receive SafeCare vs. usual care (unstructured case management and social support model) fully crossed with having vs. not having an *in vivo* coach.

Clients in the effectiveness study are child welfare involved families referred for neglect and/or physical abuse and with young children in the family. Most clients have multiple past penetrations into the child welfare system. To date, 2,243 families have been enrolled in this study, along with 120 provider staff (90% female; 66% Caucasian/non-Hispanic; 10% African-American; 16% Native American; 5% Hispanic).

## Implementation Study Design

The implementation study design is a quantitative/qualitative mixedmethods investigation of FP/FR agency organizational and providers responses to the statewide SafeCare implementation. The study draws heavily on organizational theory and organizational change theory as well as leadership, social influence, and attitude theories. Each of the constructs is examined with mixed-methods. The study design integrates quantitative and qualitative methods through parallel longitudinal data collection, observation, assessment, and collaborative meetings of researchers, consultants, and agency representatives to evaluate, discuss, and integrate quantitative and qualitative findings on an ongoing basis. A key feature of the study is a focus on organizational factors that affect or are impacted by system-wide evidence-based practice implementation. Comprehensive organizational data is being collected by web-based quantitative surveys for all 21 case-management teams delivering SafeCare in Oklahoma. Response rates for the surveys range from 94.2%-96.6% of eligible child-welfare provider staff over 5 waves of data collection. Annual qualitative interviews and focus groups are being conducted with agency executive directors, area directors, team leaders, in-vivo coaches, and home visitors.

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## Using Mixed-Methods for Studying Evidence-Based Practice Implementation

### Presenting: Danielle Fettes Contributing: Gregory Aarons & Lawrence Palinkas

Moving evidence-based practice technologies from development and research settings into scaled-up field practice involves far more than simply making efficacious practice models available to the field (Kauffman Best Practices Report, 2004). Mixed-methods are particularly relevant for studying the implementation of "soft technologies" like social services and mental health practices because of the complexity of the service context and the multiple stakeholders involved. Mixed-methods designs incorporate techniques from both quantitative and qualitative research traditions; yet, they combine them in ways to uniquely answer research questions. Differentiated from a multi-method or mixed-model design, the mixed-method research study incorporates the simultaneous or sequential use of qualitative and quantitative data collection (Tashakkori & Teddlie, 2003). There is debate about the compatibility or complementary nature of qualitative and quantitative methods (e.g. Denzin & Lincoln, 1994; Morse 2003). We suggest, though, that mixedmethods research designs serve as an empirically sound and pragmatic approach to understanding how to effectively implement and sustain an evidence-based practice in a system of care context.

A number of mixed-methods research designs have been proposed (for an overview, see Tashakkori & Teddlie, 2003). Our implementation study uses both component and integrated features of a mixed-method design (Caracelli & Greene, 1997) and incorporates three component features: (1) corroboration of findings, (2) complementarity of quantitative and qualitative assessments and methods, and (3) expansion based on initial findings. The first component is triangulation: the corroboration of findings generated through the quantitative analyses of organizational influences on implementarity of the administration of one of the survey measures (the Innovation Implementation Questionnaire) to provide a starting point of inquiry in the semi-structured interviews, conversely to enhance the validity of the instrument by expanding on domain content, and to identify appropriate respondents for qualitative inquiry. The third component is "expansion" in which the results of the implementation process evaluation based on semi-structured interviews and focus groups are presented "side by side" with quantitative results of service process and outcomes to determine whether similar or different conclusions concerning barriers and facilitators of implementation can be drawn based on the data collection strategy employed.

Our quantitative data collection process includes the completion of a bi-annual, web survey by all case managers and supervisors throughout the statewide implementation of SafeCare. The survey allows for the examination of organizational factors influencing fidelity as well as how implementation of an evidence-based practice affects, for example, work attitudes and staff turnover. Organizational factors include social influences, support for innovation, leadership, and organizational culture and climate. The qualitative portion of the study is also longitudinal as data is collected annually through in-depth interviews and focus groups with case managers, case manager supervisors, area directors, and agency executive directors. Qualitative analyses, conducted using the Nvivo software package, are conceptualized as providing complementary information that will facilitate interpretation of quantitative analyses, as well as providing the basis for refinement of measures over time. Currently, a three-step, mixed method process is in place. First, we use quantitative analyses to inform the qualitative data (e.g. maximize variability sampling). Second, we use qualitative data to inform quantitative measurements (e.g. including new survey questions derived from focus groups with case managers to capture emergent processes). Third, we host an annual meeting between researchers, state system representatives and regional directors where we engage in a "sense-making" and direction setting process. This includes review of quantitative and qualitative results for learning and plotting the direction of further inquiry, and is one example of the unique benefit of the mixedmethod approach.

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# Statewide Implementation of Evidence-Based Practice for Child Neglect: Comparison of Clinical and Administrative Perspectives on Implementation Criteria

Presenting: Lawrence A. Palinkas Contributing: Gregory A. Aarons

## Background

While cohesive organizational cultures that support innovation are considered a prerequisite of successful implementation of evidencebased practices (EBP) in child welfare systems, it is not clear whether those cultural systems require that administrators and clinicians should possess the same set of understandings with respect to criteria for successful implementation, or whether they share a distributed set of understandings, similar in some respects based on shared values and identity as members of the same organization, and different in other respects based on assigned roles and responsibilities.

# **Methods**

We conducted semi-structured interviews with 20 clinical supervisors of agencies providing comprehensive home-based services and participating in a statewide effectiveness trial of an EBP known as SafeCare (SC), designed to reduce child neglect. Grounded theory analytic methods were used to elicit themes from interview transcripts which were then compared with those obtained from 15 clinical case managers and 12 agency directors and program administrators in previous waves of data collection. Case manager participants were selected by maximum variation sampling to represent those having the most positive and those having the most negative views of SC based on results of a web-based quantitative survey asking about the perceived value and usefulness of SC.

# Results

Differences in criteria elicited from supervisors, administrators and case managers were based on role in implementation and extent of interaction with families, researchers, and state agencies. For instance, while administrators were also focused on relationships with individuals and organizations external to the agency, their focus was directed primarily at relationships with researchers from Oklahoma University and with Oklahoma Children's Services. In contrast, the case managers' focus was directed primarily at relationships with client families. While case managers expressed motivation to implement SC based on their evaluations of its content, technology and approach, administrators discussed the use of active leadership, staff selection for participation, and attrition of resistant staff as tools for creating high motivation and low resistance in case managers. Clinical supervisors acted as mediators between priorities and preferences of case managers on the on hand and agency directors and program managers on the other. Nevertheless, two sets of criteria for successful implementation and sustainability were identified by all three groups. Criteria external to agencies included: (1) Assessment of EBP acceptability and relevance to family needs; (2) Availability of resources to fund EBP use and train and supervise staff; (3) Interactions with supportive and accommodating researchers; and (4) Availability as informal support networks other agencies also implementing EBPs. Criteria internal to agencies included: (1) Agency leadership support for EBPs; (2) Selection of motivated, experienced and flexible staff for implementation; (3) Tangible staff benefits such as new skills and supervision; and (4) Perceived benefits outweighing perceived costs as assessed by process and outcomes.

# Conclusions

Administrators, supervisors and clinicians share similar internal and external criteria for successful implementation; nevertheless, differences in perspective must be considered when implementing evidence-based practices.

# Session 24 >> 2:30-3:30 pm >> Salon J

# Topical Discussion Intermediary Purveyor Organizations—Their Role in Evidence Based Practices Capacity Building and System of Care Development

Presenting: Patrick Kanary, William Carter, David Bernstein & Kelly Feller

Contributing: Karen Blase, Dean Fixsen & Phyllis Panzano

## Introduction

A number of states are using Intermediary Purveyor Organizations (IPOs) as vehicles for implementing evidence based practices (EBPs), and as change agents for capacity building, system of care development, and other related technical assistance. IPOs may share common mandates but vary in their structures, roles, and scope.

*The purpose* of this topical discussion is to identify and discuss the various models for Intermediary Purveyor Organizations (IPO) and explore their diverse structures and influences.

# The issues for discussion

IPOs are gaining attention across the country as at least one model of assisting states, locales, or territories, in implementing evidence based practices. Historically, implementation has occurred site by site, provider by provider. IPOs represent a model of dissemination that may be more planful and strategic. The assumed 'values added' include: (1) expertise that is local and accessible; (2) more efficient implementation; (3) more effective implementation; (4) level of accountability and quality control; (5) interface between state/locale/territory and the actual developer of the EBP. The discussion will look at each of these elements and the "evidence" as to its effect related to implementation and systems development. In addition to structural descriptions, panelists, all of whom are affiliated with an IPO, will identify the successful outcomes they have achieved with the dissemination of single or multiple EBPs. Highlighted IPOs are in somewhat different developmental stages as well, thus bringing to the discussion the implementation challenges and steps of their own organizations. An important component of the discussion will be the role and scope of influence of these IPOs beyond the implementation of EBPs. These would include: shaping the actual practice and its implementation; role at local and state policy levels; the array of other technical assistance tools that IPOs bring to their respective geographic areas, and the interface of IPOs with local systems of care. At least one IPO contracts directly with a SAMHSA SOC site for technical assistance. There will also be discussion on the specific ways that IPOs respond to the unique characteristics of their service areas, such as addressing the challenges of rural service delivery, working in county-driven systems versus statewide driven.

*The intended outcomes* would include increased knowledge on the part of participants related to: (1) various models of implementation strategies of EBPs; (2) the necessary ingredients for effective larger scale dissemination of EBPs; (3) how an IPO might contribute to overall policy and program development strategies within a specific state/ territory/locale; (4) assess the 'fit' for the role of an IPO specific to their areas of responsibility.

*The key audience* would include federal/state/territory/locale policy and program staff charged with the responsibility of implementing and assessing impact of EBPs within their respective systems of care.

# Monday, February 25 - 3:45 pm

Session 25 Room 11	<b>Symposium—Creating the Capacity to Continuously Improve a System of Care</b> <i>Chair: Matthew Wojack</i>	Page 125
	The Cycle of Continuous Quality Improvement	
	Presenting: Matthew Wojack, Malisa Pearson & Suzanne Miel-Uken	
	How Did Impact Create its Continuous Cycle of Improvement?	
	Presenting: Suzanne Miel-Uken, Matthew Wojack & Malisa Pearson	
	What Does It Take To Make A Knowledge Management Process Like This Work?	
	Malisa Pearson, Matt Wojack, & Suzanne Miel-Uken	
Session 26 Room 12	Symposium—Strategies and Resources for Assessing and Improving Quality in School Mental Health	Page 127
	Chair: Sharon H. Stephan, Discussant: Dean Fixsen	
	The National Assembly on School-Based Health Care: Mental Health Quality Improvement Efforts	
	Presenting: Laura Hurwitz & Sharon Stephan	
	Strategies to Enhance the Dissemination and Adoption of Innovation in School Mental Health Paul Flaspohler & Carl Paternite	
Session 27	Symposium—Outcomes Studies of Wraparound in the Mental Health, Child	Page 129
Salon C	Welfare, and Educational Systems	
	Chair: Janet S. Walker, Discussant: Eric J. Bruns	
	Wraparound in Oklahoma for Children in Child Welfare Custody: Results of a Randomized	
	Study	
	Presenting: Jim Rast, John Vetter & Jeri Poplin	
	Impact of Wraparound within a School-Wide System of Positive Behavior Supports	
	Presenting: Lucille Eber & Kelly Hyde	
	Who, What, and How of Wraparound: Factors Associated with Positive Outcomes Presenting: Kathy Cox	
Session 28 Salon D	Paper—Screening within Juvenile Justice to Identify Service Needs across the System of Care	Page 132
	Presenting: Kay Hodges, Cynthia Smith & Mary Johnson	
	<b>Paper—Pathways to Serious Criminal Activity for Multi-System Youth</b> Presenting: Stephanie Romney, Deborah Sherwood	Page 133
Session 29 Salon G	Symposium—Community Programs for Transition-Age Youth: Process, Fidelity, and Outcome Findings	Page 134
	Chair: Hewitt B. "Rusty" Clark, Discussant: Nancy Koroloff	
	Predictors of Progress among Youth in the Partnerships for Youth Transition Demonstration Presenting: Mason Haber	
	Stars Transitional Age Youth Program: Youth Demographics, Utilization and Outcomes	
	Presenting: Karyn Dresser	
	Evaluating Fidelity of Community Programs for Transition-Age Youth	
	Presenting: Nicole Deschênes	

Session 30 Salon H	Symposium—Applying the Knowledge on Effective Practices for African-American Children, Youth and their Families: Implications for Preventive, Early and Intensive Intervention Strategies	Page 140			
	Chair: Vivian Jackson, Discussant: Regina Hicks				
	School Experiences Among African-American Adolescents: Implications for Ethnic Identity Development and School Adjustment				
	Presenting: Erika Van Buren				
	Addressing Disparities in Access for African-American Children with Attention-Deficit Hyperactivity Disorder (ADHD)				
	Presenting: Janice Cooper				
	Africentrism and Kinship Care: A Study of Implementation and Meaning				
	Presenting: Vivian Jackson				
Session 31 Salon I	Symposium—Missing Data and Multiple Imputation: An Overview and Application of Techniques				
	Chair: Elizabeth Stuart				
	Handling Missing Data: The Motivation and Method of Multiple Imputation Presenting: Elizabeth Stuart				
	Guidelines and Suggestions on How to Multiply Impute Missing Data Presenting: Melissa Azur				
	Employing Multiply Imputed Data to Examine Disparities in Service Use Among Children Presenting: Crystal Barksdale				
Session 32 Salon J	Topical Discussion—Participatory Research in an Urban American Indian Community	Page 147			
	Presenting: Jami Bartgis				

# Session 25 >> 3:45-4:45 pm >> Room 11

# Symposium Creating the Capacity to Continuously Improve a System of Care

#### Chair: Matthew Wojack

## Presenting: Suzanne Miel-Uken, Malisa Pearson & Matt Wojack

Building a system of care for children with SED and their families is a complex endeavor that requires recurring activities to monitor progress toward goals and to make adjustments that will enhance system performance. To move toward a system of care that is increasingly family-driven, youth-guided, and culturally competent, monitoring goal achievement and making adjustments to accelerate our progress must be done through relationships among all stakeholders, with families and youth as full partners. The full engagement of all stakeholders in system building and improvement is dependent on a range of capacities and interactions, including determining the data needed to manage and measure performance, using that data to generate information and knowledge for improving the system of care, and monitoring progress toward outcomes. To build capacity for this work, Impact has established a set of interactions and activities for stakeholders to participate in the key steps in the continuing cycle of action, assessment, and refinement. This symposium will describe, in three presentations:

- the cycle of action, assessment, and refinement and the capacities, interactions, and activities that support the trusting relationships that are essential among the stakeholders for the cycle to work.
- how Impact created the continuous cycle of improvement.
- what it takes for a knowledge management process to work The symposium will contribute to the field by demonstrating an approach to strengthening a system of care that integrates evaluation, performance management, and improvement into a single, continuous quality improvement process.

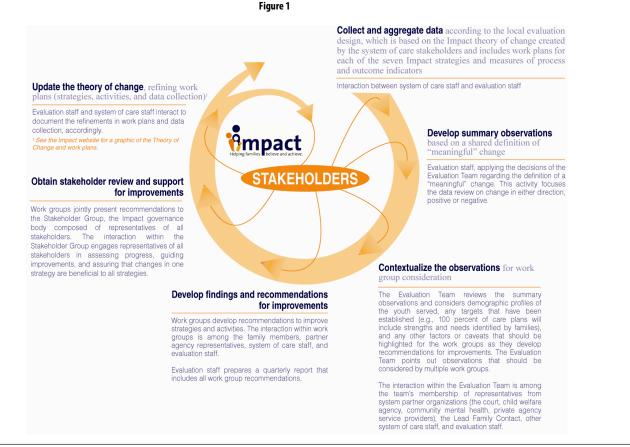
# The Cycle of Continuous Quality Improvement

## Presenting: Matthew Wojack, Malisa Pearson & Suzanne Miel-Uken

This portion of the presentation will describe the cycle of action, assessment, and refinement and the capacities, interactions, and activities that support the trusting relationships that are essential among the stakeholders for the cycle to work. This presentation will contribute to the field by demonstrating an approach to strengthening a system of care that integrates evaluation, performance management, and improvement into a single, continuous quality improvement process.

Building a system of care for children with SED and their families is a complex endeavor that requires recurring activities to monitor progress toward goals and to make adjustments that will enhance system performance. These activities are intrinsic to what managers must do in organizations, and do best when relying on the methods and tools of evaluation to monitor and strengthen performance. However, in a system of care, agreeing on goals and monitoring progress to reach those goals must go beyond managers, methods, and tools. To move toward a system of care that is increasingly family-driven, youth-guided, and culturally competent, monitoring goal achievement and making adjustments to accelerate our progress must be done through relationships among all stakeholders, with families and youth as full partners.

The full engagement of all stakeholders in system building and improvement is dependent on a range of capacities and interactions. The Impact System of Care is developing among all stakeholders the capacity to determine the data needed to manage and measure performance, use that data to generate information and knowledge for improving our



developing system of care, and monitor progress toward outcomes. Just as importantly, Impact has established a set of interactions and activities among the stakeholders to participate in the key steps in the continuing cycle of action, assessment, and refinement. The cycle spins quickly, looping through all steps every three months. Underlying the capacities, interactions, and activities are essential relationships of trust that are being nurtured and deepened among the stakeholders. The underpinning of trusting and candid relationships among stakeholders, particularly between families and youth and other system of care partners, is what makes it possible to grow the capacities needed to address weaknesses and build on strengths, thus, ever improving the system of care.

The web of activities and connections among the system of care stakeholders is best described by the cycling that completes each round of quarterly performance, evaluation, and improvement. Key quarterly activities in the cycle are depicted in the graphic, which shows how the interactions for the purpose of evaluation and performance management and more importantly, performance improvement—are fully integrated. The responsible participants in each key activity are noted.

# How Did Impact Create its Continuous Cycle of Improvement?

## Presenting: Suzanne Miel-Uken, Matthew Wojack & Malisa Pearson

- The theory of change was constructed during the planning year by all stakeholders as a map that began with our system of care values and desired results and connected those values and results to local strategies and activities needed to reflect and achieve them.
- The indicators of performance were developed to assess progress and the measures were embedded in strategies and activities to integrate evaluation and performance management. Also, data collected for the national evaluation were cross-walked with the local indicators and measures to maximize local use of the data.
- Key activities in the continuous quality improvement process (CQI) were designed to routinely engage all stakeholders in continuous data review, information creation, and decision making about improvements.
- The key activities in our CQI process are enhanced to that assure that the system of care values of family-driven, youth-guided, and culturally competent are driving performance monitoring and improvement.
  - a. Ongoing touch points with the Family Council, such as "blue sky" exercises during the construction of the theory of change to identify family-defined outcomes, review of quarterly CQI reports, assistance in the design of data collection methods and instruments, e.g., framing questions for families to assess the degree to which Family Advocate Support prepares them to be full participant in Child and Family Teams to develop care plans.

- b. Each work group and the Family Council digesting and applying findings from the System of Care Assessment Reports from the national evaluation by considering after each report is published, "What factors are contributing to high and low scores?" and "What can be done to sustain and enhance the high scores and address the low scores?"
- c. The Cultural Coalition review of the strategies and activities to maximize opportunities to strengthen cultural and linguistic competence.

# What Does It Take To Make A Knowledge Management Process Like This Work?

## Malisa Pearson, Matt Wojack, & Suzanne Miel-Uken

- Relationships, relationships, and relationships
- Leadership commitment to the system of care values and to evaluation as everyone's business—a tool for improving rather than judging
- Defining sustainability as the pursuit of community values, honoring our commitments, and improving our community (agreements can be broken)
- Supporting family and youth participation
- Strong facilitation and communication support from evaluators and system of care staff
- Recognizing and tapping into SAMHSA resources, e.g., consultation, technical assistance, and the national evaluation.
- Resisting over-engineering, i.e., too much performance measurement will sink the ship; make the hard call on the mix of performance indicators will meet the needs of stakeholders

# What is Impact's next step?

During the second year of implementation, Impact is honing in on the right mix of indicators, with an emphasis on outcome measurement, while continuously improving performance based on results and what the stakeholders believe they need to know in order to continuously improve our system of care. Another priority is strengthening youth involvement in the evaluation and improvement of the system of care.

# Session 26 >> 3:45-4:45 pm >> Room 12

# Symposium

# Strategies and Resources for Assessing and Improving Quality in School Mental Health

#### Chair: Sharon H. Stephan, Discussant: Dean Fixsen Presenting: Laura Hurwitz, Sharon H. Stephan, Paul Flaspohler & Carl Paternite

This symposium will review the unique efforts of national programs to advance school mental health quality.

The mental health efforts of the National Assembly on School-Based Health Care (www.nasbhc.org) will be shared, including a national training and technical assistance initiative and a CDC-sponsored school mental health capacity building project for state and local education agencies. Within this segment, presenters will guide participants through a QAI process using the Mental Health Planning and Evaluation Template. Finally, leaders from the Center for School-Based Mental Health Programs at Miami University (http://www.units.muohio. edu/csbmhp/) will describe their efforts to systematically assess the readiness and capacity of schools to adopt and implement researchbased innovation. This paper will review the literature on organizational and school readiness and capacity to adopt and absorb innovation, and participants will learn how to assess these dimensions in order to successfully identify, select and support the participation of schools in adopting research-based mental health programs. Dr. Dean Fixsen, Co-Director of the National Implementation Research Network, will serve as an external discussant to the symposium, and will consider the efforts to assess and improve school mental health quality in the context of Implementation Science.

# The National Assembly on School-Based Health Care: Mental Health Quality Improvement Efforts

## Presenting: Laura Hurwitz & Sharon Stephan

## Background

The National Assembly on School-Based Health Care (NASBHC; www.nasbhc.org) is a national membership organization aimed at supporting the 1700+ school-based health centers in the United States to assure that all children receive high quality, comprehensive health care. School-based health centers (SBHCs) provide many unique advantages in providing mental health services to students. As a result of their collaborative partnerships with schools, SBHCs can expand the community's mental health capacity and make optimal use of schools as an entry point to a full continuum of mental health services.

In studies of school-based health center (SBHC) service utilization, mental health counseling is repeatedly identified as the leading reason for visits by students, representing approximately one third to one half of all visits. Despite these figures, national surveys of SBHC health and mental health providers conducted by the National Assembly on School-Based Health Care indicate that not only are a variety of mental health services being delivered in SBHCs without the presence of an on-site mental health provider, but that both mental health and other health providers feel that they need further mental health training to effectively manage students' mental health needs.

## **Key Initiatives of the NASBHC**

The current paper will present findings from a two-year collaborative between NASBHC and the University of Maryland Center for School Mental Health (CSMH) to improve health and mental health providers' knowledge and utilization of evidence-based mental health interventions. The Mental Health Education and Training (MHET) Initiative also aimed to improve SBHC providers' effectiveness in mental health screening, diagnosis, coding, and referral. Participants in the MHET Initiative included mental health providers, nurses, nurse practitioners, physicians, physician assistants, and other SBHC staff. Participants engaged in a series of four intensive learning sessions, work-plan development, and monthly technical assistance from MHET faculty. Pre- and post-assessment and chart audit data from 19 SBHC sites in seven states will be presented. Results indicate improvement in the mental health screening and risk assessment process, mental health diagnosis process, the referral process, the use of evidence-based practice for mental health problems, diagnostic and procedural coding, and primary care and mental health integration. Qualitative data collected from key informant follow-up interviews will also be presented along with information about the MHET training and technical assistance process. Presenters will also review the assessment tools (pre- and post-assessments and chart audit tool) utilized to evaluate the effectiveness of school mental health quality improvement efforts.

Two other NASBHC mental health initiatives will be described. First, NASBHC is in its second of a 5-year CDC-sponsored cooperative agreement, School Mental Health Capacity Building Partnership, to support local and state education agencies in developing effective school mental health policies and programs. Presenters will share findings from stakeholder discussion groups in four early adopter states (Maryland, Missouri, Ohio and Oregon), including key themes and challenges. Information from these state discussion groups will be the basis of future capacity building in local and state education agencies. The second initiative is the establishment of an on-line tool for mental health quality assessment and improvement, the Mental Health Planning and Evaluation Template (MH-PET). In collaboration with the Center for School Mental Health, NASBHC has developed a tool for evaluating and guiding quality improvement on eight quality dimensions: operations, stakeholder involvement, staff and training, identification, referral, and assessment, service delivery, school coordination and collaboration, community coordination and collaboration, and quality assessment and improvement. Presenters will demonstrate the online tool, and will present findings from beta sites in Massachusetts and Washington.

# Strategies to Enhance the Dissemination and Adoption of Innovation in School Mental Health

## Paul Flaspohler & Carl Paternite

Given the well-documented problems in introducing new ideas to schools and sustaining innovative practices, it is critical that attention be given to understanding barriers and facilitators of the adoption and implementation of evidence-based practices (Flaspohler, Anderson-Butcher, Paternite, Weist, & Wandersman, 2006). Recently, increased attention has been focused on understanding and assessing readiness and capacity to adopt and implement research-based innovations (i.e., EBPs). Readiness is conceptually anchored in the literature of planned communication and diffusion of innovations, and knowledge transfer and change. Capacity includes consideration of both ecological level (e.g., individual, organizational) and type (general and specific to a specific innovation) (Flaspohler, Maras, Duffy, Wandersman, & Stillman, In press). Research on implementation and readiness for change suggests that inattention to forces and factors that impact adoption seriously jeopardizes any project seeking to introduce a new idea into an organization such as a school district or building. Readiness and capacity, therefore, become a crucial planning and surveillance activity.

## **Assessing Readiness**

Schools might be at different stages of readiness for program adoption and implementation if examined along a number of dimensions. In addition, schools may vary in levels of capacity to absorb and implement innovation. The primary purpose of this presentation is to describe research and technical assistance using systematic assessment of readiness and capacity to identify, select, and support participation of schools in absorbing innovations in school mental health.

An example of readiness assessment and of the identification, selection and support of schools to participate in a research-based program will be provided. Specifically, presenters will describe efforts to use systematic efforts to assure selection of pilot sites that were "ready" for the adoption of an evidence-based school improvement initiative, the Ohio Community Collaboration School Improvement Model. In addition to grant-making strategies geared toward eliminating sites that were not ready, presenters will describe systematic efforts to assess readiness for the adoption of innovation. Readiness of individuals within schools was assessed based on the A-VICTORY model (Davis & Salasin, 1975; Robbins, Collins, Lieaupsin et al., 2003). Results from the readiness assessments were used to inform the delivery of training and technical assistance in support of the implementation of the school improvement model. Findings indicate that the ongoing use of both grantmaking strategies and the ongoing collection of information related to organizational readiness assists in the adoption and implementation of effective practice programs and initiatives.

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# Session 27 >> 3:45-4:45 pm >> Salon C

## Symposium

# Outcomes Studies of Wraparound in the Mental Health, Child Welfare, and Educational Systems

#### Chair: Janet S. Walker, Discussant: Eric J. Bruns Presenting: Dawniel Baker, Kathy Cox, Lucille Eber, Kelly L. Hyde, Jeri Poplin, Jim Rast & John Vetter

The wraparound process is a team-based, collaborative process for developing and implementing individualized care plans for children with complex needs and their families. Wraparound is being applied in increasingly diverse settings, and the research base on its impact continues to develop. This symposium presents three outcomes studies, conducted in the context of child welfare, education, and mental health systems. The aims, design, and results of these studies provide an interesting reflection of the diversity of research efforts underway in the area of the wraparound process, and point to the broad range of relevant research questions inspired by wraparound. The discussant will comment on the contributions made by these studies to the overall wraparound research base, and areas in which continued research and evaluation is needed.

# Wraparound in Oklahoma for Children in Child Welfare Custody: Results of a Randomized Study

### Presenting: Jim Rast, John Vetter & Jeri Poplin

The wraparound process has been implemented and evaluated in multiple settings and systems, including mental health, education, juvenile justice, and child welfare contexts. To date, published results of controlled research have been generated for wraparound projects in all of the above settings. However, there are only two controlled studies that have been published to date that have focused on outcomes of wraparound as implemented for youth in child welfare, and none that have asked questions about the relative effectiveness of implementing wraparound care coordination through child welfare case workers vs. an intermediary care management organization.

This paper will report on a pilot study to provide wraparound for children and youth using higher levels of behavioral health services in the custody of child welfare. One hundred and six children and youth from Oklahoma County were selected and randomly assigned to one of three groups. Two groups of youth were enrolled in "high fidelity" wraparound, with one group receiving wraparound care coordination from care managers employed by a mental health agency and the other group receiving care coordination from child welfare case workers trained and credentialed to implement the wraparound model. The third group of youth received traditional child welfare and mental health services. Results found that the two "wraparound" groups had significantly better permanency, stability, wellness, behavioral and family outcomes than the control group. They also spent significantly less on behavioral health services. Outcomes differed in important ways for the two wraparound groups that had care coordination delivered by different types of professionals.

There were multiple challenges in providing high fidelity wraparound in this project and the data are discussed in terms of these challenges as well as lessons learned for moving forward with wraparound services for children and youth in the child welfare system.

# Impact of Wraparound within a School-Wide System of Positive Behavior Supports

Presenting: Lucille Eber & Kelly Hyde

## **Overview**

A key feature of School-wide Positive Behavior Supports (SW-PBS) is the ongoing use of data to facilitate positive change at all three tiers including the tertiary tier which includes the wraparound process to support students with the most challenging needs. Most critical is the use of data by individual student teams for purposes of making decisions about effective interventions and improve outcomes for students and their families. Competency with this type of data can guide the systems surrounding the child and family teams and in turn can make changes that support and sustain effective practice as evidenced by positive student outcomes. Historically, youth/family wraparound teams have not used data to guide decision-making and the use of data by schools for the purpose of driving proactive change at the individual student level has been slow to catch on and often difficult to sustain as well. Teachers, School Social Workers and other school personnel are often not trained in the use of data for purposes of facilitating positive change. This presentation will focus on how Tertiary level PBIS efforts in Illinois have targeted a paradigm shift around the use and attitudes surrounding student data in public schools employing a three level model of positive behavior supports. Included in the presentation is information related to the use and facilitation of data and data driven decision making at the tertiary level of PBIS. This presentation will culminate with the presentation of findings from the evaluation study conducted using FY 2006 individual student data. A summary of the study is presented below.

# **Evaluation Study Methods**

In FY 2006, an evaluation study was conducted on 26 students receiving wraparound services and enrolled in the SIMEO evaluation system. The purpose of this study was to evaluate the impact of students receiving tertiary level intensive school-based wrap planning within a system of positive behavioral supports, and to evaluate the use of databased decision making as a strategy to improve outcomes.

Participants in this study were Illinois public school students receiving school-based wrap planning between July 1, 2005 and June 30, 2006. Data were collected on students at baseline and one to three month intervals until discharge or graduation from the model. The flexible assessment frame of one to three months was recommended to allow for more frequent use of data since more frequent intervals are often needed for the purpose of intervention planning.

This study included 26 students with data at both baseline and three month. A sub-cohort of 10 of the 26 students (38%) also had additional data at the six-month assessment interval.

## **Assessment Tools**

Three assessment instruments were used to collect data on the students included in this study. The data collected on the tools reflective the perception of the team, to include school personnel, family and student. Perception data allows for team members to express their feelings and attitudes relative to strengths and needs in the areas of academic, emotional, behavioral and social functioning of the student. The assessment tools included the following:

**Referral Disposition Tool.** The referral/disposition tool is an 81-item tool designed to collected demographic, ISBE educational indicator and specific school behavior indicators. The tool is a composite of variables recommended/required for collection by IBSE and by ISTAC related programs to include PBIS. The tool is completed by the team facilitator in conjunction with appropriate team members. The tool is designed to be completed within one month of the initial team meeting and every 30-90 days thereafter depending upon the intensity of need of the student and family as determined by the team.

Data generated from this tool are used to develop the framework of the student/family file. ISBE outcome indicators are used to track change in a required set of ISBE related outcomes/goals such as graduation rates, standardized testing completion, etc. School behavior data are tracked and benchmarked over time to assess change in behaviors known to place students at risk of placement failure (office disciplinary rates, school suspension rates). These same behaviors are designed to serve as proxy measures of overall PBIS Initiative effectiveness.

*Educational Information Tool.* The education information tool has 43 items measuring various student academic achievement and classroom functioning as rated by the primary or lead teacher(s) of the student. Twenty-nine of the 43 questions measure these constructs using a 4 point likert scale. The tool is complete by the lead teacher or team of teachers most familiar with the student. The tool is designed to be collected within one month of the initial team meeting and every 30-90 days thereafter depending upon the intensity of need of the student and family. Data generated from this tool are used to assess change in the areas of academic achievement and classroom behavior.

*Youth and Family Functioning Checklist.* The Youth and Family Checklist tool is a 40 item tool designed to assess student strengths-needs in the areas of health/ safety, social, emotional, behavior and spiritual/ cultural functioning in the home, school and community environments. Each domain is comprised of at least 5 questions or items. Individual questions across domains are rated on a scale with 1 equaling, a *high area of need*, and 4 equaling, a *high area of strength*. The tool is completed by the Wrap facilitator/Coach and team members to include student and family when applicable. The tool reflects the perception of collective team member relative to the strengths and needs of the student. Perceptional assessment of strengths and needs by caring team members drives actions and effects the likelihood of greater integrity of interventions and better contextual fit.

The tool is designed to be collected within one month of the initial team meeting and every 30-90 days thereafter depending upon the intensity of need of the student and family. Data generated from this tool are used to assess student functioning and change in the areas of health/ safety, social, emotional, behavior, cultural/spiritual functioning in the home school and community environments.

# **Evaluation Study Findings**

The data gleaned from the evaluation study conducted in FY 2006 suggests that despite the small sample size, students continue to demonstrate significant and positive improvement in the home, school and community. When students receive intensive school-based wrap planning within a system of positive behavioral supports, significant gains are noted in the areas of educational, behavioral, social and emotional functioning. Most notably, as emotional and behavioral functioning improve classroom functioning and academic performance show remarkable improvement. Students once at risk of placement from home, school and or community significantly decrease this risk and are able to meet with success in all environments of living.

When students in need of highly individualized tertiary level support receive wrap planning and positive behavioral supports through a team based process, the students demonstrate significant gains in many life domains and areas of functioning.

While the data analyzed in the SIMEO Study have demonstrated significant and positive improvements for individual students, additional research is needed to develop the individual student level knowledge base. Studies are needed to determine what variables are most predictive of differing outcomes in students receiving comprehensive supports and services using a wraparound team approach. Additional research is also needed to determine how data used in the team planning process leads to improved outcomes for children and families. Research also needs to uncover factors that contribute to the use of data during the teaming process, as well as factors that contribute to the discontinued tracking of a student.

## **Recommendations and Considerations**

The SIMEO tracking system offers a unique opportunity in the state of Illinois to benchmarks outcomes of at-risk students receiving comprehensive supports and services through a wraparound team planning model. In the formative years of the SIMEO study, the opportunity to track these students presented itself one student at a time. The ways in which students were identified and included in the comprehensive intervention model was largely undefined with no consistent parameters for inclusion. Students presented in different ways, at different times, with differing levels of needs. The Wraparound Teaming Model was introduced as an effort to stem the flow of these same students from entering more restrictive placements.

The same principles and factors that serve as the hallmark of wraparound are often the same factors that can limit consistency and integrity with the evaluation and tracking methods. A model such as wraparound is predicated on joining with students and families who have differing levels of needs, and thus receive differing levels of supports and services. What constitutes a comprehensive array of services for one student may be vastly different for another. This present numerous methodology challenges; challenges that can serve as a barrier or an opportunity.

The Illinois State Technical Assistance Center (ISTAC) and the Illinois PBIS Network choose to look at these methodology challenges as opportunities for immediate learning and systems change. As a result, data have been used to establish parameters at all levels of the system. These data have helped to increase data-based decision making with wrap teams which ultimately results in improved outcomes for students, families and schools. In addition, the collection of data at the individual student level has allowed for the examination of the tools used to assess change and the systems used to collect and store individual student data.

This continual review of data over the course of the SIMEO tracking study has provided an opportunity to improve upon areas of weaknesses within the evaluation system. This has resulted in changes such as assessment tool restructuring and the development of a state of the art on-line data-based system currently under development with staff from ISTAC and Loyola University. The new individual student evaluation systems will be launched with the start of the FY 2008 school year. One of the top priorities from data gleaned from the FY 2006 and FY 2007 system is to continue to establish measurement validity and reliability of the SIMEO assessment tools.

# Who, What, and How of Wraparound: Factors Associated with Positive Outcomes

## Presenting: Kathy Cox & Dawniel Baker

## Introduction

While communities across the nation have embraced wraparound as an approach to serving youth with serious emotional or behavioral disorders, researchers have produced an evolving evidence base in support of its effectiveness. Investigators have also begun assessing the relationship between overall adherence to wraparound principles and outcomes for children and families (Bruns, Suter, Force, & Burchard, 2005). Little is known, however, about the specific client and service factors that are associated with positive outcomes for individual youth receiving wraparound. Presenters will share the results of a study conducted in a county in California that uses wraparound as a method for expediting the transition of youth from residential care to home settings. Public agency workers in this region have voiced confusion as to which children they should prioritize for wraparound and at what point in the youth's service trajectory they should be referred. Along with shedding light on who is most likely to benefit from this approach, and when referrals should be made, this study sought to clarify how wraparound should be implemented in order to be most effective in transitioning youth from residential to home care.

# Method

This retrospective study analyzes data obtained on youth who participated in wraparound between mid 2004 and 2007, as provided by a large community based organization. Relationships between a variety of client variables (gender, ethnicity, diagnosis, number of natural or collateral supports at discharge) as well as service variables (length of time in residential care prior to referral to wraparound, level of adherence to the wraparound principles) and outcomes (improvement in child functioning, achievement of treatment goals, transition to home setting) are examined. Child functioning at home, school, and in the community was measured at program entry and exit using the Child and Adolescent Functional Assessment Scale (CAFAS: Hodges, 1999). Adherence to wraparound principles was measured using the Wraparound Fidelity Inventory (WFI: Bruns, Burchard, Suter, Leverntz-Brady & Force, 2004), as administered to wraparound facilitators and caregivers.

# Results

**Description of sample.** The sample for this study included 176 youth that ranged in age from 7 to 18 years (mean = 14.6 years). A majority of the participants were male (56.7%) and Caucasian (55.6%), yet a sizable proportion were African-American (32.6%). Approximately 39% of the youth were diagnosed with an Anxiety Disorder, 29% with a Mood Disorder, 20% with Attention Deficit or a Disruptive Behavior Disorder, and 8% with a Psychotic Disorder. A large percentage of the participants were referred for wraparound by Child Protective Services (67.4%), with 27% referred by Mental Health and 5.6% by Probation Departments.

**Client variables.** Chi Square tests revealed that youth who met treatment goals in wraparound did not differ significantly from those who failed to achieve treatment goals (per wraparound facilitator report) on the basis of gender, ethnicity, or diagnosis. Similarly, participants who transitioned from residential care to a home setting did not differ from those who remained in group care on these demographic/diagnostic variables. *T*-tests demonstrated that children who met treatment goals had a significantly higher number of collateral supports at discharge than those who did not (t = -3.41; df = 108.06; p = .001). Likewise, youth who transitioned to a home living situation had a significantly higher number of support persons in their life (t = -2.625; df = 116; p = .01) than others in the sample.

Service variables. Non-parametric tests (Spearman's rho) found that the number of days youth were in out-of-home placement prior to enrollment in wraparound was not significantly correlated with pre-post changes in functioning, as measured by the CAFAS. Similarly, youth who met treatment goals or transitioned to a home setting did not differ in mean number of days in prior placement than youth who were not successful in achieving these outcomes. Significant correlations were found between improvements in child functioning and facilitator reports of fidelity to the principles of Child and Family Team (r = .274; p = .024) and Strength-Based Services (r = .243; p = .046). Youth who met treatment goals, as contrasted with those who did not, participated in a wraparound process that, by facilitator report, displayed a significantly higher level of adherence to the principle of Community-Based Services (Z = -3.47; p = .001). WFI Total Fidelity, by caregiver report, was significantly higher for youth who met treatment goals (Z = -2.002; p = .045) and transitioned to a home setting (Z = -2.651; p = .008) than for those who did not. From the perspective of caregivers, adherence to the element of Strength-Based Services was also significantly higher for youth who successfully transitioned to a home living situation (Z = -2.514; p = .012).

# Conclusion

This study suggests that when wraparound is utilized to hasten the movement of children from residential facilities to home and community based living situations, the questions regarding who should receive this approach and when it should be initiated may be less important than how it should be delivered. Here, wraparound appears most effective in achieving positive outcomes when it involves the development of a child and family team comprised of caregivers, informal helpers, and service providers who work in concert to enhance child and family strengths and link youth with community activities and resources. Also key in maximizing the benefits of wraparound is establishing youth connections with natural or collateral supports.

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# Session 28 >> 3:45-4:15 pm >> Salon D Screening within Juvenile Justice to Identify Service Needs across the System of Care

Presenting: Kay Hodges, Cynthia Smith & Mary Johnson Contributing: Bob Heimbuch & Lisa Martin

## Introduction

The "cross system" needs of youths accessing services via the juvenile justice system are well documented. It is estimated that at least one in five youths served by the juvenile justice system have a mental health disorder, even when conduct disorder is excluded (Teplin, Abram, McClelland, Dulcan, & Mericle, 2002). The Juvenile Access and Assessment Center (JAC) receives juvenile justice intakes and is the point of access for services for adjudicated juveniles in Detroit-Wayne County. A new diversion program (Correct Course) was developed in which the prosecutors' office refers the youth and family to JAC staff and receive recommendations for enrollment as an alternative to prosecution. The information garnered from the screening tool provides the basis for agreeing to alternative services, determining the need for more critical and intensive services, and selecting a service type to more specifically meet the needs of each youth and family. Youths are then assigned to a Youth Assistance Program (YAP) which is a community partner contracted to meet the service needs of the youths. Depending on the needs of the youth, the JAC also coordinates more intensive services for the youth with system of care partners.

This paper will describe preliminary results of two groups of youth being diverted in this program and explain how the service plan generated from the screening tool is used to determine which services the youth needs.

# Methods

## Subjects

The JIFF is being administered to two groups of youths who are first-time offenders: youth not-in-custody (NIC) but are petitioned for an array of offenses, and youth who are in detention pending preliminary hearings. To date the JIFF has been administered on 207 youths, 163 NIC youth and 44 detained youth. The ages of the youths ranged from 8 to 17 years (M = 14.9 years), with 62.3% of the sample being male. The sample was 63.3% African American, 29.5% Caucasian, 1.9% Hispanic, and 5.3% other.

# Measures

JIFF - Juvenile Inventory for Functioning. The JIFF (Hodges, 2004) assesses the youth's day-to-day functioning across 10 domains which are reported in this paper as the following subscales: School, Picked on by Peers, Non-compliance in the Home, Family Environment (reflects on undesirable behavior by others in the home, not the youth), Delinquency, Feelings (depression, anxiety, trauma), Self-Harm, Substance Use, and Health concerns. The JIFF was derived from the Child and Adolescent Functioning Scale (CAFAS; Hodges, 1989), which has strong psychometric evidence. The JIFF consists of a self-guided computerized interview that is available in two formats, one in which youths report about their behavior and the second, in which caregivers answer questions about the youth. The JIFF software generates a list of goals based on the respondent's answers and the staff then selects goals for the family and matches service recommendations to each goal. The result is a service plan that can be helpful in specifying treatment needs across the continuum of care. The JIFF can be administered repeatedly to track outcomes.

## Procedures

For the NIC youth, if they are deemed appropriate for the diversion program, the youth and their parents simultaneously do the JIFF immediately following the court session, using laptops that are connected to the facility's server. For youth placed in detention, the youth takes the JIFF before a preliminary hearing, which must take place within 24 hours of being detained. After the interview is finished, a JAC staff person uses the information from the interview to develop a JIFF service plan, which is shared with the court and the family.

## Analyses

Least-squares linear regression models were conducted. The predictor variables for each model were criminal charges, race, gender, and group (detention vs. not in-custody). Outcome variables were JIFF total score, and subscale scores for School, Picked on by Peers, Non-compliance in the Home, Family Environment, Self-Harm, Substance Use, and Health. Higher scores on a subscale indicate more problems. For each of the following regression models presented, results are reported as significant if the *p*-value was at least p < .05.

# Findings

## Group status

Controlling for the other predictor variables, youth in the detention group reported significantly higher total JIFF scores, Non-compliance in the Home, Family Environment, Feelings, and Substance Use subscale scores, compared to the NIC group.

## Charges

Charges are classified into three groups: (1) charges due to school truancy, AWOL from home or placement, or incorrigibility (Truant/AWOL), (2) charges related to assault and battery (A&B), and (3) the remaining charges, mostly involving property damages, (Property crimes). Controlling for the other predictors, Truant/AWOL youth reported significantly higher JIFF total scores, and higher scores in the following subscales: School, Picked on by Peers, Non-compliance in the Home, and Family Environment compared to the Property crimes group. A&B youth were found to report significantly more aggressive behavior, bullying, and threatening others in the neighborhood.

## Race

Controlling for all other predictors, white youth reported significantly higher scores on the Substance Use subscale than non-white youth.

## Gender

Controlling for the other predictor variables, females reported statistically significant higher scores on the Picked on by Peers, Family Environment, Feelings, Self-Harm, and Health related subscales. The self-harm scale can be broken down further into a dichotomous variable expressing suicide ideation, verbalization, or behavior. When this variable is run in a logistic regression model, females are five times more likely to report suicide ideation, verbalization, and/or behavior than males.

# Conclusion

The implications of these findings will be discussed, including the service needs of these youths, as well as the importance of system of care partners collaborating to meet these needs, despite the fact that youth first accessed care via juvenile justice. The JIFF has become an invaluable tool for engaging the families and youths and for relationship-building among various stakeholders, including service providers, prosecutors, and jurists.

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# Session 28 >> 4:15-4:45 pm >> Salon D Pathways to Serious Criminal Activity for Multi-System Youth

Presenting: Stephanie Romney, Deborah Sherwood & Sai-Ling Chan-Sew

**Contributing: Andrew Wong** 

## Introduction

Children and youth with emotional and behavioral disorders frequently have complex needs that require coordination and collaboration among multiple child-serving systems, such as the Public Health Department (Mental Health), Child Welfare, Juvenile Probation, and the Public School System. An innovative approach to sharing important information across these systems that has been developed by the San Francisco System of Care is an integrated database called the Shared Youth Database. This database contains child-level data from three of these systems, and data from the School System is expected to be added by the end of the year.

Developing a shared data system among publicly-funded systems is time-consuming and fraught with challenges. San Francisco County's children's mental health department began its efforts to create an integrated data system in 1999, and although buy-in was achieved within the first two years, it took an additional five years before all parties felt confident with the accuracy of the data. Seven years into our data system development, each department has begun to use the data in ways that are greatly enhancing their ability to provide seamless services to multi-system clients.

The goals of this presentation are twofold. One goal is to share a stepby-step guide for developing such a database, including lessons learned about the politics of data-sharing that facilitate agency cooperation. The second is to share initial findings from a study using data from the Shared Youth Database to examine the relationship between the timing of "crossing over" into all three systems and later commission of a serious crime. It was hypothesized that if such as relationship were detected, the findings could be use to identify intervention opportunities for multisystem youth prior to their commission of serious crimes.

## Methodology

This study utilized administrative data from the Shared Youth Database, an integrated database containing mental health, child welfare, and juvenile probation data for clients served from 1992 to 2007. Selected administrative data from the San Francisco Public Health Department, San Francisco Human Services Agency, and San Francisco Juvenile Probation Department are matched by Resource, Development Associates (RDA), an intermediary agency agreed on by all participating agencies. Matched data are updated in the Shared Youth Database on a quarterly basis by RDA. For this study, data were abstracted for analysis from the Shared Youth Database using Microsoft Access 2000.

During the study timeframe, 20,743 unduplicated clients under the age of 18 received one or more mental health services. Of these, 1,083 clients were identified as "cross-over" clients, those who have experienced both child welfare and juvenile probation involvement at some point during their lives. For 702 (65%) of cross-over clients, the child welfare

system was their initial portal into the multiple service systems, with mental health and juvenile probation accounting for 189 (17%) and 192 (18%), respectively, of initial client entries. Males accounted for 56% of cross-over clients. As seen in Table 1, African Americans are overrepresented in this cohort compared to the 7% of African Americans in San Francisco's general population. This over-representation is consistent with the over-representation of African American youth in the three human service systems represented in the Shared Youth Database.

Table 1 Ethnicity of Cross-Over Clients

Ethnicity	n	%
African American	716	66%
Latino	144	13%
White	70	7%
Asian / Pacific Islander	60	6%
Other	19	2%
Unknown	74	7%

## **Findings**

Of the 1,083 cross-over clients, 556 (51%) committed a serious crime, defined as a sustained juvenile probation petition for any of the following charges: WillIful homicide, manslaughter, forcible rape, robbery, assault, or kidnapping. Table 2 shows the ages of these children and youth at the time of the serious crime.

Table 2 Age at Commission of Serious Crime

Age at Incident	n = 556	%
Under 12	2	3%
12	45	8%
13	72	13%
14	122	22%
15	113	20%
16	96	17%
17	67	12%
18	28	5%

Notably, a third (33%) of these clients experienced involvement in all three child-serving systems prior to commission of the target crime. Of these,

- 6% committed the crime within 30 days of becoming a cross-over client
- 6% committed the crime between 30 and 90 days of becoming a cross-over client
- 88% committed the crime more than 90 days after becoming a cross-over client

## Conclusion

This presentation is comprised of two parts. The first is a step-by-step tutorial on how to navigate the political, financial, and technical waters in order to develop an integrated multi-agency database. The second part is a study examining the relationship between the timing of multi-agency service utilization and later commission of a serious crime. Findings from this study indicated that a third of cross-over clients who commit serious crimes have had contact with all three systems prior to committing the target crime. The study has raised a question about the feasibility of establishing procedures to automatically flag the record of any youth in the Shared Youth Database who crosses over into all three service systems. Any such flagging would require parental consent and be conducted with the intent of enabling case managers, probation officers, therapists, and other front-line staff to develop effective interventions for cross-over clients to facilitate positive mental health outcomes and reduce the risk of negative criminal justice outcomes. An integrated database provides a wealth of research and evaluation possibilities. Some next steps for research in the San Francisco System of Care include:

- Examining the influence of clinical characteristics, such as trauma diagnoses, on later mental health and juvenile justice outcomes,
- Examining the types of early mental health services that lead to positive school and juvenile justice outcomes, and
- Exploring differential outcomes for children by their agency of first entry.

# Session 29 >> 3:45-4:45 pm >> Salon G

# Symposium Community Programs for Transition-Age Youth: Process, Fidelity, and Outcome Findings

### Chair: Hewitt B. "Rusty" Clark, Discussant: Nancy Koroloff Presenting: Nicole Deschênes, Karyn Dresser & Mason Haber

Youth and young adults who have been diagnosed with serious emotional disturbance (SED) face enormous risks and challenges as they struggle to become adults. Challenges also exist in providing services and supports to this population. For example, differences in eligibility rules and the lack of enough developmentally-appropriate services often pose obstacles to providing assistance to young people with SED. However, emerging models to address the specific problems, developmental needs, and service barriers to success of this population have yielded some promising data suggesting some specific possibilities for addressing these issues

This symposium has been designed to contribute to the knowledge regarding program and system level strategies for assisting youth and young adults with SED in their transition to adulthood. The first presentation describes some of the evaluation results from a multi-site demonstration of services to support transition, showing the types of indicators that may improve during enrollment in these programs, the time course associated with their improvement, and individual characteristics that predict whether of not such improvement is shown. The second presentation will provide a description and evaluation results of a program designed and implemented based on the Transition to Independence Process (TIP) model indicating possible effectiveness of the program in addressing problems of transition-age young adults with especially severe difficulties related to their mental health conditions. The final presentation will describe a fidelity assessment protocol to assist transition program in the implementation of the evidence-informed practices described by the TIP model.

# Predictors of Progress among Youth in the Partnerships for Youth Transition Demonstration

### Presenting: Mason Haber Contributing: Hewitt B. "Rusty" Clark, Arun Karpur & Nicole Deschenes

# Introduction

The difficulties faced by youth with serious emotional disturbance (SED) in the transition to adulthood are well documented, including lower rates of employment and education, increased involvement in the juvenile and adult criminal justice systems, and greater difficulties performing daily activities due to their mental health or co-occurring mental health and substance abuse disorders (Vander Stoep, Davis, & Collins, 2000). Few data exist, however, on how these youth fare in their transitions when enrolled in community-based programs to support them in achieving successful transition related outcomes. Similarly, few if any data exist on which types of transition-related issues tend to show improvement among youth enrolled in transition support programs, the time course associated with these improvements, and individual characteristics that may predict degree of transition-related improvement. This paper presents data addressing these issues from the evaluation of the Partnerships for Youth Transition Initiative (PYT), a four-year, multi-site demonstration of community-based transition support programs for youth and young adults aged 14-25 with SED.

# Methodology

PYT sites and participants. Data were collected from the five demonstration sites involved in the PYT initiative. Site characteristics have been described elsewhere (e.g., Clark, Deschênes, Seiler, Green, White, & Sondheimer, in press). Certain site characteristics varied substantially, such as the characteristics of the youth that were served and the specific supports that sites offered. However, all sites emphasized evidence-informed guidelines for facilitating transition of youth with SED similar to those codified in the Transition to Independence Process (TIP) model (Clark, 1995, 2004) and received training and technical assistance to support their implementation of these TIP guidelines. Of the 562 youth served by PYT programs over the three year implementation period of the demonstration, 193 contributed data to the present analyses. These youth were selected due to having data collected over four or more quarters of program enrollment. In chi-square comparisons, the youth in the analysis were not significantly different from other youth enrollees on most of the individual characteristics considered in the analyses, with the following exceptions: they were less likely to be male and to have histories of juvenile justice involvement and were more likely to suffer from mood disorders (p < .05).

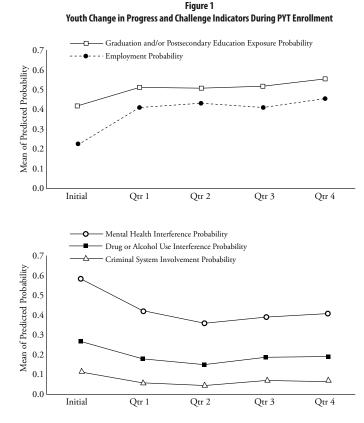
*Measures.* Data used in the analyses included demographic and background characteristics, their initial diagnoses, and the following dichotomous indicators of their transition progress and challenges for the 90 days prior to program entry and at four 90-day follow-up assessments: (a) employment status (i.e., employed vs. not employed); (b) educational advancement (i.e., graduated or received postsecondary education or training); (c) juvenile or adult criminal justice system

involvement; and severe functional limitations due to (d) mental healthrelated problems or (e) substance abuse-related problems, as indicated by provider ratings on items assessing functional impact of mental health symptoms or substance use.

**Analyses.** For all statistical tests, alpha was set at p < .05. Logistic regressions were used to predict changes in indicator probabilities across four categories of time (i.e., from initial assessment to Q4). Tukey tests were performed to ascertain differences between predicted indicator probabilities at consecutive quarters. In addition to the time variable, demographic and historical variables, variables representing current diagnoses, and a variable representing the site where services were received were entered both as main effects and as interactions with time. Variables were selected for final models using the Akaike Information Criterion (AIC; Akaike, 1983).

## Results

*Main effects.* Time effects controlled for the influence of covariates described change for all five indicators across time. The overall pattern of change across outcomes indicated increased probability of indicators of education and employment progress and decreased probability of indicators of challenges, with most of the change occurring in the first quarter of enrollment (see Figure 1). Tukey tests suggested additional probability increases from Q3 to Q4 on progress indicators, suggesting that improvements on these indicators, a significant probability decrement was noted from Q2 to Q3 assessments, suggesting possible tendencies for mental health or substance use disorder "relapse" among youth showing in programs following initial improvement.



*Interactions.* Significant interactions by site suggested that at the site level, improvements on education and employment indicators were relatively more consistent than improvements mental health and substance abuse challenges. Interactions by age indicated that participants over 18 were more likely to show improvements on several indicators than younger participants. Demographic variable interactions suggested that females tended to show better outcomes than males. Interactions also indicated that improvement was less likely for individuals with disruptive behavior diagnoses. Interactions involving substance abuse diagnosis and history of substance abuse treatment suggested these youth may experience delayed progress relative to other youth. Correspondence between this pattern and the additional overall increment in education and employment probability from Q3 to Q4 suggested that the delayed overall increase was due to youth with substance use problems.

## Summary

Findings from the evaluation showed that youth improved on a variety of indicators during their program participation, with consistent improvements shown in the areas of employment and education across all programs. Youth over the age of 18 were particularly likely to show improvement Other findings suggested that program elements addressing specific types of problems such as substance abuse and disruptive behavior disorders may enhance the effectiveness of these programs, and that efforts may be needed to guard against returning mental health and substance abuse difficulty following initial improvements in these programs.

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# Stars Transitional Age Youth Program: Youth Demographics, Utilization and Outcomes

Presenting: Karyn Dresser Contributing: Katie Censky & Peter Zucker

# Introduction

Stars CS Transitional Age Youth Program (TAYP)<sup>1</sup> is designed to address the serious problems facing older youth and young adults, ages 18 to 25, with serious mental illnesses (SMI) as they "age out" of the child mental health system in Alameda County, California. The program's transitional age youth (TAY) experience the many documented problems of their peers nationally-high rates of school dropout, arrests, and unemployment, and low rates of independent living compared to young adults without disabilities (e.g., Wagner, Newman, et al, 2005). In their pasts, and often quite recently, TAYP clients have met medical necessity criteria for treatment in secure settings and are returning to community living at the time of enrollment. Many stay involved with the TAYP through early adulthood. The presentation provides select qualitative and quantitative data from an annual program evaluation including information about the service model, population, utilization, and contracted performance outcomes. These include decreases in use of crisis and hospitalization services after the program when compared to periods before and during enrollment.

# Methodology

**Program model.** A comparative cross-walk of the contracted program model and operation was conducted using checklists derived from: (a) California's Mental Health Services Act (MHSA) as it applies to TAY programs; (b) Transition to Independence Process (TIP) System Development and Operations Manual (Clark, 1995, 2004); and, (c) Assertive Community Treatment (ACT) literature (e.g., Phillips & Burns, 2001) case management practices effective for adults with mental illnesses. The purpose was to clarify the concordance of best practice models to the TAYP and identify quality improvement needs. The cross-walk was amplified by a consultative visit by researchers from the National Center on Youth Transition for Behavioral Health (NCYT/FMHI/USF).

*Measurements.* Stars CS participates in the SBHG outcomes program and routinely gathers data with respect to four key domains safe at home/family-like settings, attending and progressing in school/ vocationally, improving in health/mental health, and out of trouble with the law—in addition to demographic and diagnostic information. Measurements are taken upon admission, every six months or annually, and at the time of discharge and are trained to during in-services with ongoing quality assurance provided by SBHG and program staff. Tools include mandated ACBHCS Community Functioning Evaluations (CFE); SBHG Client Outcomes Report (COR), young adult satisfaction/ housing surveys; and, California's Mental Health Performance Outcome and Quality Improvement (POQI) surveys. Data in the county billing system includes service utilization and placements of TAYP clients over time, including before and after TAYP involvement.

*Analyses.* From the practices checklists, congruent vs non-congruent features were collaboratively identified by stakeholders and program experts. Descriptive statistics were used to tabulate demographics, diagnoses, and utilization. An alpha of p < .05 was used for all statistical tests including paired samples T-tests and Chi Square tests. CFE data have variable scaling transformed into *z*-scores prior to analyses. Regression analyses were used to assess CFE change scores as a function of service

time among clients with matching data. An iteration history of crisis and hospitalization episodes was developed for any/all clients with one or more such episodes during the six months prior to and after TAYP service with GENMOD and GEE Model procedures applied to estimate rate changes over time.

# Results

Program model. The cross-walk of program models culminated in a detailed Professional Services Plan that identifies both operational program features as well as developmental next-steps. The TAYP helps focus community resources on supporting housing and vocational training needs, as well as promotes community advocacy by TAYP clients themselves. For examples, staffs have: (a) developed close relationships with vocational rehabilitation resulting in workability options for TAYP clients; (b) evolved a network of board and care facilities-screened and willing to accept program clients as residents; and, (c) sponsored TAYP clients to serve as participants in county-level planning processes. A recent accomplishment includes the extension of the TAYP eligible age range from 23 to 25 which came about due to young adult advocacy. Examples of developmental steps being worked on: (a) Increased formalization of collaborative treatment team process; (b) Hiring of Peer Advocate to co-facilitate groups and peer counseling; (c) Implementation of TIP oriented QA checklists; and, (d) Use of a strengths interview with each young person.

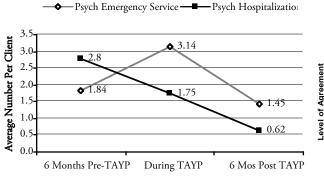
Client profile. During sample FY 05-06, the TAYP served 122 young adults with an average age of 19 years at enrollment. Roughly half (52%) were males under age 20. African Americans made up 51% of the service population, followed by Anglo Americans (22%), Latinos/Hispanics (14%) and Asian Americans (8%). Clients came from sixteen Bay Area cities; 47% in Oakland. At the time of program enrollment, they were living in institutional settings (19%), community settings such as Board and Care, friends or family (45%), or temporary shelters/homeless (7%). Upon enrollment, many (41%) of the young adults were without a source of income. Some (13%) were on public assistance. Program staffs work closely to facilitate clients' obtainment of disability income and help clients with schooling and vocational accomplishments, which are limited historically (e.g., 20% completed high school, 50% unemployed at enrollment). Clinical diagnoses include 49% of clients with major mental illness (psychotic spectrum); 43% internalizing disorders (e.g., depression, bipolar); and, 10% externalizing disorders (ADHD, conduct). Community functioning evaluations indicate 50% of clients also struggle with substance abuse.

*TAYP utilization.* The program served 350 youth since inception in 1998. On average, each year there have been 31 enrollments, 23 discharges, and an annual census of 79. The program has grown over its eight years of operation reaching 48 enrollments, 44 discharges, and an annual census of 122 by FY 05-06. The length of TAYP enrollment among the 44 clients discharged during FY 05-06 ranged from 30 to 2,079 days with an average of 768 days. A quarter of the clients were discharged by 298 days and a quarter remained in services beyond three and half years.

*Sample of outcomes.* Analyses of CFE data reveal a relationship between functional improvements (decreases in impairments) and length of TAYP enrollment, with respect to the broad domains of activities of daily living, social relationships, and symptom management. In particular, length of enrollment accounts for a good amount of the variance in symptom management ratings (Adj. R2 of 0.57). The findings are corroborated by DSM IV-TR Axis V (GAF) gains based on an analyses of 30 matched pairs (68% of FY 05-06 clients) with an average score at admission of 44.9 (*SD* 9.2) compared to discharge of 48.6 (*SD* 8.7), a statistically significant ( $p \le .05$ ) improvement in functioning. Follow-up data were analyzed for 181 discharged clients served June 2001 to June 2006 at six months post discharge. There are positive results for pre to post reductions in emergency

<sup>1</sup> Affiliate of Stars Behavioral Health Group (SBGH), President Mary Jane Gross, RN, MN. Stars CS Administrator is Sandra Simmons, LCSW. SBHG including the TAYP was a recipient of a 2006 National Council on Community Behavioral Healthcare Service Excellence Award which noted the application of evidence-informed practices and vigorous quality assurance and outcomes program.

Figure 1 **Psychiatric Emergencies and Hospitalizations** 



services, hospitalizations, and lengths of acute episodes (p < .001), particularly for hospitalizations. The average length of acute episodes was 16 days before to 5 days during to 1 day after TAYP (see Figure 1).

Bringing assertive case management to clients' housing needs has been an important quality improvement effort over the past few years, and will continue into the future. There has been an upward shift in clients' positive perceptions regarding different aspects of their housing situation on many discrete questions (e.g., access to phone and emergency services, having someone in the home available to help, contributing to upkeep of the home, perceiving people are positive about renting to youth; see Figure 2).

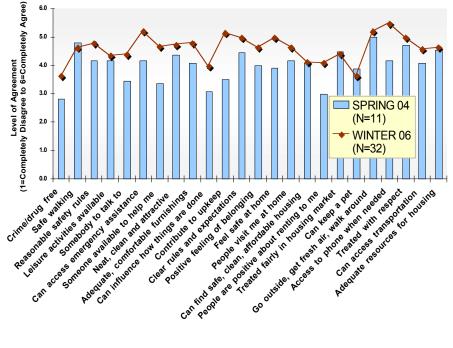
## Conclusion

As a program, the TAYP has moved through early developmental years to become the largest provider of support services to transitional age youth in Alameda County. The program is well poised to evolve into a full TIP model having approximated many TIP features during its development. The findings regarding client outcomes contribute to the nascent literature that suggests youth and young adults can achieve improved outcomes with mental health treatment and caring attention to life transitions within a supportive community (Clark, Pschorr, Wells, Curtis, & Tighe, 2004; Karpur, Clark, Caproni, & Sterner, 2005).

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Figure 2 **TAYP Housing Surveys Client Perceptions of Housing Issues over Time** 



Wagner, M. Newman, L., Cameto, R., Garza, N & Levine, P (2005). After high school: A first look at the post school experiences of youth with disabilities. A report from the National Longitudinal Transition Study -2(NLTS-2). Menlo Park, CA: SRI International.

# **Evaluating Fidelity of Community Programs for Transition-Age Youth**

## Presenting: Nicole Deschênes Contributing: Hewitt B. "Rusty" Clark, & Joanne Herrygers

## Introduction

6.0

The Transition to Independence Process (TIP) system was developed to assist youth and young adults (14-25 years old) with EBD in making successful transitions into adulthood, and acheive their potential in the transition domains of employment, education, living situation, and community life functioning (Clark & Foster-Johnson, 1996; Clark, Deschênes, & Jones, 2000). To accomplish this goal, personnel at all levels of the service system apply the following seven TIP guidelines: (1) engage the young people; (2) tailor supports and services to be accessible, coordinated, developmentally-appropriate; (3) acknowledge and develop personal choice and social responsibility with young people; (4) ensure that a safety-net of support is provided; (5) enhance young persons' competencies; (6) maintain an outcome focus; and (7) involve young people, parents, and other natural and community partners in the TIP system at the practice, program, and system levels.

Many community sites, including a federally funded set of sites, the Partnerships for Youth Transition (PYT), have adopted the TIP model for serving these young people. Details regarding development of the TIP model, evaluations, tools and the PYT initiative are available through: http://tip.fmhi.usf.edu and http://ncyt.fmhi.usf.edu.

The Comprehensive Program for Transition-Age Youth: Program Fidelity Assessment Protocol, AKA the "Transition Fidelity Assessment" (Deschênes, Herrygers, & Clark, 2006; Deschênes, Clark, & Herrygers, 2007) measures program adherence to the TIP model's structural and process components. Fidelity measures and protocols provide site stakeholders with information as to the strength of the implementation of their program model and assist them in improving the quality and effectiveness of the transition system over time.

This presentation provide an overview of the application of the Transition Fidelity Assessment protocol in a community program for transition-age youth and young adults and their families. The unique features of the fidelity protocol, application of it, findings from its use, **and** implications of this fidelity assessment process are presented.

## Method

The Transition Fidelity Assessment protocol Version 2.0 (Deschênes, Herrygers & Clark, 2006) was applied at a PYT transition site in Utah, which operated out to two Community Mental Health Centers (CMHCs). Investigators from the National Center on Youth Transition performed data collection activities during a 3-day site visit.

*Data collection methods.* Methods included (a) focus groups with young people and parents or other informal key players in the youth's transition; (b) document reviews of youths' files; (c) interviews of site's transition program personnel and program administrator; and (d) surveys of transition program personnel, program administrator, young people, and parents or other informal key players. Other site documents were furnished prior to the visit (e.g., program mission statement, logic model, admission criteria, operations manual, demographic information on youth being served and on the geographic catchment area, policies and procedures, fiscal funding sources).

Young people with at least 6 months of program exposure were placed in the eligible pool, then were randomly selected for record review and participation in a survey and/or focus group. Parents or other natural supports of the enrolled young people were also randomly selected and invited to participate in a focus group session. Informed consent was obtained from both youth and family members involved in this assessment. In addition, a fidelity semi-structured interview protocol and survey were administered for some of the transition facilitators and all of the program supervisory.

Randomly selected youths' files (n = 7, e.g., assessments, transition plans, progress notes and correspondence with other service providers) were reviewed to determine the extent to which planning and service documentation reflected the TIP system guidelines. Two focus groups were held with young people (n = 19, 11 male; ages ranging from 14 to 25), and one focus group included parents and other informal key players (10 participants). Focus group sessions were recorded and participants were given gift cards.

The program fidelity assessment protocol was used to collect data to measure fidelity scale elements. Table 1 presents items listed on the anchored scale as well as number of sub-elements for each item. For each item, there are multiple sources of data.

Following on-site data collection, assessors rated all elements on a 5-point Likert-type scale ranging from 1 (*not implemented*) to 5 (*fully implemented*). When assessors' ratings differed, they discussed the data and selected an agreed upon rating. Ratings proved reliable (96.43%) through cross-ratings. Ratings were then averaged to produce a site average rating, and an average for each level of the 5-point scale. These average ratings gave an overall measure of the extent of implementation of the 56 fidelity items for this site.

The resulting fidelity assessment report shared scores, graphic representation of the data, as well as direct quotes from the interviews. The report allowed stakeholders to discuss the findings, celebrate program strengths, and examine possible options for system improvement.

#### Table 1 Transition Fidelity Assessment Anchored Scale: Process and Organizational/Structural Items

#### Process Items (36)

- . Engage young people
  - Strength-Based (2)
  - Person-Centered Planning (4)
  - Prevention Planning (1)
  - Culturally-Competent (2)
- Tailor supports and services to be accessible, coordinated, and developmentally-appropriate
  - Access to Services and Supports (2)
  - Coordination of Supports and Services (1)
  - Tailored Services and Supports (3)
- Acknowledge and develop personal choice and social responsibility with young people
  - Use of Social Problem-Solving Methods (1)
  - Personal Accountability (1)
- 4. Ensure that a safety net of support is provided;
  - Involvement of Key Players (3)
  - Mediation (1)
  - Unconditional Commitment (3)
- 5. Enhance young persons' competencies
  - Assessment of Transition Needs (1)
  - Skills teaching (1)
  - Community/Natural Social Environment (1)
  - Self-Advocacy (1)
  - Self Sufficiency (1)
- 6. Maintain an outcome focus
  - Measurable Goals & Objectives (1)
    - Assessment of Progress (2)
    - Continuous System Improvement (2)
- Involve young people, parents, and other natural and community partners in the TIP system at the practice, program, and system levels
  - Involvement in the Transition System Governance & Stewardship of Program (1)
  - Advocacy & Networking (1)

Organizational & Structural Items (20)

- 1. Staffing (3)
- 2. Caseload (1)
- 3. Staff Management and Supervision (3)
- 4. Access to Consultants/Experts (1)
- 5. Continuity of Services (2)
- 6. Training (2)
- 7. Admission Criteria (2)
- 8. Outreach (1)
- 9. Location and Accessibility of Services (2)
- 10. Hours of Operation (1)
- 11. Community Resource Development (1)
- 12. Financial Management (1)

## **Results and Findings**

This section presents examples of observations and findings from this application of the Transition Fidelity Assessment. Table 2 presents the summary of findings for this site related to TIP guideline #6 from the fidelity report; a similar summary was provided for all protocol items.

A majority of the site's scores (71%) fell in the 4 to 5 range indicating high adherence to the TIP model (see Table 3). However, the percentage of scores in the mid and low range (29%) indicates that Utah project has opportunities to improve adherence to the model and thereby improve outcomes.

Guideline 6: Maintain an outcome focus in the TIP system at the young person, program, and community levels.

rengths:	Opportunities:
<ul> <li>rengths:</li> <li>Every 90 days, program personnel create reports from data collected using the following instruments:</li> <li>Agency Acuity Assessment</li> <li>Ansell-Casey Life Skills Assessment</li> <li>Strength Discovery Assessment</li> <li>National Center on Youth Transition (NCYT) Historical/Initial/Quarterly Transition Assessment</li> <li>Program distributes consumer satisfaction surveys.</li> <li>Outcome data are reported to SAMHSA, the Steering Committee, Councils, Board of Substance Abuse, the mental health centers, and also included in a flyer distributed to the state legislature.</li> <li>Program implemented improvements (e.g., youth council, Casey Life Skills Assessment) as a result of data analysis.</li> <li>Data are used to improve effectiveness of training.</li> <li>Outcome data at the individual level was prepared with input from the young person.</li> <li>Young people received charts showing individual pooples. The charts inspired young peosle.</li> <li>Data were stored in an online</li> </ul>	<ul> <li>Opportunities:</li> <li>Although the staff involved young people in assessing status, the young people reported that they were unaware of the transition goals document in their plans.</li> <li>Young people and parents were not satisfied with handling of complaints. Some youth reported that there is no avenue for complaints. Some youth address complaints with facilitator or parent, but others worry about the impact of their complaint on others. The complaint procedure is too complex for addressing the day- to-day issues that arise during transition planning and activities.</li> <li>Sometimes, adult systems fail to understand the special needs of youth and present roadblocks to transition process and service improvements.</li> <li>It was reported that greater involvement by family members would greatly assist program personnel with the implementation of process improvements.</li> <li>Collect program level data to use for program improvement.</li> <li>Sometimes, transition facilitators are challenged to find material to improve classes</li> </ul>

 Data were reviewed to identify trends and top issues. Progress data was perceived to be of practical use.

analysis.

#### Table 3 Fidelity Assessment Scores by Score

Score	# Definitions	Percent of Total
5	13	23%
4	27	48%
3	14	25%
2	2	4%
1	0	0%
Total	56	100%

Findings suggest that transition personnel were working with youth in a way that is highly consistent with key TIP principles, and that adherence to practice guidelines related to encouraging youth voice and youth decision-making were particularly strong. In fact, 35 of the 56 TIP practice guidelines received a mean rating of 2.5 or better. Only three of the 56 TIP practice guidelines received a mean rating of 1.9 or lower (on a scale of 1 = low to 5 = high). Overall, scores for three TIP principles pointed to particularly high fidelity: providing coordinated services and supports, providing safety net, and providing services that are competency-based. Lower scores were assigned for practices related to involvement of family members and key informal support in the transition process.

## Conclusion

In this study, results from the Transition Fidelity Assessment provided site stakeholders with detailed documentation of the consonance of their daily practice with the program model they are attempting to implement. While this assessment confirmed relatively high fidelity to key TIP model principles and related practices, it also identified areas that could be improved upon, including the need for more staff training and supervision on the TIP system, and greater efforts to involve family and informal key players in the transition process. Counties and states now call for agencies and communities to adopt evidence-based practices, however increased attention and funding, as well as on-going assessment, will be needed to ensure programs and practices are implemented with sufficient fidelity to improve outcomes for those being served.

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# Session 30 >> 3:45-4:45 pm >> Salon H

## **Symposium**

# Applying the Knowledge on Effective Practices for African-American Children, Youth and their Families: Implications for Preventive, Early and Intensive Intervention Strategies

## Chair: Vivian Jackson, Discussant: Regina Hicks Presenting: Janice Cooper, Vivian Jackson & Erika Van Buren

This symposium examines factors from the knowledge base that support the implementation of effective strategies for African-American children, youth and their families in the system of care. Using a developmental framework and drawing upon different settings, the presenters explore the role of ethnic identity development and perceptions of self on school outcomes, as well as their implications for protective factors associated with mental health promotion and prevention of mental health problems. Within the context of youth receiving mental health treatment they highlight a range of treatment choices for attention-deficit hyperactivity disorder (ADHD) focusing on new empirical evidence that supports the effectiveness of psychosocial treatments for ADHD. This evidence is considered within the context of African-American families' historical ambivalence regarding the use of stimulant-only treatment for ADHD. Presenters also explore the culturally-specific mechanisms by which an Africentric treatment paradigm is delivered for children and youth of African-descent in child welfare through the lens of a community-based agency. Collectively these papers contribute to the research on the role and experience of community, familial and cultural factors on improved access and outcomes. They shed light on the family structures and values, historical experiences and other culturallyembedded factors in the design and delivery of interventions within multiple ecologies. Presenters discuss the relevance of the findings to behavioral health policy and practice reforms.

# School Experiences Among African-American Adolescents: Implications for Ethnic Identity Development and School Adjustment

Presenting: Erika Van Buren

## Introduction

Early adolescence has been identified as a period of increased risk for poor school adjustment in youth of color (Carnegie Council on Adolescent Development, 1995). The process of negotiating the developmental tasks of young adolescence, while adjusting to the demands and expectations of the school environment, is made significantly more challenging by the threat of negative stereotypes and inequitable treatment experienced within their schools and communities (Munsch & Wampler, 1993; Spencer & Markstrom-Adams, 1990). Schools, in particular, provide children and youth with one of the first and most powerful experiences of the social world outside of the home environment, and have the potential to shape internalized perceptions of self and subsequent behavior. The research literature suggests that perceptions of the school environment are particularly important for the school functioning of African-American youth (Haynes, Emmons, & Ben-Avie, 1997; Kuperminc et al., 1997, 2001). The quality of social experiences within this environment may be particularly important for creating a nurturing school "village" that protect Black youth from such threats to the development of a positive academic self-concept, school engagement and adjustment. This study examines the role of experiences with discrimination and perceptions of fairness and rule clarity at school

in shaping ethnic identity and the expression of behaviors that serve to promote or threaten positive school adjustment in a sample of young African-American (n = 273) adolescents.

This study is unique from prior research investigating the school adjustment outcomes of youth from diverse ethnic backgrounds in that it assessed direct experiences with discrimination in diverse contexts, and utilized a multi-dimensional and phenomenological conceptualization of ethnic identity. Four primary questions were tested with structural equation analyses:

- 1. Are perceptions of school fairness associated with specific experiences with educational, institutional, and peer discrimination;
- 2. Do perceived discrimination, school fairness and ethnic identity affected school adjustment (school engagement, unexcused absences, Spring term GPA, and aggression);
- 3. Do school fairness perceptions and experiences with discrimination differentially impact components of ethnic identity; and
- 4. Does ethnic identity serve as a partial social-cognitive mediator of the relationship between the context variables under study and school adjustment outcomes.

## Methodology

Participants attended the 7th grade at one of eight participating public middle schools that serve low-income communities in the Los Angeles metropolitan area. Self-report data was collected to assess perceptions of school fairness, experiences with discrimination and ethnic identity, while reports from teachers and school records were obtained for data on school adjustment outcomes. Multivariate analysis of variance and structural equation modeling was utilized to investigate the relationships between and among the variables under study.

# Results

Results suggest that relative to students of other ethnic groups, African-American students appeared to experience the school environment as less fair, to perceive lower expectations from others within the school, and more negative perceptions of how others view their ethnic group relative to students from other ethnic groups. Conversely, African-American students tended to report significantly higher ratings of ethnic pride. For these students, higher ethnic affirmation was associated with higher teacher-reported school engagement, higher Spring GPA, and lower reports of aggressive behavior.

African-American students in general who reported more frequent peer and educational discrimination reported significantly lower ratings on ethnic pride. More frequent perceptions of institutional and peer discrimination, were associated with lower school engagement and higher ratings of aggression by teachers among African-American students.

Findings also suggest that for African-American girls, more positive perceptions of the school climate are strongly associated with how positive they feel about being a member of their ethnic group. Moreover, for African-American girls, perceptions of the more global school climate were related to their experiences with discrimination from peers, within the school and in the community. Perceptions of discrimination appeared to predict reports of aggression within this group. For African-American boys, experiences with institutional discrimination (discrimination within the larger community) appear to fit into their conceptualization of what it means to be a member of an ethnic group. In addition, ethnic identity had significant effects on unexcused absences, Spring GPA and teacher-reported aggression for African-American boys, suggesting that ethnic identity perceptions may be particularly relevant to African-American boys' school functioning.

## Conclusion

Findings lend support to the association between students perceived experience with discrimination, their experiences of the school environment as a whole, and the subset impact of these phenomenological experiences on ethnic identity and school adjustment. Based on these findings, future directions for continued research on the role of school ecological factors that differentially shape the process of identity development and adjustment in young African-American are provided. Implications for school policy reform addressing the connection between specific school practices, the fostering of positive and caring relationships, and the development of positive ethnic and cultural identity in youth are also explored. Finally, suggestions for developing individualand family-centered school-based interventions that address the unique stressors experienced by youth of color are also explored.

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# Addressing Disparities in Access for African-American Children with Attention-Deficit Hyperactivity Disorder (ADHD)

**Presenting: Janice Cooper** 

## Introduction

The purpose of the presentation is to re-examine data on access to "guideline level" care for African-American children and youth with attention-deficit hyperactivity disorder (ADHD), based on recently published studies on the efficacy of psychosocial interventions, and address the policy implications (Jensen et al., 2007).

## Background

In 2004, guideline level care for the treatment of ADHD consisted of stimulant treatment alone when there was no other co-occurring conditions; and stimulant treatment in combination with psychosocial interventions (combination treatment) when other conditions were present (MTA Cooperative Group, 1999). Psychosocial interventions alone for children with ADHD and no other conditions were determined to be ineffective. Parameters for treatment choices were based on standards of care determined by the Multimodal Treatment Study (MTA). In 1999, the MTA, the largest ever randomized controlled trial, established that guideline level care did not include psychosocial treatments alone. Race, particularly African-American, predicted treatment guidelines, a study of four years of Medicaid utilization patterns suggested that White children were more likely to receive guideline level care, although the disparities diminished over time (Cooper, 2005).

Recent data from the MTA puts psychosocial treatment alone on par with other interventions, stimulants only and combination treatment (Jensen et al., 2007). The author analyzes treatment patterns for children and youth using this new information with data from a state Medicaid program for FY 1996-2000. Special attention is paid to how race factors in as a determinant of care. Given the newly released data on effective care, a new analysis is undertaken to establish whether racial disparities in treatment persist when the use of psychosocial treatment only is included in the standard of care. This study raises questions about the timing of policy pronouncements and support for evidence-based treatments. It asks: when do we have sufficient evidence to support large-scale implementation?

# Methods

Using data from the Florida Medicaid program, the author proposes to analyze claims and enrollment to examine treatment choices using logistic and multinomial logistic regression. Treatment choice categories include: no mental health treatment, stimulants only, behavior treatment only, combination therapy, and a residual/community treatment category. Each treatment choice will be treated as equal in effectiveness in light of the new study. Independent variables include: age, race, gender, Medicaid eligibility category, urbanicity, severity indicator, and contraindication indicator. The study population encompasses children and youth ages 3-18 with six or more months of continuous enrollment who have a primary or secondary diagnosis of ADHD. Over 105,200 children and youth with ADHD are included in this analysis.

## **Findings**

Previous analysis of this data reinforced prior studies that showed treatment choice trend patterns that were inconsistent with guideline level care (Cooper, 2005; Hoagwood, Kelleher, Feil, & Comer, 2000). Race and service intensity predicted treatment choice. Over time,

decreases in disparities in access to guideline level care resulted from White children being less likely to receive evidence-based treatment, rather than African-American and other children of color receiving care that was empirically supported. Prior analysis also found that compared to African-American children and youth, White children and youth were less likely to receive psychosocial only treatments for ADHD, then deemed below standard of care. We anticipate that new analyses will find similar treatment choice patterns.

# **Conclusion/Implications for Policy**

The MTA findings that psychosocial treatments alone for children and youth with ADHD and without co-occurring disorders was not indicated treatment based upon empirical studies radically changed the debate on outcomes for children and youth in the late 1990s (Goldman, Genel, Bezman, Slanetz, & Council on Scientific Affairs American Medical Association, 1998). There was evidence for the enhanced efficacy and effectiveness of stimulants alone for children with ADHD compared to psychosocial treatments in the face of traditional and cultural skepticism of the use of psychotropic medications for children and youth. Indeed, there was a backlash against the use of medications for ADHD treatments that found its way into policy statements at the state and local levels to ban the use of stimulants (Cooper, 2004). In addition, African-American families' reluctance to embrace the stimulant only treatment choice became a factor in many analyses of treatment patterns (Bussing, Schoenberg, & Perwien, 1998). Concern and reluctance by families of color, particularly African-Americans, are rooted in historical fears to use psychotropic medications and appear to be borne out by the latest MTA findings. Is "science" catching up with community responses? As ambassadors of science, what is role of researchers of color in this debate? What are the implications for the field in decisions about when the evidence is good enough to push widespread implementation?

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# Africentrism and Kinship Care: A Study of Implementation and Meaning

**Presenting: Vivian Jackson** 

## Introduction

Many children who are receiving mental health services through systems of care or other community based child serving programs are residing with grandparents and other kin. Many of these caregivers struggle with a variety of issues because they had not anticipated parenting additional children when these children entered their homes. Fortunately, there are some social services available to caregivers to help enrich their capacity to parent these children, but what are the outcomes of these services? Do they make a difference in the lives of the families? Does it make a difference if the services are culture-specific?

This presentation explores the impact of Africentric practice in service delivery to caregivers of African descent. Specific research questions were: (a) How does an organization transmit an Africentric paradigm to providers and service participants? And (b) what meaning (if any) does the transmission of an Africentric paradigm have to service participants? Or to service providers?

# Methodology

To examine the question of meaning, a symbolic interaction theoretical framework was used as a foundation to guide the methodology and analysis. This qualitative case study of the Kinship Care Program of an Africentric social services agency used institutional ethnography including, participant observation, semi-structured interviews and examination of documents over eighteen months. The data analysis was conducted through a combination of template analysis as described by King (1998) and thematic or open coding as guided by Strauss and Corbin (1998).

The researcher observed agency meetings, in-service training, team conferences, parenting classes, social events for the caregivers and children, social events for the staff, and agency rituals. The researcher accompanied workers on visits with caregivers. The interviews included senior management, trainers and supervisors (named, "fidelity monitors"), caregivers and front line workers. The documents included public materials such as the web site and brochures, administrative documents, and clinical records and correspondence.

The initial template was developed from review of the literature on Africentrism and Africentric practice and modified following member check with the fidelity monitors for accuracy as intended by this particular agency. From that template, the researcher coded the data for the themes listed in the template. Open coding and further analysis was conducted to identify themes related to meaning and implementation. Member checks were conducted with each category of respondent to refine the themes and interpretation.

## **Findings**

The analysis of the data revealed that the agency demonstrated each of the elements listed in the literature on Africentrism and Africentric practice to a greater or lesser degree. The most predominant themes were *the importance of relationship, balance, authenticity, rituals, and spirituality.* The strategy to implement an Africentric practice was by attempting to create a culture, complete with defined beliefs, norms, values, rituals and practices, language, artifacts and transmission strategy, within the organization that reflected the values and principles of Africentrism. The agency attempted to select staff members who were knowledgeable about or open to learning about their approach to Africentric practice, required coursework and certification in the method, and used supervisory methods to reinforce the approach. As an organization there was clear effort to use the values and principles in all interactions between members of the workforce at all levels and with all interactions with clients and members of the public.

The success in implementing this practice was impeded by contextual forces external to the agency such as contractual requirements of funding entities, limited funding, and refusal to provide contracts because of Africentric or spiritual orientation. There were also impediments from within the organization due to such factors as mixed feelings of the staff members regarding Africentrism and strains on culture maintenance as the organization grew.

Therefore, the caregivers actually received a modified Africentric service. In the analysis of the meaning attached to this service, the caregivers were adamant about the importance of the *authentic, caring relationships*. It was the authentic, non hierarchical relationship such as, "social worker like a friend" or "counselor like a daughter," that stimulated self-efficacy as a "parent" and gave them "hope" about their own ability to be effective caregivers for these children. This relationship was a central factor in the engagement process between the caregiver and the worker which in turn contributed to the nature of their participation in services and their satisfaction with the services. This method was clearly effective in addressing their needs in terms of their care providing roles and stability for the children and youth.

### Conclusion

This study affirmed a positive role of Africentric practice for kinship caregivers of African descent. This culture-specific intervention served as a base to strengthen the engagement and thus the *participation* (Littell, 2001) of the family members. This factor is particularly important as a factor that influences the opportunity of positive outcomes.

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# Session 31 >> 3:45-4:45 pm >> Salon I

### Symposium

## Missing Data and Multiple Imputation: An Overview and Application of Techniques

### **Chair: Elizabeth Stuart**

Missing data occurs in nearly all children's mental health services research. It is important to understand the consequences of missing data, as well as techniques for dealing with it. Traditional methods such as complete case analyses-which discard all individuals with any missing data-often rely on unreasonable assumptions and may lead to misleading results. This symposium describes a more principled approach for dealing with missing data-multiple imputation. The first talk in the symposium provides an overview of missing data, why it is a problem, and how to investigate missing data, as well as an overview of multiple imputation procedures. The second talk presents steps and suggestions on how to do multiple imputation, using freely available and easy to use software. The third talk discusses techniques for analyzing multiply imputed data and presents findings from a study that used multiply imputed data. The methods and ideas from each discussion are illustrated using data from the Children's Mental Health Initiative, a federally funded program to develop systems of care for children and adolescents with serious emotional disturbances. All three talks focus on implications and practical applications of these methods in order to make them more accessible to a wide range of researchers.

# Handling Missing Data: The Motivation and Method of Multiple Imputation

### Presenting: Elizabeth Stuart Contributing: Melissa Azur, Constantine Frangakis & Philip Leaf

Nearly all research in mental health services has to deal with missing data. Individuals do not respond to surveys or only partially complete surveys, and administrative data often has missing values. Datasets such as that collected for the National Evaluation of the CMHS Children and Their Families Program potentially provide a wealth of information on children's mental health services, however there is also substantial missing data. Data collected on 9185 children as part of the National Evaluation longitudinal study across 45 sites that received funding from 1997 through 2000 are used to illustrate these issues. The 12-month follow-up rates of these children ranged from 93% to 0%. At baseline, some variables, such as DSM-IV criteria, are observed for only 70% of the children, and other variables are observed for only 30%. Researchers need to understand the consequences and solutions for dealing with missing data in order to make full use of datasets such as this, and to ensure that accurate results are obtained.

This talk will first describe the three types of missing data: missing completely at random, missing at random, and not missing at random (Rubin 1974), and consequences for data analysis. We will then discuss methods for dealing with missing data, including simple approaches such as complete-case analysis. We will highlight the method of multiple imputation (Rubin 1987; Schafer & Graham 2002).

An analysis that simply drops all individuals with incomplete data can lead to bias if there are differences between the individuals with and without missing values, and can be inefficient because it does not utilize all available data. A simple approach to dealing with the missingness is to fill in (or "impute") the missing values. However, analyses that use standard single imputation (imputing one value for each missing value) will underestimate the true variability in the data because they do not account for the fact that the imputed values are not in fact the true, observed data. Single imputation will thus result in variance estimates that are biased towards zero, which will lead to anti-conservative results in terms of higher significance levels (lower *p*-values, shorter confidence intervals) than are valid.

Multiple imputation uses the observed data to predict (or "impute") the missing values. This imputation is done multiple times to account for the uncertainty in the imputations. The analysis after multiple imputation is run separately on each "complete" imputed dataset, with the results combined across datasets using combining rules that account for the variability both within each imputed dataset and across the imputed datasets. With new procedures such as "multiple imputation by chained equations" (MICE) available in standard software packages, multiple imputation is becoming increasingly easy to implement and use. MICE procedures iterate through the variables in the dataset, imputing each variable one at a time while conditioning on all others (Raghunathan et al. 2001). In particular, the missing values for a given participant are predicted from that participant's observed values, using relations observed in the data for other participants. This is accomplished by running a series of regression equations. In each regression, a variable with missing values is regressed upon other variables used in the imputation process. The resulting regression model is used to predict the missing values for that variable. The process then moves to the next variable with missing data, where that variable is regressed upon all the other variables and previously generated predictions. The process continues in an iterative manner until all missing values have been imputed. A benefit of using the MICE procedure is that the regression models reflect the types of variables being imputed, with, for example, binary variables modeled using logistic regression and continuous variables modeled using normal linear regression.

In this talk we will discuss multiple imputation methods both in the context of researchers who need to impute missing data, as well as researchers who are using publicly-available data sets that have already been imputed using multiple imputation techniques (such as the National Health Interview Survey). The discussion will be motivated and illustrated using the CMHS data described above. After this talk, researchers will have a better understanding of the types of missing data, how to investigate the effects of missing data in their datasets, and the differences between methods for dealing with missing data.

### References

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### Guidelines and Suggestions on How to Multiply Impute Missing Data

Presenting: Melissa Azur

### Contributing: Elizabeth Stuart, Constantine Frangakis & Philip Leaf

Missing data is a common problem in mental health research and increasing attention has been given to methods of handling missing data. The limitations and assumptions that underlie listwise deletion, mean substitution, and single imputation have encouraged researchers to consider multiple imputation techniques. In recent years, there has been growth in the number of software packages that multiply impute missing data, however, there are few practical guidelines available that discuss how the imputation should be conducted. This talk will provide information on how to multiply impute missing data and the questions, considerations, and challenges that researchers may face when employing these techniques. Data from the National Evaluation of the Comprehensive Community Mental Health Services for Children and Their Families program (CMHS) will be used to illustrate these points.

Once patterns of missing data have been examined and the decision has been made to use multiple imputation techniques, many researchers are presented with the question "where do I begin?" This talk presents suggestions on steps that can be taken to make the multiple imputation process proceed smoothly, based on our experience in imputing data with IVEware, free software that runs through SAS. Many of the suggestions presented here are relevant irrespective of the software used.

The multiple imputation process can be broken down into four broad steps: preparing to impute data, creating the imputation model, checking the imputation model, and running diagnostics on the imputed data. While it may be tempting to ignore the first step and immediately begin creating the imputation model, substantial time and effort will be saved if researchers first focus on developing a clear understanding of the nature of the data.

In preparing to impute data, it is useful to create a list of all of the variables in the dataset, group them by type of variable (categorical, continuous, etc.), and note how the variable is coded. This list will be helpful when it comes time to create the imputation model, check the specification of the model, and run diagnostics on the imputed data. As this list is being created, it is also important to make note of data that are missing by design. In the CMHS data, there were a number of variables that respondents answered only if a previous question was endorsed. For example, a child who endorsed smoking marijuana, would then be asked about age at first use and frequency of use. If a child did not endorse marijuana use, then the follow-up questions appropriately contained missing values. Researchers want to ensure that the imputation model is constructed in such a way that these values remain as missing.

Once an understanding of the data has been achieved, the next step in the imputation process is to build the imputation model. In IVEware the variables have to be specified as to their type (continuous, count, categorical, mixed) and the list generated in the previous step will be useful here. When specifying variables, researchers need to decide whether to impute item level variables or summary level variables. Points of consideration for both options are presented and discussed.

A number of model specification options are available. For example, it is helpful to specify restrictions and bounds in the imputation model. These can be used to address missingness by design and to prevent inappropriate values being generated for certain variables. In large datasets, such as the CMHS, it may also be useful to specify step-wise selection. Otherwise, all variables (e.g. the 396 variables used in this study) would be included in each regression model. Additional issues to consider when building the imputation model are presented. Once the imputation model is specified, the next step is to run the model and then check the model's specification. This is often an iterative process whereby an imputation model is specified, imputed data is created, the data is examined, and the imputation model is then modified. Given the length of time required to impute a large dataset (the CMHS data took an estimated 10 hours for one dataset to be generated), it is suggested that researchers begin the process on a subsample of the data and use one or two iterations rather than the ten iterations that will ultimately be used. This allows the creation of imputed data in a matter of minutes rather than hours and will aid users in building the final imputation model in a timely manner.

Once the imputation model has been run, a number of steps should occur to ensure that the imputed dataset was properly generated. IVEware provides summary statistics and the actual regression models for each variable, and taken together this information is useful in evaluating the imputed data. Examples of generated output are presented and signs of potential problems with the imputed dataset are discussed. Potential problems often result in the imputation model being re-specified. With large, complex datasets it may take many iterations of creating an imputation model, generating imputed data, and reviewing the data for errors before researchers are satisfied with the model.

Once the final imputed datasets have been created, the last step in the imputation process is to run diagnostics on the imputed data. Diagnostic methods are presented and include both graphical and numerical comparisons of the pre- and post- imputed data. Implications for variables identified as problematic are discussed, as well as options for assessing the imputation model's sensitivity to change. Finally, if the imputed data will be used by multiple people, it is important to develop documentation that clearly explains how the imputed data was created, factors to consider when analyzing the imputed data, and resources on how to analyze imputed data.

This talk presents information and suggestions on how to multiply impute missing data. Examples, points of consideration, and lessons learned are illustrated using the CMHS dataset mentioned earlier. After this talk, participants will have a better understanding of how to multiply impute missing data, as well as tools and resources that can be applied to their own research.

### Employing Multiply Imputed Data to Examine Disparities in Service Use Among Children

### Presenting: Crystal Barksdale Contributing: Melissa Azur & Philip Leaf

### Introduction

Racial minorities have the greatest unmet need for mental health services (e.g., Bui & Takeuchi, 1992; McCabe et al., 1999). African Americans in particular face challenges in accessing and receiving appropriate care. This is a concern given that delays in service utilization increase the risk that psychiatric problems will worsen. Developing an understanding of racial differences in mental health service use is complicated by the fact that contextual factors likely influence the relation between race and service use. For example, income may account for race differences or psychiatric diagnosis may modify the relation between race and service use. Despite the increased emphasis among policy makers on reducing health disparities, there has been little investigation into differences in service use or factors that modify the relation between race and service use between African American and Caucasian children. Therefore, it was hypothesized that African Americans would be less likely than Caucasians to have used any past year mental health services and that they would have used a fewer number of service agencies than

Caucasian children. It was further hypothesized that the relationship between race and past year mental health service use was modified by the child's psychiatric diagnosis. These hypotheses/aims will be examined within the context of using multiply imputed data.

### Method

The data for this study come from the National Evaluation of the Comprehensive Community Mental Health Services for Children and Their Families Program (CMHI). Twenty-four percent of the sample was missing data on key variables and thus, multiply imputed data was used. Analyses were conducted using random effects regression models and results were combined using Rubin's rules for combining multiply imputed data. The sample (n = 3,649) included African American and Caucasian children between the ages of 5 and 18 years, with a diagnosis of mood, anxiety, or externalizing disorders, from 43 grantee communities that received funding from 1996 through 2000. Mental health service use was obtained from caregiver report. Psychiatric diagnoses were extracted from clinician records. Challenges using the multiple imputed data and the multiple imputation commands are discussed. These include how to determine the most appropriate set of commands to prepare the data for analyses, which commands to use to conduct the primary analyses, appropriate methods to examine sample characteristics, and how to troubleshoot limitations in the available multiple imputation commands to test differences (i.e., a *t*-test,  $\chi^2$  test) between variables.

### Findings

African American children were less likely to have received past year mental health services compared to Caucasian children (OR = .57; 95%) CI: .45-.71). When psychiatric diagnosis, referral source, functional impairment, and sociodemographic characteristics were taken into account, race was no longer significantly associated with past year service use. Race was associated with number of service agencies used, such that the expected number of service agencies used decreased by 10% for African American children. When other characteristics were taken into account, this association approached, but no longer reached statistical significance. There were no significant interactions between race and psychiatric diagnosis in either model, however, there was a significant interaction between race and referral source on the number of mental health service agencies used. African American children referred from juvenile justice had a lower expected number of service agencies used in the past year than Caucasian children referred from juvenile justice. There were no racial differences in number of service agencies used by children referred from a mental health agency.

### Conclusion

The results of this study have important implications for efforts to understand and reduce racial disparities in children's mental health service utilization. In unadjusted analyses, there were significant differences in service use between African American and Caucasian children. Once contextual factors were taken into account, these differences were no longer significant. This illustrates the importance of considering factors related to the child's health and environment when examining racial disparities.

There was a significant interaction between race and referral source on the number of service agencies used in the past year. Though African American youth are disproportionately involved in the juvenile justice system, the results from the present study suggest that they are not receiving the same range of mental health services as Caucasian youth referred from the juvenile justice system (e.g., Pumariega et al., 1999). These differences could result in an exacerbation of their psychiatric problems and a need for more intensive services once they enter treatment. Interventions to reduce racial disparities in children's mental health service utilization should address cultural and contextual factors that influence service utilization, and focus early attention on African American youth in the juvenile justice system.

Finally, in addition to adding to the literature on disparities in children's mental health service utilization, this study also represents an effort to examine these issues in the context of using multiply imputed data. Missing data is a reality that researchers must address. Standard approaches such as list-wise deletion, mean substitution, and single imputation have limitations that researchers are often unwilling to accept. Multiple imputation is one technique that addresses many of these limitations and has become increasingly accessible to the broader research community. This was demonstrated in the present study. Using the multiply imputed data was generally straightforward. Additional preparation was required to understand how the original data was imputed and to understand the necessary steps in analyzing imputed data. Resources were available to gain this knowledge and resulted in a successful experience in working with multiply imputed data.

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# Session 32 >> 3:45-4:45 pm >> Salon J

## Participatory Research in an Urban American Indian Community

### Presenting: Jami Bartgis Contributing: Chad Johnson

### Introduction

In 2005, Indian Health Care Resource Center (IHCRC) was awarded a Circles of Care (CoC) grant to plan a system of care for urban American Indian youth in Tulsa, Oklahoma. As a part of this planning effort, the initiative included the completion of a community-wide needs assessment. Although research has, in many ways, failed to benefit tribal communities, changes have been made in the way in which research is conducted with native communities. Participatory Research is about putting the people in charge of addressing the problems they face in life with one of the main premises being that people must benefit from the research conducted in their communities (Davis & Keemer, 2002). The IHCRC CoC Initiative used a community based model for conducting the Needs Assessment and Service System Description. A review of the methods, outcomes, and lessons learned will be reviewed.

### **Methods**

At the start of the project it was recognized that community members would need to be employed to assist in the evaluation. Two FTE community coordinators were hired based on their familiarity with the culture and community. These coordinators began organizing community events such as dinners, indoor stomp dances, and storytelling. These events were critical to get the community together to start talking about mental wellness. As the community became more familiar with emotional health discussion, these events began to provide training on research and a community-based approach to evaluation. Once these trainings were completed, staff recruited community members to participate in one of two ways: either as Community Researchers or as Advisory Board Members. Several of the Community Researchers also chose to participate in the Advisory Board.

Community Researchers went through multiple trainings on ethics, IRB requirements, research methods, conducting key informant interviews, focus groups, and surveys. These researchers assisted in data collection and some also provided assistance to the evaluator on coding qualitative data.

The Advisory Board met monthly during the duration of the initiative. This board worked to guide project activities, develop evaluation questions and evaluation instruments. Once all the data was collected, the board assisted with data interpretation and some presented data to a broader urban Indian audience. The all Indian board was widely represented of the community, having a strong elder presence and active voting youth membership.

### **Outcomes**

In partnership with project staff, Community Researchers conducted 55 key-informant interviews, 11 focus groups, and 663 community surveys. One of the most important accomplishments was the Community Researchers ability to conduct interviews with the spiritual leaders and "ceremonial" people in the urban Indian community. This was no easy task and required months of communication before the interviews could even begin. Another important accomplishment was that the Advisory Board became empowered to take ownership of the data for the benefit of their community. One important indication of this was the community board negotiating with the university partner to change language in the contract making data "jointly owned" and all publications "jointly approved."

The project's advisory board used data from the evaluation to develop a comprehensive mental health service system model for Tulsa's American Indian youth. Their decisions about how to expand services, partners to include, and future research activities were founded in the data they had collected. One important example of their ability to apply the data came from an important partnership that was made with the state mental health department on the Anti-Stigma Campaign. More specifically, the data the community had collected about mental health stigma provided a baseline for designing an anti-stigma campaign that focuses on American Indians.

Another important use of the data was the recognition of the limited number of substance abuse treatment and prevention services that were available for youth and that alcohol abuse was the number one concern for American Indian adolescents in Tulsa. Further the group identified that this gap was a problem all over the state. This data was presented at the Oklahoma Policy Academy and as a result, expansion of adolescent substance abuse services was included in the Academy's recommendations to the legislature for 2008.

One of the most important outcomes is the development of new research questions and projects within the group. The Advisory Board is now working to examine the impact of acculturation on substance use within Tulsa's American Indian youth as well as partnering on a National Institute of Mental Health grant to plan for a community assessment of strengths and resiliency.

### **Lessons Learned**

There were many lessons learned along the way. The first and most important is the time. It takes much longer to conduct research with true community involvement and participation. Development of research measures and data interpretation took many months. The connection to the spiritual leaders was an even longer process with discussions lasting as long as 8 months prior to interviewing. The evaluation took all of two years to complete before data could then be used in application.

Second, for the Tulsa urban Indian community, social connections were incredibly important to the evaluation. Fortunately, the Community Coordinators hired in the beginning knew this and insisted on scheduling *consistent and ongoing* community events in which providing food was a cultural must! Knowing this, it is important that any community-based research initiative in similar Indian communities have a budget for food and such activities.

Third, the project staff keeping up with community involvement was an ongoing process. There were certainly ebbs and flows in participation throughout the years. Some of the things that helped included personal contacts, providing transportation and child care to meetings and interviews, and continuing to educate about the importance of this data in a larger community context. There was an ongoing educational piece to teach and model to the community to be consumers of data. The community having faith in the initiative and trust in the process was vital. The trust that has been built in this community using a culturally relevant approach to evaluation has been essential to the application of data. It is anticipated that the effects of this community's work will be far-reaching for years to come.

### Reference

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# Monday, February 25 - 5:00 pm

Session 33 Room 11	Symposium—Out of the Lab and Onto Our Streets: Findings from Three National Evaluation Efforts on the Use and Implementation of Evidence-Based Practices in Community-Based Service Settings	Page 151
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	Implementation Factors for Evidence-Based Practices within Children's Mental Health Systems of Care	
	Presenting: G. Kurt Moore	
	Evidence-Based, Trauma-Informed Practices and Resources: Adoption, Use and Implementation in the National Child Traumatic Stress Network Presenting: Elizabeth Douglas	
	Training Retention and Utilization: The Impact of Suicide Prevention Training Activities on Youth-Serving Professionals and Their Communities Presenting: Kathleen Jones	
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Room 12	Symposium—Creating a Research Agenda to Promote Effective School-Based Mental Health Services	Page 154
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# Session 33 >> 5:00-6:00 pm >> Room 11

## Symposium Out of the Lab and Onto Our Streets: Findings from Three National Evaluation Efforts on the Use and Implementation of Evidence-Based Practices in Community-Based Service Settings

### Chair: Christine Walrath, Discussant: John Fluke Presenting: Elizabeth B. Douglas, Kathleen E. Jones & G. Kurt Moore

The implementation of evidence-based practices (EBPs) for children in the context of developing intervention systems is daunting and complex. Major questions arise concerning the degree to which it is desirable and possible to implement such practices in complex service delivery settings. Are such practices generally accepted by practitioners, agencies, and communities and are some of these entities more accepting than others? What beliefs and attitudes are present and how are these related to actual implementation? To what extent are the practices implemented in a fashion that reflects fidelity? How are practices being adapted to address considerations of cultural competency? What is involved in adapting practices to meet the needs of various target populations? How broadly are certain practices being implemented and to what degree have they been adopted? Addressing such questions is critical to our evolving understanding of how best to implement and sustain such practices.

The purpose of this symposium is to present information on this topic from the perspective three different national evaluations addressing mental health services for children and adolescents in three contexts: systems of care, child traumatic stress, and suicide prevention. Each evaluation has implemented sophisticated survey designs and instrumentation to assess the extent to which practitioners and communities are addressing EBPs. The presentations will describe the underlying evaluation assumptions and questions, methodology including various incentive structures as reward for respondent participation, and findings to date. Discussion will focus on lessons learned and overall patterns that may be reflective of the status of adoption and implementation.

### Implementation Factors for Evidence-Based Practices within Children's Mental Health Systems of Care

### Presenting: G. Kurt Moore

Contributing: Carolyn Lichtenstein, Michelle Dimeo & John Fluke

### Introduction

Systems of care provide the context for organizing and delivering an array of community-based services necessary for successfully treating children with serious emotional disturbances and their families. The selection and implementation of evidence-based practices appropriate for specific communities or target populations can be difficult; however, an in-depth understanding of the challenges and issues inherent in translating research to practice can facilitate this process.

Findings from the national evaluation of the Comprehensive Community Mental Health Services for Children and Their Families Program / Child Mental Health Initiative (CMHI) and its special studies have demonstrated the need for increased and more intensive investigation into evidence-based treatment implementation factors. For example, in a survey of providers affiliated with systems of care communities, most providers reported that they did not typically implement evidence-based treatments fully, according to the recommended protocol (Walrath, Sheehan, Holden, Hernandez & Blau, 2005). This same survey indicated that the provider knowledge base around effective practices was strong and suggested that other contextual factors, such as varying organizational supports, may be responsible for less than full implementation.

The purpose of the Child Mental Health Initiative Phase V Evidence-Based Practices (EBP) Study is to examine the effects of diverse factors on the implementation of EBPs in communities funded in 2005 and 2006 and to increase understanding of approaches that facilitate EBP implementation. In an effort to include each of the 30 communities funded in 2005 and 2006, the EBP Study includes a multi-level, mixed-method approach to the collection of information from multiple respondent groups within and across communities. The EBP Study is comprised of five substudies: (1) Assessment of Planned EBP Substudy (APEBPS); (2) Provider Practice Substudy; (3) Community Readiness Substudy; (4) Evidence-Based Practice Experiences Substudy; and (5) Combined Provider Practices, Community Readiness and Outcomes Substudy. This symposium paper reports on initial results from the first cycle of the Provider Practice Substudy, supplemented by data from the APEBPS Substudy.

### Methods

The overall design of the study is multi-level and mixed method. The APEBPS Substudy involves a review of planned implementation of EBPs among all communities funded in 2005 and 2006, conducted through a review of the grant applications and ongoing communication with the local communities. The Provider Practice Substudy involves the administration of the Evidence-Based Treatment Survey-Revised (EBT-R), which is composed of the Evidence-Based Provider Attitudes Survey (EBPAS) (Aarons, 2004) and the Organizational Readiness for Change scale (ORC) (Lehman, Greener, & Simpson, 2002). The survey provides contextual detail concerning the knowledge and use of EBPs among providers (N = 400) delivering services to children referred into system of care communities. Project directors, affiliated mental health agency directors/supervisors, and representatives of the administrative or management organizations (N =60) overseeing the implementation of the system of care are also invited to participate. This group is invited to complete the Organizational Readiness for Change Scale-Director version (ORC-D).

*Analyses.* Data analysis for the APEBPS is largely qualitative and descriptive. Data collected with the EBT-R will be analyzed both qualitatively and quantitatively. As this is largely a descriptive study, traditional quantitative statistics (e.g., means, standard deviations, percentages) will be used to profile the extent to which clinicians are aware of and utilize EBP in routine practice. Knowledge and practice of EBP will also be compared across systems of care grouped by primary focus of the served population (e.g., children in protective custody, youth involved with juvenile justice, youth transition to adult services). Data analysis for the ORC-D will be combined with EBT-R data for multilevel modeling, allowing for the discovery of agency/organizational factors, as well as provider characteristics, that are associated with the implementation of EBP.

### Findings

Results from the initial APEBPS Substudy identified a number of practices qualifying as evidence-based that grant communities funded in 2005-2006 planned to implement. Survey data collection of practitioners and administrators will continue until January 1st; after that date, analyses will be performed. It is anticipated that these analyses will address several key issues, including: the level of acceptance for several EBP practices by practitioners and treatment agencies, the range of beliefs and attitudes about these practices and how these are related to actual implementation, facilitators and barriers to the adoption of EBP, and, the extent to which practitioners report they are implementing these practices with fidelity.

### Conclusion

The systems of care communities funded in 2005 and 2006 have generally demonstrated broad support for evidence-based practices by describing a diverse array of EBPs being considered for the system of care program they are implementing. Communities that had EBPs already in use were continuing to use them and were often interested in adding more. This seems to indicate that any initial distrust of EBPs is often reduced through positive experiences and/or results. It will be important to learn how these initial understandings are transformed through ongoing evolution of beliefs and knowledge about EBP, and the impact of this on actual implementation.

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### Evidence-Based, Trauma-Informed Practices and **Resources: Adoption, Use and Implementation in** the National Child Traumatic Stress Network

**Presenting: Elizabeth Douglas** 

Contributing: Charles Seagle, Elana Light, Christine Walrath, John Gilford, Jr. & John Fluke

### Introduction

Children's experience of traumatic events can lead to a wide range of psychopathologies and other negative consequences capable of having lifelong effects and intergenerational impact (Hubbard, Realmuto, Northwood, and Masten, 1995). Research has shown that intervention at the appropriate time can dramatically affect whether and to what extent children and adolescents recover from trauma (Goenjian, Karayan, and Pynoos, 1997); however, even in the case of treatments found to be effective, the protocols are not necessarily implemented consistently and are not being translated into practice often enough (Silverman, Kurtines, and Hoagwood, 2004).

The National Child Traumatic Stress Initiative (NCTSI) is positioned to play a pivotal role in supporting the translation of research to practice in addressing child traumatic stress. The initiative funds 45 specialized centers that develop and implement evidence-based, trauma-informed practices, approaches, and systems to meet the needs of children and adolescents exposed to traumatic events. Funded since 2001, the centers-collectively, the National Child Traumatic Stress Network (NCTSN)-pursue the NCTSI mission of improving services for children and their families through research, training, dissemination, and service delivery. NCTSN centers serve youth with diverse demographic and clinical characteristics and address a variety of types of traumatic exposure including physical and emotional abuse and neglect, community violence, natural disasters, war-

This presentation reviews findings from the Adoption of Methods and Practices Study, part of the national cross-site evaluation of the NCTSI. The study assesses the extent to which evidence-based, trauma-informed treatments, service modalities and related resources, particularly those disseminated by the NCTSN, are being adopted and implemented by NCTSN-affiliated clinicians and other child-serving professionals. Research related to diffusion of innovations (Rogers, 2003; Silverman, Kurtines, and Hoagwood, 2004) and evidence-based practice implementation (Fixsen, Naoom, Blase, Friedman & Wallace, 2005) influenced the study approach to examining contextual factors that facilitate or hinder adoption and implementation processes on multiple levels (e.g., individual, organizational, community and national). Sample research questions include:

- 1. How many unique, trauma-related practices are in the process of being adopted by NCTSN centers and affiliated providers?
- 2. What types of practices are most widely adopted?
- 3. What methods are used to introduce practices to be adopted and implemented?
- 4. What are the factors that facilitate or hinder the implementation of practices?
- 5. What are the pathways to practice adoption and implementation? The information obtained through this study will enhance

understanding of the pathways through which adoption and implementation occur, common barriers, and best practices leading to successful adoption and implementation.

### Methods

The study design consists of a two-stage annual data collection effort including: (1) a Web-based survey of all centers to determine the degree to which specific practices are in process of being adopted, and related contextual factors and (2) interviews with a subset of centers to collect additional in-depth, qualitative information about adoption and implementation. The Web-based survey began in August 2007. Respondents including administrators (n = 84), evaluators (n = 30) and service providers (n = 595) were invited to participate through a five-stage email invitation process. Survey data collection will continue through November 30, 2007, at which point second stage data collection (i.e., the telephone interviews) will begin. The interview is semi-structured and designed to elicit information related to the following domains: practice implementation history and status, organizational culture, internal support infrastructure, NCTSN support, past experience, organizational readiness, and staff attitudes (appeal, likelihood of adoption, openness, and divergence from current practices). Through use of a team-based qualitative analytic approach, the narrative responses of up to 75 providers and administrators affiliated with the NCTSN will be analyzed to assess underlying themes regarding adoption and implementation processes. Preliminary analysis is largely descriptive and consists of charts and tabular displays of information, which will be used to formulate models of adoption penetration rates for certain population segments, centers, and specific practices.

### Findings

Preliminary findings indicate that respondents are in the process of adopting and implementing over 140 unique, trauma-related practices, including EPBs and other resources developed for diverse target audiences, clinical populations, and purposes. Frequently endorsed facilitators of practice adoption and implementation include support from supervisors, consultation with peers and colleagues, and training provided by the NCTSN. Primary barriers include lack of sufficient resources to support the adoption and implementation of new practices, lack of ongoing technical assistance following initial training events, and the need for adaptation of practices for diverse target populations.

### Conclusions

Initial results suggest that training offered by the NCTSN, whether in person, via the Web, or through outreach and education, has positively impacted the adoption and implementation of EBPs among NCTSN affiliated staff and partners. Among areas for improvement, while technical assistance following a training or consultation was identified as a critical resource supporting implementation, results also suggest that this resource is not always provided or available, and that its absence is one of the most significant challenges to successful EBP implementation and sustainability. Following final data collection and analyses, an updated review of the findings will be provided and discussion will address applicability of the findings to a variety of community mental health service settings and contexts.

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### Training Retention and Utilization: The Impact of Suicide Prevention Training Activities on Youth-Serving Professionals and Their Communities

**Presenting: Kathleen Jones** 

Contributing: Christine Walrath, Michael Rodi, Jennifer Wallach, Qualandria Bell & Stephanie A. Hess

### Introduction

Suicide is the third leading cause of death for young people aged 15-24 (10.4 per 100,000) and aged 10-14 (1.5 per 100,000) (National Center for Injury Prevention and Control, 2006). While these youth suicide rates are disturbing, the numbers of youth at-risk for suicide are even higher. The 2005 Youth Risk Behavior Survey found that 17% of high school students had seriously considered suicide, and 8.4% of students had made a suicide attempt (National Adolescent Health Information Center, 2006).

In 1994, the Centers for Disease Control and Prevention wrote that, "the lack of evaluation research is the single greatest obstacle to improving current efforts to prevent suicide" (CDC, 1994). A decade later, following the suicide of Senator Gordon Smith's son, Garrett, Congress unanimously passed the Garrett Lee Smith (GLS) Memorial Act, a bill that provided \$81 million to fund and evaluate 38 suicide prevention, research, and service programs.

This presentation will provide information collected through the cross-site evaluation of suicide prevention gatekeeper trainings conducted

by the GLS-funded programs. Gatekeeper trainings are designed to raise awareness around suicide, assist in the early identification of youth at-risk for suicide, and build the skills necessary for successful intervention. GLSfunded programs direct a significant proportion of their funding towards these trainings; however, despite the popularity of these gatekeeper trainings, there is little existing data evaluating their overall impact (Berlim, Perizzolo, Lejderman, Fleck, and Joiner, 2006; Verger, Brabis, Kovess, Lovell, Sebbah, Villani, Paraponaris, & Rovillon, 2006).

The Training Utilization and Penetration (TUP) interviews are the component of the GLS cross-site evaluation designed to assess the content, utilization, and perceived impact of training activities conducted by GLS-grantees as well as the challenges and facilitating factors associated with suicide prevention. This presentation will focus on the reported training experiences of professionals working within systems of care, including: useful training components and techniques, the knowledge and skills acquired in the training, how these skills are applied, the populations most affected, and the factors that help and hinder the suicide prevention efforts of recent trainees.

### Methodology

The cross-site evaluation team draws TUP respondents from a sample of participants in GLS-supported activities. Immediately following the conclusion of targeted training events, and in conjunction with the administration of the post-training assessment survey, interested trainees provide their contact information and written consent to receive further information about the interviews from the cross-site evaluation team. Two-months following the training, interviewers begin contacting participants via e-mail and telephone to obtain verbal consent and schedule interviews. Following the interview, participants are provided a \$20 money order to compensate them for their time.

Analysts transcribed interview recordings into a Microsoft Word document, and all analyses were conducted using the software package, Atlas.ti 5.2.9. The first phase of data analysis involved the selection and categorization of text in order to identify underlying themes. The second phase of analysis involved compiling the segments of text aligned with each general theme followed by a more detailed examination of the responses within each category. The guiding questions of the second phase of analysis include:

- 1. What do participants report learning from the training?
- 2. What are the practical skills or tools acquired from the training?
- 3. Which parts of the training do participants report as being the most useful? What modifications do they recommend?
- 4. How do participants report using the skills and tools learned in the training? Which populations are affected by the utilization of these skills?
- 5. What are factors that help and hinder the suicide prevention efforts of recent trainees?

### **Findings**

Interviews with over 100 youth-serving professionals will be included in the findings discussed in this presentation. Approximately half of these interviews have been analyzed to-date, with ongoing data collection continually informing the aggregate results. This presentation will draw from all available data to inform the audience about the experiences of trainees as well as the implications of those experiences upon future training practice.

In addition to an overview of the reported knowledge and skills that participants acquired, this presentation will present findings related to: (1) how actual utilization of skills compares to the expected utilization reported by trainees immediately post-training; (2) training techniques and materials supporting the successful utilization of skills; (3) the impact of other training participants on the training experience; (4) the impact on the training on the participant's subsequent interactions with youth; (5) additional populations impacted by the training, and those implications on workplace protocol; and (6) reported barriers and facilitators to effective suicide prevention.

### Conclusion

The gatekeeper training data collected by the cross-site evaluation of GLS funded programs provide, for the first time, national-level feedback about this popular prevention activity. These data have local and national implications, and continue to improve the emerging field of suicide prevention. Evaluation data and analyses described during this presentation will enable suicide prevention stakeholders and other decision-makers to better target potential gatekeepers and choose the most appropriate training, improve and augment current training practice, and be informed of the reported barriers and facilitators to suicide prevention in order to identify areas for future intervention.

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## Session 34 >> 5:00-6:00 pm >> Room 12

## Symposium Creating a Research Agenda to Promote Effective School-Based Mental Health Services

### Panel: Michael H. Epstein, Krista Kutash & Albert J. Duchnowski

Efforts to increase the amount and variety of mental health services delivered in schools have received much attention within the last decade as the field engages in transformation of the mental health services system for children and adolescents. One assumption driving this advocacy has been the belief that this shift in placement of services would result in better access to services by children and adolescents. This assumption has empirical support. For example, Catron and his colleagues (Catron, Harris, & Weiss, 1998) demonstrated close to a 500% increase in the use of mental health services by youth when those services were located in schools as compared to when families were referred to a community based agency.

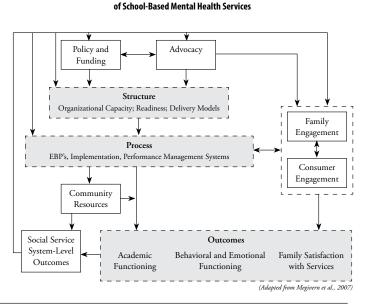
There are, however, additional empirical findings that reveal the complexity in this shift in policy. First, while increase in access to services has been demonstrated, the question of the effectiveness of the services delivered has been questioned (Atkins, Frazier, Adil, & Talbott, 2003; Catron et al, 1998; Zins, Weissberg, Wang, & Walberg, 2004). Additionally, more recent service delivery models have emphasized that a continuum of services should be delivered within a three tiered framework (usually displayed as a triangle) that includes offering universal, selective, and indicated services as part of a comprehensive mental health delivery system (Sugai & Horner, 2002). For many schools, however, student populations reflect "at risk" prevalence rates of over 50%, not the 5-15% found in the ideal three tiered triangle (Atkins et al., 2003). Lastly, many of the positive outcomes associated with mental health interventions are not those valued by the education community (Adelman & Taylor, 2003).

These challenges reveal that models of school-based mental health (SBMH) are emerging, not complete, and that significant work needs to be done before the field has an array of effective school-based models from which to choose. We believe that there is an important role for

services researchers in the development of these effective models of SBMH. We believe that policy support for school-based mental health will be based on both a cohesive conceptualization of mental health services in schools and the best available empirical evidence and support. We offer the following conceptual framework to stimulate discussion of the research that needs to be conducted in order to assist in the development of effective models of SBMH (see Figure 1).

Figure 1

Model of Influence on Quality and Effectiveness



The prevailing model of quality in health care is composed of three interrelated constructs, i.e., structure, process, and outcomes (Donabedian, 1998) and it has been widely adapted to social services (e.g., Megivern et al., 2007). Admittedly, the factors influencing overall quality are multifaceted and multidimensional and may differ depending on the stakeholder group (e.g., efficiency, sensitivity). We believe, however, that an important principle in delimiting the factors influencing quality and effectiveness in SBMH services is that they affect and influence outcomes and therefore this principle provides an underpinning of the proposed framework.

Of the many factors affecting the outcomes in SBMH, the guiding policies, especially financing, and advocacy exert compelling influence in that they encourage, promote, or demand quality in the services they regulate and support. They can insist on evidence of desired outcomes in exchange for their investments (Megivern et al, 2007). Within SBMH, federal policies that regulate financing have repeatedly been reported as a barrier (Cooper, 2008), and little research has been conducted in this area. Therefore, the approaches to financing SBMH are one of the important topics for researchers.

Within the structure domain, organizational culture (Glisson, 2002), capacity, and receptivity to innovation have been found to affect quality of services and outcomes. For SBMH, the best way to structure mental health delivery within schools to address all levels of need (e.g. universal, selective, and indicated) remains a challenge. Researchers could contribute to this area by describing the different models used by districts (resource teams, health clinics, community mental health providers placed in schools) and the number of students reached by type of service model.

Factors within the process domain of SBMH have received the most attention by advocates and researchers with efforts to encourage evidencebased practices and adequate implementation of these practices receiving wide-spread support (Cooper, 2008). While the advocacy movement has been strong, efforts to create performance management systems to monitor the processes and associated outcomes are not as developed. Systems similar to school-wide indicators (e.g., office referrals and discipline referrals) encouraged by PBIS need to be developed by SBMH researchers.

The promise of improved outcomes has also received much attention in SBMH research and dialogue. However, a recent analysis of results from investigations of interventions by mental health services researchers reveals that academic outcomes are not commonly measured (Hoagwood et al., 2007). Until mental health services researchers adopt the improvement of academic outcomes as part of the mission of the mental health system, SBMH will remain a goal instead of a reality. Perhaps the mantra of the goals for our children of "at home, in school, and out of trouble" should be refined to "at home, achieving in school, and out of trouble." It is imperative that mental health services researchers contribute to building effective SBMH by incorporating academic achievement in their program theory and outcome models.

In summary, this presentation proposes a role for mental health services researchers in furthering the effectiveness of SBMH services. Priorities for systematic investigation include financing, explicating what is working for whom through creating performance management systems, and lastly, incorporating academic achievement as an essential outcome for mental health services delivered in schools.

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## Session 35 >> 5:00-5:30 pm >> Salon C No Wrong Door, Implementation Plan for Montgomery County, Maryland

Presenting: Kiran Dixit, Ayesha Bajwa, Bruno J. Anthony & Vicki Effland

### **Implementation Plan**

In 1999, Montgomery County received the funding from the SOC SAMSHA grant. Implementation of the SOC grant lead to education of SOC values and principles that laid the foundation for planning and building a sustainable SOC in Montgomery County.

The Collaboration Council (the local management board(LMB) for Montgomery County partnered with the local Dept of Health & Human Services and the State to sustain the system of care efforts, particularly wraparound services in the county. Montgomery County was able to release an RFP in 2005 and was successful in contracting with Choices to be the provider for wraparound.

Two very crucial aspects of building an effective system of care were in place – wraparound and family support. As CME, Choices was to provide care coordination services and administrative and fiscal oversight in managing a provider network. Department of Health and Human Services continued to provide funding to support the family organization. As the Local Management Board, the Collaboration Council was able to secure funding from other child serving agencies so that wraparound could be accessed not just by the top 5% of the needs triangle, but also the next 15%. This blended funding allowed for expansion of eligibility criteria – "No Wrong Door." As the CME, Maryland Choices has been successful in developing a vast provider network so that families have choice. There are over 90 different providers in the Maryland Choices – Montgomery County provider network currently.

Maryland Choices was contracted to be the CME in 2006. CANS data is available for a 12 month period and indicates positive outcomes for youth and families that received wraparound services. CANS scores indicate that families report increased functioning as exhibited by decreased need across all 13 life domains. CANS scores also show families report increased ability to manage behaviors exhibited by youth. The Wraparound Fidelity Index (WFI) was administered and the overall score was 83% indicating good fidelity.

### Wraparound Fidelity Index and CANS Outcomes for Youth & Families Participating in Wraparound Services Purpose

To support and guide Wraparound Innovation Zone projects in Maryland, we have been collecting both implementation fidelity and functional outcomes for participating children and families. In Maryland, the Wraparound Fidelity Index 4.0 (WFI; Bruns et al., 2006) is being used to determine the extent to which the services and supports that are being received by children, youth, and families enrolled in services within Maryland adhere to the foundational principles of the Wraparound process. At the same time, the Child and Adolescent Needs and Strengths (CANS) assessment is being collected for developing treatment plans, making level of care decisions and measuring youth and family outcomes within systems of care (Lyons 2004). This paper presents WFI and CANS results and preliminary data on their relationship.

*Wraparound Fidelity Index.* Collection of WFI data is conducted under approval by the University of Maryland, Baltimore Institutional Review Board. 117 families and their Child and Family Teams receiving Wraparound services between October 2006 and March 2007 were referred to Innovations for interviewing using the WFI-4 and 101 were confirmed eligible, meaning that they had been receiving services for over 3 months, had not received services from pre-existing Wraparound vendors, and contained a youth over the age of 11. Of these Child and Family Teams, 85 had at least one team consent to be interviewed.

The ten elements of Wraparound were evaluated. Items from the WFI interviews are coded as 2 (*high fidelity*), 1 (*partial fidelity*), or 0 (*low fidelity*). The four item scores for each element are added together to calculate the total element score, and then converted into percent fidelity.

**Child and Adolescent Needs and Strengths**. Youth who had both an intake and discharge CANS completed and who had participated in Choices for at least 6 months (n = 77) were included in the CANS data analysis. Approximately 40% of the youth were African American, 29.9% Caucasian and 27.3% some other race. The majority of youth were male (71.4%) and the average age was 14 years. CANS items are rated using a four-point scale, with a 0 indicating *no evidence of a need* and a 3 indicates a *cornerstone strength* that can be used in treatment planning and a 3 identifies an area in which *no strength* has been identified.

### Findings

### Wraparound Fidelity Index

Overall Wraparound fidelity across respondents and elements is averaging between "adequate" and "good" within the state and jurisdictions implementing Wraparound. The state's overall fidelity at 77% is above the national average of 76.7 on previous versions of the WFI. Specifically, the elements of family choice and voice, cultural competence, strengths based, and collaborative are reporting high fidelity across respondents. There also are areas where improvement is needed such as in the elements of individualized, community based, outcome based, and team based that are showing low fidelity statewide.

### **Child and Adolescent Needs and Strengths**

A paired sample *t*-test was conducted to compare the mean dimension score at intake and discharge. Additionally, the percent of youth who had at least one area in which no strength was identified (for the Child Strengths dimension) or actionable need (i.e., at least one item rated as 2 or 3) in each dimension and the average number of needs those youth had at intake and discharge was computed. The paired sample t-test indicated there was a statistically significant change in functioning in all but one of the six dimensions The percentage of youth who had at least one area in which no strength was identified decreased between intake and discharge from 100% to 92.2. The percentage of youth who had at least one need identified in each dimension also decreased between intake and discharge from 100% to 83.1% in Life Domain Functioning, from 37.7% to 13% in Acculturation, from 81.8% to 50.6% in Child Emotional and Behavioral Needs, from 51.9% to 24.7% in Child Risk Behaviors and from 75.3% to 53.2% in Caregiver Needs and Strengths. Similarly, the average number of actionable needs youth had decreased between intake and discharge across all dimensions.

## Session 35 >> 5:30-6:00 pm >> Salon C Documented Treatment Among Children Receiving Care in California's Publiclyfunded Oupatient Programs

### Presenting: Bonnie Zima

### Contributing: Bowen Chung, Penny Knapp, Liu Gang & Lily Zhang

### Introduction

The overarching aim of the presentation is to briefly describe the lessons learned in the development of a statewide agency-academic partnership to examine quality of care for children in California's publiclyfunded outpatient programs from common mental health problems and to summarize major findings that were driven by agency-identified research questions. Specifically, the questions were: (1) If the California Department of Mental Health relied solely on Medicaid encounter data to report clients served, what is the rate of matching on gender, race/ethnicity, and diagnosis matched information in the medical record?; (2) What is the documented adherence to quality indicators for the outpatient care of attention deficit hyperactivity disorder (ADHD), conduct disorder (CD), and major depression (MD) for children in public mental health clinics, and how does adherence vary by child and clinic characteristics (i.e., rural vs. urban, poor vs. wealthy counties, county-operated programs vs. contracted out)?; and (3) Among children identified as having one of these common disorders, what proportion of children are receiving only psychosocial (i.e., individual, family, behavior, group, case management), only medication, or combined treatment and who is more likely to receive such care?

### Methodology

Under the direction of the State of California Department of Mental Health (DMH), a consortium of DMH agency leaders and quality assurance experts and 5 university-based health services research centers was developed. The study was developed in cooperation with the California Mental Health Directors Association and California Mental Health Planning Council. In addition to regular presentations at their meetings, a multi-stake holder Advisory Board provided regular telephone consultation on the study design, implementation and priorities for data analysis. Study procedures were approved by the research committees or institutional review boards (IRB) of the State of California, all participating universities, the 22 county departments of mental health, and five local hospital or clinic-affiliated IRBs.

A statewide, longitudinal cohort study of 813 (weighted n = 7,560) children ages 6.0-16.9 years with at least 3 months of outpatient care, drawn from 4,958 patients in 62 mental health clinics in California from August 1, 1998 through May 31, 1999. Using a computerized record abstraction tool, information on sociodemographic and clinical characteristics and documented care processes was collected by a 12-member team of quality assurance nurses. The mean age of the children was 10.6 years (SE = 0.20), 63.4% (SE = 4.48) were from minority backgrounds, and the most common tracer condition was ADHD. Slightly more than one-quarter of the children (25.8%, SE = 2.46) met criteria for more than one tracer condition, and of these youth 64.8% (SE = 5.15) met criteria for ADHD and CD. The median number of DSM-IV symptoms documented for children who met tracer condition criteria was 4.3 for ADHD, 3.0 for CD, and 2.0 for MD. The majority of children (95.1%, SE = 1.16) had at least one functional impairment documented during the assessment period. Deficits in academic functioning were the most common (82.8%, SE = 2.82). For the 59.9% of children with a CAFAS score during the assessment period, the mean score was 50.5 (SE = 1.56), with 74.3% in the moderate to severe range. Nearly 30% of the children had a history of physical or sexual abuse and nearly half had a parent with a substance abuse history.

### **Major Findings**

### **Academic-Agency Partnership Process**

Integration of DMH experts within the health services research team at each stage of the study is feasible and was a hallmark of our successful collaboration. To address provider concerns that participation may lead to targeting programs that provide poor care, a sampling strategy that allowed for describing care statewide but also testing how care varied by commonly shared program characteristics instead of individual program or county was developed. Additional work is needed to standardize procedures for protection of human subjects across county agencies and universities.

### Validity of Medicaid encounter data

The match rate for gender was 99% and for race/ethnicity was 71.8%, 90.5% and 89.7% for Caucasian, African-American, and Hispanic children, respectively. Misidentified Caucasian children were more likely to be recorded as African-American or Hispanic than misidentified minority children to be recorded as Caucasian. Diagnosis match rates were high (ADHD: 98%, CD: 89%, MD: 89%).

### Adherence to quality of care indicators

Relatively high adherence was recorded for clinical assessment (78-95%), but documented adherence to quality indicators related to service linkage, parental involvement, use of evidence-based psychosocial treatment, and patient protection were moderate to poor (74.1-8.0%). For children prescribed psychotropic medication, 28.3% of the records documented monitoring of at least one clinically indicated vital sign or laboratory study. Documented adherence to quality indicators varied little by child demographics or clinic factors.

### Psychosocial and medication treatment

During at least one visit, more than 80% of children had documented receipt of any psychosocial treatment. Three-fourths of the children were reported to have met individually with the clinician, 45.8% had documented parent or family involvement, 45.4% had any documented efforts to link child or family to services or coordinate care, 23.6% were noted to receive group therapy, and 7.6% had documented receipt of parent education on at least one contingency management technique. About one-half of the children receiving care for only ADHD had a documented stimulant prescription. More than 45% receiving care for MD had a documented antidepressant prescription. About 50% of youth had documented probable acceptable care, ranging from 93% for MD, 55% for ADHD, 33% for CD to 24% for ADHD+CD.

### Conclusion

Development of a statewide agency-academic partnership is feasible and can provide data that complements existing approaches to describing care provided. If DMH relied solely on Medicaid encounter data to describe clients served, misclassification of African-American or Hispanic children as Caucasian could produce an underestimate of their service use. In addition, findings suggest that efforts to improve care should be directed broadly across clinics; with documentation of safe practices, particularly for children prescribed psychotropic medication, being of highest priority. Further, there is room for improvement in documented use of evidence-based psychosocial treatments in public mental health clinics, and acceptable care for ADHD and CD lags behind MD.

# Session 36 >> 5:00-6:00 pm >> Salon D

### Symposium

# Child and Adolescent Psychiatric Crisis Stabilization within a Comprehensive System of Care

### Chair: Neil Jordan

### Presenting: Richard Epstein, YongJoo Rhee, Scott C. Leon & Jung Min Park

This symposium brings together researchers from leading universities in Illinois to talk about issues related to access, cost and outcomes of child and adolescent psychiatric crisis stabilization services in that state's comprehensive system of care. All symposium papers present original empirical research using administrative data collected by the Illinois Screening, Assessment and Support Services (SASS) program. The SASS program provides psychiatric crisis stabilization services to all Illinois youth at risk of psychiatric hospitalization and whose psychiatric care requires public funding from the Illinois Department of Human Services (DHS), Healthcare and Family Services (HFS), or Children and Family Services (DCFS).

This symposium features paper presentations "sandwiched" between an Introduction and Discussion. Papers will focus on explaining racial disparities in system of care decision making (Epstein), estimating the direct costs of providing crisis services in a system of care (Rhee), and identifying factors associated with important system outcomes such as length of stay (Leon) and the recurrence of psychiatric crisis (Park). Papers use advanced statistical methods to investigate the relative impact of child, provider and community level factors on system of care functioning. This symposium can serve as a model for administrators, practitioners, policymakers and researchers of the importance and need for collaborative investigation for expanding the research base in systems of care that provide child and adolescent mental health crisis stabilization services.

### Community Population Characteristics Mediate Racial Disparities in Child Psychiatric Crisis Stabilization Decisions

### Presenting: Richard Epstein Contributing: Neil Jordan & John Lyons

### Introduction

Racial disparities in the use of child mental health services are a significant public health concern. Different child mental health service use patterns by race have been demonstrated in the use of child mental health services (Garland et al., 2005; Padgett et al., 1993).

The underlying causes of racial differences are not well understood, but racial disparities in healthcare more generally are believed to result from differential service access. Existing research demonstrates that regardless of age, racial minorities are over-represented in underprivileged communities (Wolch & Dear, 1994), and that poverty (Pottick, Hansell, Gutterman, & White, 1995) and urbanicity (McMillen et al., 2004) are related to the use of child mental health services. However, there is very little existing research that investigates whether the characteristics of a local community, as opposed to race per se, explain racial disparities in the use of child mental health services (McMillen et al., 2004).

The current study investigates whether local community characteristics mediate racial disparities in a publicly-funded system of care for children with a mental health crisis. Specifically, the current study asks: (a) Are there different rates of referral to psychiatric hospital for children from different racial groups? (b) Do racial differences persist after statistical adjustment for the effects of demographic variables and mental health needs? (c) Do community racial diversity, poverty, and urbanicity mediate these racial disparities?

### Methodology

### **Study Design**

The current study involves secondary analysis of existing data from two sources. The first data source is administrative data from the Screening, Assessment and Support Services (SASS) program of the Illinois Departments of Human Services, Healthcare and Family Services, and Children and Family Services. The SASS program is a single point of entry for all children experiencing a mental health crisis whose care will require funding from one of these three agencies. The SASS program database provided the demographic information, severity of mental health needs at the crisis screening, and the crisis screening decision.

The second data source is the 2000 decennial census. The zip code from which each mental health crisis phone call was received was used to append three community-level variables (racial diversity, poverty, and urbanicity), derived from census data (http://factfinder.census.gov), to the variables from the SASS database.

### **Population Studied**

The study sample (n = 5,116) included screening data for the first SASS screening between December 1, 2005 and August 31, 2006 for all children ages 5 to 18 years who were not previously screened by the program. Children whose screening data were incomplete were excluded.

### Findings

Rates of referral to psychiatric hospital for mental health crisis stabilization differed by race. African-American children were more likely to be referred to psychiatric hospital than were Caucasian children (62.5% versus 58.4%, p < .05). After statistical adjustment for the effects of demographics and mental health needs, African-American children (OR = 1.43, 95% CI = 1.24 - 1.66) and Hispanic, Asian, Native American or Bi-Racial children (OR = 1.40, 95% CI = 1.14 - 1.72) remained significantly more likely than Caucasian children to be referred to psychiatric hospital.

When community racial diversity, poverty, urbanicity, and the interactions between the community-level variables and race were entered into the logistic regression model, there was no statistically significant difference in the likelihood of referral to a psychiatric hospital for crisis stabilization for African-American (OR = 1.05, 95% CI = 0.82 - 1.36) or Hispanic, Asian, Native American or Bi-racial children (OR = 1.02, 95% CI = 0.73 - 1.44) in comparison to Caucasian children. Children whose crisis occurred in an urban community were statistically significantly more likely to be referred to hospital (OR = 2.58, 95% CI = 1.98 - 3.36) than children whose crisis occurred in a rural community. Children whose crisis occurred in a poor community were statistically significantly less likely to be referred to hospital (OR = 0.66, 95% CI = 0.55 - 0.79) than children whose crisis occurred in an affluent community.

### Conclusion

Results of the current study suggest that racial disparities in decisions to refer youth to hospital for crisis stabilization within a system of care are mediated by characteristics of the local communities within which crises occur. Children who had a crisis in an urban community were more likely to be referred to a psychiatric hospital than were children who had a crisis in a rural community. Children who had a psychiatric crisis in a poor community were less likely to be referred to a psychiatric hospital than were children who had a psychiatric crisis in a more affluent community.

Results emphasize the need for systems of care to consider local community resources when making resource allocation decisions.

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### Direct Treatment Costs of Child Psychiatric Crisis Stabilization Services

### Presenting: YongJoo Rhee

Contributing: Neil Jordan, Richard Epstein & John S. Lyons

### Introduction

There are two common treatment options for stabilizing children and adolescents with a mental health crisis. The most common option, psychiatric hospitalization, is generally regarded as being relatively restrictive and intensive. The alternative to psychiatric hospitalization is the provision of crisis stabilization services within the community. Community-based treatment options are preferable because they are less restrictive and expensive.

Although there have been efforts to demonstrate the effectiveness of both psychiatric hospitalization and community-based services (Geller, 1991; Kiesler, 1982), little is known about the costs of providing psychiatric crisis stabilization services to children and adolescents. Blumberg (2002) found cost minimization analysis helped reduce bed days and total costs (Blumberg, 2002). Cost evaluation is necessary (Ruffin, 1993; van Enckevort, 1999; Wooten, 2002) to assess the cost of hospital and community-based services in order to better understand the resource needs associated with child psychiatric crisis stabilization. The objective of the current study is to estimate the direct costs associated with the provision of publicly-funded psychiatric crisis stabilization services to children and adolescents in Illinois. Specifically, the current study asks three questions: (a) What is the total cost of providing child and adolescent psychiatric crisis stabilization services? (b) How do the costs of providing such services differ by level of psychiatric need? (c) How do the costs of providing such services differ for children and adolescents in state custody as compared to children and adolescents who are not in state custody?

### Methodology

### **Study Design**

This retrospective cohort study uses administrative data on children and adolescents with a mental health crisis who received psychiatric crisis stabilization services through the Illinois Screening, Assessment and Support Services (SASS) program from January 1, 2006, to December 31, 2006. The SASS program is a partnership of the Department of Children and Family Services (DCFS), the Department of Human Services (DHS) and the Department of HealthCare and Family Services (DHFS). It provides access to psychiatric hospitalization and community-based services through regional agencies for children with a mental health crisis.

Administrative claims data for this cohort of youth served by SASS were extracted from Medicaid records and used to estimate the direct costs associated with treatments for psychiatric crisis. Total direct cost of treatments for psychiatric crisis consists of costs associated with inpatient services (hospitalizations), outpatient services (community services) and medications.

### **Population Studied**

The SASS program collects demographic data and mental health screening data for each child at the beginning and end of a SASS episode. The current study is restricted to those children and adolescents with complete functioning data at the beginning and end of the SASS episode, as measured by the Child Severity of Psychiatric Illness (CSPI) (N = 4,731). Psychiatric need level was determined by the number of CSPI items for which a child had moderate or severe needs at the beginning of the psychiatric crisis. The children in the study sample were divided into three psychiatric need groups: low (n = 906), medium (n = 2,816) and high (n = 1,009).

### Findings

The average age of children and adolescents in SASS was 13.6 years old; 51% were male, 53.9% were white, and 44.6 % lived in Cook County.

The cost associated with hospitalizations (\$43,746,463) was 89.3% of total direct treatment cost (\$48,989,564) for youth with a mental health crisis during the one-year study period. The cost associated with community-based services accounted for \$4,718,619 (9.6%), and total medication cost was \$524,483 (1.1%). The average cost per episode for publicly-funded mental health crisis treatments was \$10,355 in 2006.

The average cost per episode for treatment for psychiatric crisis increased significantly according to psychiatric need level. Average episode costs ranged from \$5,709 (low psychiatric need) to \$10,437 (medium psychiatric need) and \$14,297 (high psychiatric need) (p < 0.001). The proportion of cost associated with community services out of total cost among low psychiatric need youth was higher (15.8%) than that of (7.6%) youth with high psychiatric need.

Less than one quarter of SASS children and adolescents were in state custody (n = 1,128, 23.8%), but these youth accounted for 41.1% (\$20,127,954) of total treatment cost. The average treatment cost per

episode for these children and adolescents in DCFS (\$ 17,844) was significantly higher than that for non-DCFS youth (\$8,010) (p < 0.001). The average treatment episode costs among DCFS wards was consistently higher within the three psychiatric need groups than the costs for non-DCFS youth (*p* < 0.001).

### Conclusions

The results of the current study suggest that psychiatric hospitalizations appear to play a major role in publicly-funded child and adolescent psychiatric crisis stabilization and cost significantly more than community-based services. Costs showed a linear increase among youth with low, medium and high levels of psychiatric need. Children and adolescents with higher psychiatric need had significantly higher costs on average for their treatments. Youth who are wards of the state also appear to have severe, higher psychiatric need and significantly higher treatment costs on average than youth who are not involved in the child welfare system. The findings emphasize the need for effective resource allocation in public-funded mental health services.

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### Factors Associated with Psychiatric Hospital Length of Stay among Children and Adolescents

### Presenting: Scott C. Leon

Research exploring psychiatric hospital length of stay (LOS) has two primary applications: (1) as one step in guiding cost containment initiatives, and (2) as a means of ensuring the hospital is only used to manage acute psychiatric distress, in keeping with least restrictive environment policies (Stroul & Friedman, 1994). Most research on youth hospitalization LOS has focused on diagnostic and clinical variables. Less work has studied the impact of broader social, community, and treatment provider variables.

The current study provides one of the broadest perspectives to date on the variables that combine to impact acute psychiatric hospitalization LOS among children and adolescents. The sample consists of all Illinois Department of Children and Family Services and Illinois Department of Health and Human Services youth receiving Medicaid funded healthcare in Illinois between FY 2005 and 2006. Both departments employ utilization review strategies to manage inpatient utilization. However, despite concerted utilization management, the current study hypothesizes that, in addition to clinical risk variables, community variables associated with the youth (represented by 2000 census tract data), and the hospital serving the youth will also predict LOS.

### Methodology

### **Participants**

The participants were all children in Illinois receiving Medicaid insurance screened by SASS and hospitalized in fiscal years 2005 - 2006. The numbers of participants in each fiscal year were: overall (n = 1,473), FY05 (n = 341), FY06 (n = 807). Hospital bed days in this study were funded by Medicaid through the Illinois Department of Public Aid.

### Procedures

The current study was conducted through the Screening, Assessment, and Supportive Services (SASS) program of Illinois. The SASS program was implemented in 1992 to provide crisis services to children in protective custody who are at risk of hospitalization.

Referrals are made to SASS workers when a child is demonstrating a risk that might require hospitalization. Telephone referrals can be made by any relevant party and are followed by a face-to-face screening that assesses whether the child requires psychiatric hospitalization.

A demographic cover sheet and the Children's Severity of Psychiatric Illness (CSPI) measure were completed by SASS workers upon completion of the screening. The CSPI is a measure of clinical and environmental factors developed from focus groups and the literature (Lyons, 1997) and provides ratings on a four point scale (rating of 0-3) of Risk, Behavioral/Emotional Symptoms, Functioning Problems, Juvenile Justice, Child Protection, and Caregiver Needs and Strengths. 2000 Census Tract Data tied to the zip code of the youths' residence were added to the data using the United States Census Bureau website (U.S. Census Bureau, 2007).

### Findings

hospitals, a full

67.57% of this

accounted for by

variance was

Hierarchical Linear Modeling (HLM) was used to predict LOS (Bryk & Raudenbush, 1992). The large number of variables employed in the study required a trimming strategy such that only statistically significant variables remained in the models. Table 1 presents results of the HLM analysis for the random effects, which show the amount of variance explained for unconditional and conditional models. In the unconditional model, 83.87% of the variance in LOS can be attributed to the child, while 16.13% can be attributed to the hospital. In the conditional model, 83.87% attributed to the child, 2.55% of this variance is explained by the variables in the study. At the hospital level, of the 16.13% of variance attributed to

### Table 1 Analysis of Client- and Hospital-Level Predictors of Length of Stay: Random Effects of Unconditional and Conditional Models

the one variable				acis	
entered at this level, proportion of Medicaid clients served at the hospital that are DCFS wards.		Variance Component	df	Chi Square	p-value
	Unconditional Level 1 Level 2 Conditional	92.49 17.79	31	314.41	<.001
	Level 1 Level 2	90.13 5.77	27	50.39	.004

Table 2 shows the fixed effects that significantly contributed to predicting LOS. Although none of the youth demographic or 2000 community census tract variables were associated with LOS, several CSPI variables predicted LOS. Caregiver health problems and caregiver supervision difficulties predicted lower LOS. As stated above, only one variable was entered at the hospital level, proportion DCFS, and this was statistically significant.

Table 2
Analysis of Client- and Hospital-Level Predictors of Length Of Stay:
Fixed Effects

Fixed Effect	Coefficient	se	t	P value
Level-1 (Child predictors)				
DCFS (yes)	1.54	.69	2.25	.03
Suicide	-1.71	.56	-3.05	.005
Other self-harm	1.41	.44	3.19	.004
Living situation	.90	.30	2.99	.006
Caregiver needs- Health	86	.33	-2.64	.013
Caregiver needs- Supervision	71	.22	-3.21	.003
Level- 2 (Hospital predictors)				
Percent of Medicaid DCFS	.16	.03	4.16	<.000

### Conclusions

The Illinois hospital utilization monitoring system studied here is relatively advanced. However, despite relatively concerted management by the state, the hospital is still predicting approximately 16% of the variance in LOS. Given the growing body of research demonstrating this hospital effect in a variety of settings, the results here argue for coordinated research efforts to understand practice pattern and culture and climate variations across hospital settings in a system of care.

Overall, results suggest that utilization among at-risk youth is a function of the youth's clinical presentation (suicide risk versus other selfharm, community functioning), the caregiver context (health status and supervision capacity), and the service provider (hospital). Variables such as community census tract data, which at first may have held intuitive appeal as predictors of utilization, are not as prominent, possibly because they are removed from the specific client's presentation and the dynamic interplay between the client and the various treatment and caregiver stakeholders.

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### Predicting Recurrent Psychiatric Crisis Among Children and Adolescents in State Custody

Presenting: Jung Min Park

### Introduction

Although national and regional studies report prevalence rates for serious emotional and behavioral problems among children and adolescents in the child welfare system to be between 42-60%, less information is available about those who are prone to have recurring psychiatric crises. This longitudinal study followed a cohort of children and adolescents in state custody who were referred for a psychiatric crisis screening for the first time in order to observe the extent of recurring psychiatric crises and to explore the role of symptoms and functioning, type of subsequent treatment, and experiences in child welfare on the recurrence of psychiatric crises. The current study has implications for the development of enhanced treatment strategies and the reduction of recurrent referral to psychiatric crisis screening among children in state custody.

### Methodology

The current study was conducted using two sources of data collected by the Illinois Department of Children and Family Services (DCFS). The first source of data was DCFS child welfare records. The second source of data was the records of the Screening, Assessment and Support Services (SASS) program that provide crisis screening to children who are at risk for psychiatric hospitalization. All children who are in the custody of DCFS are eligible for the SASS program. The SASS program records include data on child symptoms and functioning, contextual factors and comorbidities, disposition of screening, date of services, and demographic characteristics.

The sample included 1,537 children and adolescents between the ages of 3 and 18 years who were in out-of-home placement and who were referred to crisis screenings for the first time between July 1, 2001 and June 30, 2003.

Repeat psychiatric crisis was identified using the SASS data. Symptoms and functioning of the sample were measured during the crisis screening through the use of a standardized assessment tool with a 27-item Likert-type rating scale for five impairment categories of psychiatric symptoms, risk behaviors, level of functioning, co-morbidity, and system factors. Type of treatment was categorized as hospitalization and community-based treatment. Characteristics related to the child welfare placement included the main reason of child welfare case opening, the type of initial placement in out-of-home care, and the number of placement changes. Demographic characteristics included race and ethnicity, sex, and age.

Chi-square and *t*-tests were used to explore the bivariate relationships between covariates and recurrent referrals to psychiatric crisis screening. Logistic regression was applied to examine the effects of covariates on the repeat crisis screening.

### **Findings**

Approximately 40% of the sample experienced recurrent referrals to psychiatric crisis screening. Older children and female youth had a significantly higher rate of reoccurrence. Among youth with a high level of need for hospitalization, 50% of those hospitalized and 42% of those deflected to community-based treatment experienced a repeat psychiatric crisis. For youth with a low level of need for hospitalization, 47% of those hospitalized had repeat psychiatric crisis, compared with 32% of those deflected to community-based treatment.

The results of logistic regression showed that psychiatric symptoms and functioning problems were significantly associated with repeat psychiatric

crisis, with a 1-point increase in the measures increasing the risk for repeat crisis by 4% and 7%, respectively. Experiencing a psychiatric inpatient episode substantially increased the risk of repeat psychiatric crisis by 48%. The odds of repeat crisis screening for females were 33% higher than those for males. The odds for youth in kinship foster care were 28% lower compared to the odds for youth in non-kinship foster care. Youth coming from a residential care setting at the time of crisis screening were 1.5 times more likely to experience recurrent crisis screening compared to those in non-kinship foster care.

### Conclusion

This study demonstrates that state wards which receive psychiatric crisis screenings are at a great risk for recurrent psychiatric crisis. The association of psychiatric symptoms and functioning problems, and psychiatric hospitalization with risk for repeat psychiatric crisis was somewhat expected, in that youth who showed more of a pattern of psychiatric need were more likely to exhibit behavior problems and emotional disturbances afterward, which would result in another crisis screening. However, while statistically significant, the differences in scores for symptoms and functioning problems between those who did and did not have a reoccurrence were quite small, and other youth-specific domains such as risk behaviors and comorbidities, were not significantly associated with a repeat psychiatric crisis in the adjusted analyses. Having a history of hospitalization followed by the initial SASS screening was

much more predictive of a repeat psychiatric crisis than symptoms and functioning. It may be that exogenous factors, such as family characteristics, predict both hospitalization and referrals to psychiatric crisis, separate from the measured child characteristics. It is also possible that hospitalization may have iatrogenic effects, causing placement disruption among state wards and resulting in exacerbated symptoms and behaviors. Other findings, the association of types of out-of-home placement with recurrent psychiatric crisis, also point to the role of nonclinical factors in predicting a repeat psychiatric crisis.

Psychiatric hospitalization as a risk factor for repeat psychiatric crisis, independent of the severity of symptoms at the time of crisis screening, suggests that an effort to prevent unnecessary hospitalizations may reduce the demand for future crisis screenings. Clinicians need to be aware of the excess risk for repeat crisis screening among state wards in psychiatric crisis and make efforts to include their foster families in the treatment process. Clinicians might also need to help families gain access to community-based, preventive services through the public mental health and child welfare systems. Practitioners in residential care facilities may need to identify a subgroup of children who are more ready to move on to intensive outpatient services and community-based care settings. The findings of this study on the clinical and non-clinical characteristics of state wards in psychiatric crisis can be used to reduce the likelihood of repeat psychiatric crisis and provide knowledge to develop more effective treatment programs for those in crisis screenings.

# Session 37 >> 5:00-6:00 pm >> Salon G

### Symposium Functioning in Transition

#### Chair: Nancy Koroloff, Discussant: Craig Anne Heflinger Presenting: Maryann Davis, Nancy Koroloff, Judith W. Katz-Leavy & Eric Slade

The issues facing young adults with serious mental health disabilities who are transitioning from adolescence into adulthood place special requirements on the programs and systems that serve them. This symposium will focus on research related to the system requirements and gaps experienced by transition aged youth. The first paper will discuss findings from a study of system change in a community that implemented a specific service for transition aged youth. The paper will focus on findings related to changes in age related eligibility criteria. The second paper will report on research using the 1995 National Longitudinal Study of Adolescent Health to examine the access to health care during young adulthood and the impact of severity of emotional and behavioral problems. The third paper will discuss a national study of programs that emphasize career preparation, workbased experiences and employment for transition aged youth. The discussant will reflect on all three studies as they contribute to the growing body of knowledge about service systems.

### The Effects of Age-defined Eligibility Criteria on Access to Services

Presenting: Maryann Davis &, Nancy Koroloff Contributing: Diane Sondheimer

### Introduction

The public services available to youth with serious mental health disabilities are in part organized according to the age group served. The children's system is comprised of child welfare, juvenile justice, special education and children's mental health. The adult system consists of

substance abuse services, vocational rehabilitation, corrections, homeless services and adult mental health services. Many of these agencies have no direct counterpart in the other system (e.g. special education has no adult counterpart, vocational rehabilitation has no child counterpart). This way of organizing services presents a tremendous challenge to providing continuous transition supports to youth as they move into young adulthood. Public mental health services usually have child and adult subsystems, which could, theoretically, allow for service continuity. However, eligibility or priority population criteria for child and adult mental health services are often misaligned, with adult criteria generally defined more narrowly (Davis & Hunt, 2005). This misalignment results in some portion of the children and youth who receive mental health services losing services as they enter adulthood (Davis & Koroloff, 2007). This presentation will examine one of the structural challenges to the needed transitional services for young adults: discontinuity in care cause by age defined eligibility for services.

### Methodology

The data for this study were collected as part of a social network analysis conducted in Clark County, Washington. The first wave of data were collected from child and adult service agencies in October 2003, at the beginning of the implementation of a specialized transition program funded under the CMHS Partnership for Youth Transition initiative. A second wave of data were collected in the spring of 2007, after the program had been fully functioning for three years. The purpose of the overall study was to document the changes that occurred in the configuration of service agencies and how they related to or served transition aged youth. In addition to collecting data about how often agencies meet to discuss issues of mutual interest, to discuss mutual clients and how they refer clients to each other, data were collected on what age ranges each agency served and whether services could proceed continuously across typical age breaks of 17 and 18, 21 and 22 and 25 and 26.

Clark Count, Washington was chosen as the system to study for this project because it was one of the five PYT grant sites and because it represented a suburban metropolitan area that had implemented a CMHS children's system of care prior to receiving the PYT grant. The community had leaders who were clearly interested in creating a system of care for the transitioning population and expected this system to be integrated within its existing system of care. This dedication to the goal of creating a transition system made it likely that change would occur that would stand in contrast to the baseline findings. Most of the public services in the state of Washington are decentralized to the county or regional level and most of the county mental health services are funded by Medicaid. Further the county mental health administrator has considerable discretion in the disbursement of funds and the development of policy and contract language and was committed to continuing the Options program past the end of federal funding. Thus, Clark County is representative of many local systems that have considerable local autonomy and whose mental health systems are largely shaped by Medicaid funding.

### **Findings**

Social network interviews were conducted with representatives of 103 agencies during wave one and 100 agencies during wave two. At baseline, 31% of transition system organizations offered at least one service that 14-25 year olds might access, this amounted to 16.2% of all services offered, and a total of 13.4% of all services were offered to 14-25 year olds "continuously," meaning that there were no breaks in programs or staff as individuals matured across these ages. Currently, 33% of transition system organizations offered at least one services to the entire 14-25year old age range, this amounted to 22.1% of all services, and a total of 21.2% providing those services continuously to this age group. Thus, while there are not a remarkably higher portion of organizations that serve this entire age span, there was a 1.6 fold increase in the number of services that offered continuity across these ages. Further analysis is being conducted to examine which category of agency seemed most likely to increase the continuity of services across age range and whether there were services that reduced their continuity over time. Age continuity or discontinuity of services will also be examined in relationship to membership in specific social network clusters.

### Transitioning Youth with Mental Health Needs to Meaningful Employment and Independent Living

Presenting: Judith W. Katz-Leavy

### Introduction

This work is part of a series of research activities funded by the Department of Labor's Office of Disability Employment Policy (ODEP) to identify the supports needed by youth with mental health conditions to live independently. The research particularly focuses on promising practices related to career development, work experience, and employment. The National Collaborative on Workforce and Disability for Youth (NCWD-Youth) and the authors undertook this research on behalf of the Department of Labor. The report presents the findings of case studies of five promising program sites, selected from a national scan of the field and interviews with key informants. The study documents promising practices and identifies common design features across successful programs.

Youth with diagnosed mental health needs are four times as likely to be suspended or expelled from secondary education. While in school, they are 13.3 times more likely to be arrested than their peers, and seventy percent will be arrested within three years of leaving school.<sup>1</sup> Sixty-five percent will drop out of school before obtaining their high school diploma.<sup>2</sup> In comparison to other youth who drop out of high school, youth with emotional disturbances are three times as likely to live in poverty.<sup>3</sup> They experience longer delays before obtaining employment, and have higher unemployment rates than youth with other types of disabilities, who overall, exhibit unemployment rates of up to seventy percent.

Against this backdrop, changes in the treatment of mental illness (primarily deinstitutionalization and new developments in psychotropic medications in the early 1980s) have productively informed the field in at least two critical ways: 1) Recovery is possible, and 2) Integration into society (including work) is a keystone to that process. Promising interventions have emerged that attempt to build recovery models that minimize and reverse negative outcomes. These models acknowledge that the mental health needs of youth/young adults are different from adults and treatment must therefore be individualized. The programs described in this report operate under this premise, and have tailored their models to specifically support youth in transition.

### Methodology

Researchers undertook a national scan of programs that indicated a dual focus on youth/ young adults with psychiatric disabilities and/or mental health needs, and on career preparation, work-based experience, employment, and related services. The scan relied on input from knowledgeable sources in the fields of mental health intervention, education and training, and workforce development. During telephone interviews with promising program sites, a final five were selected for further study. Site visits were conducted at all five programs; and structured interviews were conducted with mental health staff, education/ training staff, case managers, youth and family members.

### Findings

A collection of common design features emerged. These design features address commonly cited challenges to successful transition by youth with mental health needs, including: stigma of traditional mental health therapy; low self esteem and feelings of lack of worth; a missing sense of ownership by youth over their own life plans; a combination of low expectations by society on the ability of youth to succeed; traditional work-exposure and employment models that do not maximize individual strengths; and the lack of appropriate transitional housing in the community. Common program features addressing these challenges include:

- A youth program location that is distinct and separate from adult service program locations;
- The opportunity for youth and young adult clients to guide the program's services and policies;
- Individualized mental health interventions that are youth-friendly, innovative approaches to assisting the youth or young adult to manage their condition, socially engage, identify life goals, and understand their choices for achieving those goals;
- Assessment instruments that facilitate the identification of individual strengths, talents and skills that can lead to education and career goals;
- Exposure to the world of work and career options, including individualized support by program staff to identify training, work experience, and jobs that are most appropriate and rewarding for individual clients;
- Access to a range of transitional housing options in the community that fits the array of independent living readiness by youth and young adults with mental health needs.

In addition to the design features described above at the service delivery level, there were also several themes that emerged at the systems level as well. First, successful programs actively seek out partnerships with service agencies and organizations in their community in order to provide the comprehensive array of services needed by youth and young adults with mental health needs. These partnerships can be informal, but are most successful when formalized by memoranda of understanding and formal community governance structures (i.e. advisory bodies of multiple community systems). Formalized partnerships address service gaps, allow collaborative identification of appropriate services for transition-age youth, and create the real possibility of seamless care. A second theme is the ability of programs to identify access and leverage funding streams that will enhance and expand program services. This includes private funding sources, and re-imagined public funding sources from local, state, and federal levels. Finally, a complex third theme emerged around understanding the multiple state and federal policies that affect transition-age youth.

### Conclusion

There are many systems at the state and local levels that potentially serve youth with mental health needs, including public school systems, special education, child welfare, children's mental health agencies, adult mental health agencies, vocational rehabilitation, the workforce investment system, juvenile justice, Social Security, and community-based organizations. Access to each of these systems depends on an individual's exposure to them, either based on referral from one system to another, referral by a trusted contact (friend, parent, teacher, counselor, social worker), or self-referral if the individual is resourceful. In some cases, referral is more likely based on existing relationships between systems, such as to juvenile justice by a judge, to vocational rehabilitation from special education, or to Social Security from a children's mental health agency. The study highlighted the importance of connecting these multiple systems in order for youth and young adults to access the many experiences needed to successfully transition to adult life.

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### Access to Care and Mental Health in Early Adulthood

### **Presenting: Eric Slade**

### Introduction

In the U.S., many young adults who are vulnerable to chronic and impairing (i.e., serious) mental health conditions may be impeded from access to needed health care services and medications. Five to 15 percent of young adults have serious mental health conditions, typified by persistent psychiatric symptoms, acute distress, and cognitive-behavioral impairments that limit their ability to participate fully in usual daily activities. Only a few research studies of adults provide any information about access to health care among adults with mental health problems, and none specifically provides information about these young adults.<sup>1-3</sup> For these young adults, unimpeded access to health insurance coverage and to needed health care services and medications may help to sustain personal independence from institutions and public programs.<sup>4-11</sup>

The purpose of this presentation is to describe two studies of access to health care among young adults. The first study, which has been completed, provides estimates of the association of risk for serious mental health conditions with young adults' access to health care, and assesses whether socioeconomic outcomes mediate this relationship. The second study, which was recently begun, will use administrative data from a mid-Atlantic state to explore how primary care services are utilized by young adult Medicaid enrollees who have mental health conditions. The discussion of these two studies will emphasize the role of primary care in managing the health of young adults who have mental health conditions and the role of primary care within an integrated public social services system that serves young adults with mental health conditions.

### Methodology

The first study used data from 1,826 young adults (ages 18 to 27 years old) who completed interviews for the National Longitudinal Study of Adolescent Health (Add Health) in 2001 or 2002 and were previously interviewed in 1995 (at ages 12 to 19). Add Health is based on a series of in-person interviews with a nationally representative sample of middle and high school students who began their participation in the study in 1994. The present analysis used data on 935 pairs of siblings in the Add Health sample. Access to health care was measured by health insurance coverage continuity during the past year, having a usual source of care, and not delaying needed health care because of inability to pay or difficulty getting an appointment. Multivariable analyses of access to care used random-effects and sibling fixed-effects regression model specifications. Risk for serious mental health conditions was calculated as an index that combines six indicators of symptoms and risk factors: CES-D depression scale scores, history of sexual abuse during childhood, low self-esteem, heavy alcohol use, suicidal ideation, and impulsivity. Covariates included educational attainment and academic achievement, parents' educational attainment, parents' income, and demographic characteristics. Indicators of full time employment, employment in a job that offers health insurance coverage, full time enrollment in school, and being married were used as potential mediators of the association between risk level and access to care.

The second study is currently in progress. It will use administrative data from approximately 11,000 young adults (18 to 25 years old) who were enrolled in a mid-Atlantic state's Medicaid program in 2005 or 2006, and who were authorized to use specialty mental health services by the state mental health agency that reimburses providers. The study will produce estimates of these young adults' use of primary care and outpatient mental health services over an 18-month period in relation to the organization of primary care services within the state. Medicaid enrollees' primary care services are managed by one of seven managed care organizations. These organizations may vary with regard to the geographic areas they cover, the level of access to mental health care they offer their enrollees, and the frequency with which enrollees are seen in primary care services are related to use of outpatient mental health services among young adults in Medicaid who have mental health conditions.

### Findings

Results have been obtained only in the first study. Risk for serious mental health conditions was associated (at p < 0.05) with a greater probability of no health insurance coverage during the past year, no usual source of health care, and delay obtaining needed care because of an inability to pay or difficulty getting an appointment. Young adults

whose risk level was in the top decile were between 35 and 194 percent more likely than other young adults were to experience impeded access, depending on the measure of access to health care. Male gender and adverse socioeconomic outcomes were associated with impeded access. However, socioeconomic outcomes did not mediate the relationship of access with risk for serious mental health conditions.

### Conclusion

Young adults who are at higher risk for serious mental health conditions are more likely to lack access to needed outpatient health care services and medications than are other young adults. The influence of socioeconomic outcomes on access to health care in this population is probably marginal as compared to the influence of other factors. Additional research studies of the role of primary care providers in managing the care of young adults who have serious mental health conditions are needed.

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## Session 38 >> 5:00-6:00 pm >> Salon H

### Symposium

## Unlocking Disparities: Provider and Community Perspectives

Chair: John D. Fluke, Discussant: Sylvia K. Fisher Presenting: Donald Baumann, Peter Pecora, John Hedderson, Daniel Capouch, Phyllis Gyamfi, Kurt G. Moore & Kendralin Freeman

The objective of this symposium is to explore aspects of disparities in child welfare and children's mental health through research and evaluation at the multiple levels within the service delivery systems

The first presentation, Exploring Cultural Biases in Child Welfare Decision Making, describes research on child welfare decision makers with respect to disparities in CPS determination, placement, and reunification. Analyses are based on structural equation modeling and multilevel analysis focused on assessing the impact of cultural sensitivity training and localized service improvements models. Sources of bias are sought with the objective of identifying leverage points for local and system level intervention.

The second presentation, Cultural and Linguistic Competence: Focus on Disparities, focuses on challenges for the elimination of disparities discovered by the CMHI CLC Study during 2007. Disparities were discovered within even the most CLC-driven systems of care; causes and potential solutions will be explored and discussed.

The third presentation, Culturally Competent Service Provision in System of Care Communities, presents findings from a survey assessing cultural competence of mental health providers connected to systems of care and other community-based providers. System of care providers differed significantly from other providers in their knowledge, attitudes, and practices of culturally competent service provision.

# Exploring Cultural Biases in Child Welfare Decision Making

Presenting: Donald Baumann, Peter Pecora John Hedderson & Daniel Capouch Contributing: John Fluke

### Introduction

There is a need to develop a clearer understanding of the source of apparent racial bias in Child Protective Services (CPS) decision making in order to identify leverage points for intervention. Racial bias, particularly with respect to superficial features, appears to be subtle and may manifest in surprising ways (Banaji, 2001). For example, it is not clear whether the bias resides at the policy, administrative, supervisory, worker, or the community level. Should effective interventions be tied to training, resource availability, resource utilization patterns, or hiring practices? While specific interventions can be formulated in the absence of such knowledge, it is believed that these interventions may be more limited in effect, or not directed appropriately. An evaluation of CPS disparities and disparity interventions in Texas is being conducted using a Decision Making Ecology (DME) framework (Baumann, Fluke & Kern, 1997) by the Texas Department of Family and Protective Services (TDFPS). The DME framework was developed in order to understand the influences on caseworker decision-making and thereby design interventions to improve decision making processes. The DME framework contains case, organizational, individual and community influences, and has been successfully used to investigate a variety of decisions, most recently how individual factors related to racial disparity influence the disposition decision (Fluke, Parry & Baumann, 2006)

TDFPS has implemented training interventions for staff including the Knowing Who You Are and Undoing Racism curriculums throughout the state. There are also 20 TDFPS zip code areas tied to five sites in three Regions in Texas that are the subject of focused attention related to addressing disproportionality. Sites in all other regions have already implemented changes at the community level. It is important to know if staff who have received the training or who operate in the disproportionality regions are making decisions differently compared to other staff and locales in the State, and to place this comparative information in context with other factors.

A goal of the evaluation is to clarify and assess leverage points for factors that might be associated with decisions by TDFPS staff. Ideally, such factors can be based on hypotheses drawn from both program experience and extant research. Those factors verified though research and evaluation can be the focus of targeted evidence based interventions designed to address them.

### Methodology

### **Data Sources**

There are three primary sources of data being used in the evaluation: (1) case level administrative data including service and personnel data, (2) worker survey data; and (3) staff training records. Administrative data are used to construct most of the measures disproportionality indexes and factors.

#### Sample

The data constructed from administrative data was the universe of data for the State regarding key case decisions from January 2004 through October 2007. The worker survey was administered to all CPS workers ( $n \approx 2,500$ ) in the State during August and September 2007. The sample includes more than 2,000 workers. Specific factors to be included in the analysis are listed in Table 1.

### **Findings**

Consistent with findings from other States, analysis of case characteristics and local demographic features by TDFPS indicates that African American children are being placed by TDFPS at higher rates than children of other racial or ethnic groups. Race was found to be a significant contributing factor even when controlling for poverty and risk. Findings also indicate that exits from care are slower, for African American and Hispanic children. Thus far, age and setting while in care are associated with longer stays in care. (Rivaux, James, Wittenstrom, Baumann, Sheets, Henry, et al., in press).

Findings expected from they study by February 2008 will also include analysis of the worker survey data in relation to worker level disparity indexes.

and	Case characteristics	Poverty
		Child Demographics (Age, Sex)
d		Prior History
he		Placement Length
unity		Maltreatment type
,		Substance Abuse
ty		Risk
		Services Received
ng	Worker characteristics	Demographics (Age, Sex, Race)
8		Skills
o five		Supervision
on		Difficult Situations
ve		Experience
it		Workload and Resources
		Decision Making
: 1		Liability Concerns
1		Service Use
		Knowing Who You Are Training Dates
		Undoing Racism Participation Dates
r	Community Level	Aggregate Service Availability
lly,	Service Utilization	Provision of Services
	Patterns (zip code level)	Aggregate Type of Services Used
h	Community	Community Demographics
ions	Characteristics	TDFPS Staff Coverage (workload)

Community Demographics Characteristics TDFPS Staff Coverage (workload) (zip code level) Disproportionality Region Implementation Community Poverty Levels (over time and current) TDFPS Aggregate Staff Characteristics

### Conclusion

Factor Category

Racial/ethnic disparities appear to exist when decisions concerning placement into substitute care are made in Texas as a result of bias. It may be that other decisions such as when to return children home may also exhibit disparities than cannot be otherwise explained. Ultimately, an understanding of what factors impact these decisions is needed to improve our ability to reduce disparities.

By directly addressing worker decision making the study presented here attempts address the source of the biases that result in disparities. The results of the study will shed light on whether various strategies to address bias in decision making are effective, and through a systematic examination of contributing factors, help to determine what other interventions that might mitigate bias could be identified.

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Table 1

Factors

Rivaux, S., James, J., Wittenstrom, K., Baumann, D., Sheets, J., Henry, J.,Jeffries, V. (in press). *The intersection of poverty, race and risk: Understanding the decision to provide services to clients and to remove children. A study of systems of care.* 

# Cultural and Linguistic Competence: Focus on Disparities

### Presenting: Phyllis Gyamfi & G. Kurt Moore

### Introduction

The Cultural and Linguistic Competence Implementation Study (CLCIS) is a substudy of the national evaluation of the Comprehensive Community Mental Health Services for Children and their Families Program. It addresses the extent to which the cultural and linguistic characteristics of communities inform the implementation of the Substance Abuse and Mental Health Services Administration (SAMHSA) Managed Care Cultural and Linguistic Standards. The results presented here address an initial qualitative exploration of how four 2005-funded systems of care communities are integrating the cultural and linguistic characteristics of their communities into their system of care implementation.

Specifically, the study addresses these questions:

- What are each community's efforts to develop culturally and linguistically appropriate systems of care at the infrastructure and service delivery levels and what factors impact the implementation of CLC standards?
- What are the barriers and facilitators identified in the process and what efforts have been implemented to resolve barriers?
- What are consumers' and other respondents' perceptions of how these efforts meet the diverse cultural and linguistic needs of children and families?

### **Methods**

This study uses an ethnographic approach that includes site visits and key informant interviews and focus groups. Each system of care community participating in the CLCIS was asked to organize a core CLC team for the study, consisting of community representatives such as the project director, cultural coordinator, evaluator, families, and youth. Conference calls were held with this team to determine appropriate respondents, review documents and coordinate the site visit. A two-person team from the national evaluation conducted the three-day site visits.

### Analyses

The CLCIS is guided by 8 key domains of inquiry, identified via a thorough literature review:

- Collaboration and Outreach
- Culturally competent practices/ interventions
- Governance
- Planning and management
- interventions • Training and Workforce
- Policies and procedures
- Development
- Diverse populations
- Continuous Quality Improvement

Interview and focus group audio recordings were transcribed and qualitatively analyzed for information around these eight domains.

### **Findings**

Findings address the barriers in communities that must be overcome to address issues of disparities. For example, some of these communities struggle with governance bodies that are politicized and that do not represent the service populations they are charged with serving. In the communities studied most treatment professionals and administrators are members of the dominant American Caucasian culture, and sometimes find it difficult to admit to any type of inability or incompetence. This can create a barrier to system change. Other barriers to reducing disparities and increasing CLC include: limited financial resources, a lack of concrete and measurable CLC plans, inadequate training, difficulty hiring professionals that reflect the service populations' cultural and linguistic characteristics, poor assessment techniques, and a lack of focused efforts to reach youth from other diverse populations, including GLBTQI2S. Amongst the communities studied there was evident frustration with the slow pace of change as well.

The four communities that participated in the CLCIS are employing a variety of tactics to address disparities in service. So far, the results of these tactics are mixed. The findings will describe examples of tactics that are in use by communities and indicators of success. For example, one community created small treatment teams that match the youth and family's language and ethnicity. Each team consists of a clinician, parent advocate and a case manager/youth counselor, usually from the same cultural or ethnic background as the youth and family and always skilled in delivering cultural/ethnic and linguistically relevant services. Families determine the composition of their treatment team during a needs assessment process. When requested "blended" or multicultural teams are created to meet the distinct needs of youth and families. Staff have been supported in creating safe, respectful and nonjudgmental relationships with youth and their families. These relationships seem to be effectively mitigating historical mistrust and isolation at both the individual and community levels. The teams have been so effective in engaging youth and families such that that enrollment is already at capacity, and services are reaching previously untreated groups. This is a prime indicator that they are in fact meeting the goal of reducing disparities. Another example of a way to reduce disparities and deliver more culturally and linguistically appropriate care is to work from a bottom-up approach; rather than laboring to first change the perceptions and behaviors of the entire community. Also, a degree of individual cultural competence may be achieved through rigorous - and repeated - training. Finally, language skills and translation resources can be acquired.

### Conclusion

The goal of reducing disparities within children's mental health systems of care requires, and is receiving, considerable attention. Systems of care exist within larger cultural, political, and historical contexts, which are not quickly or easily altered. From the case studies of these four communities it seems clear that engagement of diverse groups may promote CLC within systems of care and is helpful in addressing the institutionalized marginalization of some groups. The successful transformation to a system of care requires people and institutions that have traditionally distrusted each other to make the leap to active collaboration, with an attendant relinquishing of autonomy. The challenges are daunting, but all four of the participating communities seem determined to surmount them.

Deeply held religious beliefs and ingrained power differentials are far more resistant to change, and they have clear effects on the experiences of children and families with mental health needs. Traditional systemic behaviors may be one of the central challenges to the provision of truly culturally and linguistically competent care. They cannot be overcome except by strongly reassuring proofs of safety, and this proof cannot be obtained without changing systemic norms. These four participating communities are attempting to surmount this challenge, as detailed throughout this report, by pushing for change at all levels of their systems. Training, policies, assessment, family and youth empowerment, translation, evaluation, and adaptations of treatment practices are all interventions to improve CLC. They generally seem to be having positive effects.

# Culturally Competent Service Provision in System of Care Communities

Presenting: Kendralin Freeman & Phyllis Gyamfi Contributing: Brigitte Manteuffel & Anna Krivelyova

### Introduction

Providers directly or indirectly involved with a system of care serve children, youth and families of cultural and ethnic backgrounds that differ from their own. Their awareness, sensitivity and treatment of these clients are critical elements to the philosophy of systems of care services (Davis et al. 2002). While previous studies have examined how caregivers perceive the cultural competence of providers (Stephens, Xu & Gyamfi, 2007), providers have rarely been assessed directly. This study examines demographic differences between two types of providers: (1) Those directly connected with the system of care and (2) Other providers in the broader community not directly connected to the system of care, but provide services to children enrolled in systems of care. The study also examines differences between these groups of providers on three key components of cultural competence: cultural knowledge of population served, provision of culturally competent services, and attitudes and beliefs about cultural competence in service provision.

### Methodology

A sample of providers serving at least one child or youth enrolled in a system of care funded initially from 2002 to 2004 by the Center for Mental Health Services received a culturally competent practices survey (CCPS) in 2006. The CCPS was developed for the specifically for use in the evaluation of providers in these communities to assess the extent to which providers are familiar with and engage in culturally competent practices and the degree to which their organization supports or hinders culturally competent service provision. Providers and agencies serving children in the system of care were identified by project directors using snowball sampling. Agencies identified their provider staff. Of the 975 providers who were invited to participate in the CCPS, 348 qualified (respondent provided direct services to at least one child in his community's system of care) and completed the survey. Using the Dillman (2000) method for mail and internet surveys, following pre-notification by mail, providers with email addresses received email links to the survey website and emailed reminders; those without email addresses received mailed surveys reminder cards, and follow up survey mailing to non-respondents.

### Results

Respondents represented both providers directly connected to the system of care and those serving system of care children in the broader community (36% and 64% respectively). The majority of respondents were female (81%), with a mean age of 39 years (*SD* = 12.26). In terms of racial and ethnic characteristics, most respondents were White (68%), African American (17%) and Hispanic (12%). However, significantly fewer system of care providers were White than those from the broader community. (59 percent versus 71%,  $\chi^2$  = 5.77, *n* = 348, *p* = .02), and significantly more were Native Hawaiian/Pacific Islander (8% versus 1%,  $\chi^2$  = 9.69, *n* = 348, *p* = .01). More system of care providers had obtained education at the master's degree or higher than other community-based providers (54% versus 43%,  $\chi^2$  = 3.14, *n* = 344, *p* = .05).

Most providers identified their role as case managers (41%), followed by clinician or therapist (31%) and paraprofessional (16%). Significantly more system of care providers than other community-based providers participated in training activities in the past year (92% versus 82%,  $\chi^2 = 6.86$ , n = 340, p = .01) but had worked fewer years on average than providers outside of the system of care (4 years versus 6 years, t = -3.27, n = 348, p = .05). Although a small number of providers identified their role as probation or corrections, a significantly greater percentage of these providers were not directly involved with the system of care (3% versus 0%,  $\chi^2 = 3.99$ , n = 346, p = .05).

A principal components analysis was conducted that grouped responses about cultural competence into three areas (a) cultural knowledge of population served, (b) provision of culturally competent services, and (c) attitudes and beliefs about cultural competence in service provision. System of care providers differed significantly from other providers in their attitudes, beliefs, and philosophy about cultural competence in service provision. For example, system of care providers rated statements related to beliefs about cultural norms, treatment of mental illness, and interaction style as significantly more important in service provision to diverse populations than other providers (t = 2.13, n = 316, p = .03). They did not differ in their knowledge or practices.

Characteristics of organizations where providers are employed are likely to be important factors in the degree of cultural competence of the respondents. The providers in organizations that train on cultural competence as a concept/approach provide significantly more culturally competent services (t = 2.95, n = 286, p = .003). They also are more knowledgeable about their populations (t = 1.78, n = 285, p = .07), provide more culturally competent services, and articulate more culturally competent philosophy about provision of services (t = 1.87, n = 287, p = .06). However, the latter differences are only marginally significant. Providers in organizations where they were evaluated on cultural competence at least once a year are significantly more knowledgeable about their population (t = 3.22, n = 289, p = .001), have significantly more culturally competent philosophy of services (t = 2.02, n = 288, p = .04), and provide significantly more culturally competent services (t = 2.11, n = 291, p = .04). No differences were found between system of care and other providers in the cultural competence of their organizations.

### Conclusion

In this survey, providers directly affiliated with systems of care benefit from program emphasis on the delivery of culturally competent care. These providers received more training on cultural competence, and had knowledge, attitudes and practices more consistent with culturally competent service delivery. The importance of organizational emphasis on cultural competence and regular and ongoing commitment to cultural competence is supported by this study. Survey findings suggest the need for additional research into organizational characteristics, and the diffusion of system of care principles within communities.

### References

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# Session 39 >> 5:00-6:00 pm >> Salon I

### Symposium

# Retention in a Longitudinal Outcome Study: Modeling Techniques and Practical Implications

### Chair: Robert L. Stephens, Discussant: Paul E. Greenbaum Presenting: Megan Brooks, Yisong Geng, Ye Xu & Tesfayi Gebreselassie

The retention of participants in multi-site, longitudinal studies is a critical concern from a number of perspectives. Techniques for analyzing change over time are impacted by the availability of data on the same individuals across waves of data collection. Approaches to dealing with cases that have missing data at some follow-up data collection waves can have varying effects on the validity and interpretation of findings. Modeling the characteristics of individuals and sites that influence retention in longitudinal studies can provide insight into the best ways to allocate limited data collection resources to intervene when and where efforts will be maximally effective.

The current symposium will examine a number of approaches to modeling retention in the longitudinal outcome study of the national evaluation of the Comprehensive Community Mental Health Services for Children and their Families program. These approaches vary in their definitions of the outcome of retention: as a probability of participating that varies with successive waves of data collection, as a ratio of the number of waves retained over the number of possible waves for participation, or as a probability of participating in all possible data collection waves. As a result, they also take a variety of analytic approaches to understanding the characteristics that predict retention across individuals and across sites. The symposium will provide insight into innovative analytic applications as well as practical information for understanding the characteristics of those least likely to be retained in longitudinal studies and how those characteristics could potentially be targeted to maximize retention.

### Modeling Retention over Time in the CMHS Longitudinal Outcome Study

### Presenting: Megan Brooks & Yisong Geng Contributing: Tesfayi Gebreselassie

### Introduction

In this analysis, two methods are used to model participation in the longitudinal outcome study. In both models, the outcomes are binary indicators of participation at each timeframe. In the first, the outcome of retention is modeled as a series of sequential decisions of whether or not to participate in the next longitudinal outcome study interview, up to the 18 month interview. Because an individual does not decide to be "retained" in a study at one point, but rather makes a series of decisions at each interview of whether or not to continue to participate, this sequential model might capture these dynamics more accurately than other models.

In the second model, panel data analysis techniques are used to analyze participation from the 12 month interview up to the 30 month interview, focusing on the impact of past participation on future participation. While retention is not modeled sequentially here, the decision to participate at each timeframe is considered separately, while taking into consideration participation at each prior timeframe.

### Methodology

The data source for both models is the Center for Mental Health Services' national evaluation of the system of care initiative in communities initially funded between 2002 and 2004. Analyses are based on all data submitted through October 11, 2007.

The sequential logit model, also known as the sequential response model, or the continuation ratio logit, is used in the sequential decisionmaking model. Specifically, we use the sequential logit module in Stata developed by Maarten L. Buis (Buis, 2007). This model estimates the effect of the explanatory variables on the probabilities of passing a set of transitions. As explanatory variables, our model includes child characteristics (age, gender, race/ethnicity, custody status, baseline CBCL total problems score (Achenbach, 1991), and referral agency) and caregiver characteristics (log income per household member and caregiver employment status). These explanatory variables are considered at each decision point, allowing for changing impacts over time. Study participants are selected only if data are available for all baseline characteristics mentioned above. Children who miss one interview, but then return to be interviewed at a later point (or "skippers"), are dropped from the analysis (6% of the sample), as this participation pattern does not fit into the sequential decision-making model. The final sample includes 1,339 individuals.

In the panel data analysis, random effects logistic regression is used to study the impact of past participation on future participation, while controlling for the child and caregiver characteristics mentioned above. The key independent variable was the count of participation in the past. To capture any non-linear relationships, the square of count of participation in the past was also added into the model. Dummy variables were created to control for the effect of site on individual-level participation. Individuals are included in the study if there are no missing data for: age, gender, race, custody status, CBCL total problems score at baseline, referral agency, log income per household member, and caregiver employment status. Each "observation" in the study is a child at a particular timeframe, including only those timeframes where the child could have had data. For example, a child enrolled in the study for one year will have observations at the 6 month timeframe and at the 12 month timeframe, but not at the timeframes of 18 to 36 months. The "skippers" described above are included in this analysis, as there are no restrictions on the sequential nature of the data in panel data model. The resulting sample is made up of 1,519 children in 3,444 timeframes.

### **Findings**

In the sequential decision-making model, at the first decision point of whether or not to participate in the 6 month interview, there are three positively significant variables: log income per household member (*coefficient* = 0.18, p = 0.03), CBCL total problems score (*coefficient* = 0 .02, p = 0.03), and an indicator of whether or not a child was referred to the system of care through his or her school (*coefficient* = 0.55, p = 0.01). At the 12 month interview decision, child's age is marginally significant (*coefficient* = -0.05, p = 0.09), with older children less likely to participate at 12 months. None of the child or caregiver variables are significant at the 18 month interview decision point. In the panel data analysis, current participation status is positively correlated with count of historical participation (*coefficient* = 4.95, p = 0.00), while the quadratic term is negatively correlated with current participation (*coefficient* =- 0.88, p = 0.00). This implies that the impact of historical participation on current participation gets stronger as the client participates in more interviews, and then eventually decreases. Having a working caregiver is negatively correlated with current participation, but the other control variables are not significant in the model.

### Conclusion

While child and caregiver characteristics are significant in the sequential decision-making analysis, particularly at the 6 month interview, these effects are no longer significant when historical participation is added in the panel data model. Additionally, in the sequential decision-making model, child and caregiver characteristics are more significant in the earlier interviews than in the later interviews. It is possible that individual-level characteristics are important when making that first investment in the longitudinal study, but that once individuals have participated, their past participate.

Given that participation in prior interviews is the most significant predictor of future study participation, it is crucial that investments made to encourage participation are made early. Once individuals establish a record of participation, they are likely to maintain their participation. The sequential model provides some guidance as to where these early investments should be made. Children from families with lower incomes, children with fewer problems (as reported by the CBCL), and children referred by an agency other than education are all less likely to participate in the 6 month interview.

### **Reference List**

Achenbach, T. (1991). Manual for the Child Behavior Checklist/4-18 and 1991 Profile. Burlington: University of Vermont, Department of Psychiatry.

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### A Latent Class Analysis of Patterns of Respondent Participation in a Longitudinal Outcome Study

Presenting: Ye Xu Contributing: Robert Stephens

### Introduction

This presentation will explore the patterns of respondents' participation in the national evaluation of the Comprehensive Community Mental Health Services for Children and Their Families Program. Through this study we hope to develop a classification system of the longitudinal outcome study participants who were heterogeneous in their participation in follow up data collection, and develop a set of key characteristic variables that predict these patterns of participation in the longitudinal study. We will present the utility of latent class analysis for accomplishing this type of classification. Latent class analysis (LCA) allows one to examine shared characteristics across groups of respondents with different distributions on several indicators at a point in time (Muthén, 2001). LCA categorizes different patterns of characteristics into a small number of mutually exclusive classes, with each class having a distinct probability of endorsing each characteristic. LCA also allows for exploration of the effects of covariates on class membership. For this presentation retention is defined through a series of dichotomous variables that represent participation at each of the follow-up waves of data collection.

### Methodology

Data were collected from 946 respondents who all had baseline data and who participated in the national evaluation at subsequent 6-month follow-up data collection waves up to 24 months. There were 16 possible patterns of participation over the 4 follow-up waves (i.e., 6-, 12-, 18-, and 24-months). Forty-three percent of respondents participated in all 4 follow-up waves of data collection, 19% participated in the first 3 followup waves but did not participate in the last wave, 10% participated only at baseline and did not participate in any of the four follow-up waves, 10% participated in the first and second follow-up waves only, 10% participated in the first follow-up wave only, and the remaining 8% were distributed over the remaining 11 patterns.

LCA was used to identify the number of latent classes in the patterns. The outcome variables of interest are four observed indicators that represent the participation status of individuals at discrete time points (1 = *participating* and 0 = *not participating*), and the latent class variables model the population heterogeneity up to 24 months. We used Mplus to conduct two-class versus three-class versus four-class LCA analysis. The performance of several fit indices was used to evaluate the models. We also regressed latent categorical variables on a set of covariates to assess how well respondent characteristics, such as gender, race and age, predicted class membership.

### **Findings**

The three-class model yielded a sample size adjusted BIC of 3356.91, which is lower than in the two-class and four class models. This model also yielded a significant adjusted Likelihood Ratio Test = 66.427, df = 9, p < .001, suggesting that the three-class model provided better fit to the data (see Table 1).

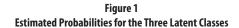
In the three-class model, Class 1 comprising 17.5% of the sample exhibited consistently low probabilities of participation across all followup data collection waves (see Figure 1). Class 2 comprising 17.1% of the sample consisted of individuals with drastically declining probabilities of participation from 6 months to 24 months. Class 3 comprising approximately 65.3% of the sample population consisted of individuals

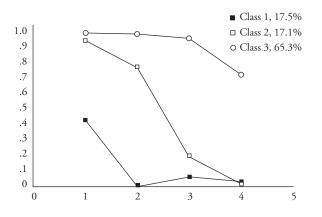
Table 1
Bayesian Information Criterion (BIC), Entropy Index,
and Lo-Mendell-Rubin Adjusted Likelihood Ration Test (LRT)
values for One-class, Two-class, Three-class and Four-class models

Model	BIC	Sample-size Adjusted BIC	Entropy	Lo-Mendell-Rubin adjusted LRT (df)
One-class	10626.392	10588.280		
Two-class	3432.61	3391.32	0.860	890.023 (9)*
Three-Class	3426.78	3356.91	0.814	66.427 (9)*
Four-Class	3461.95	3366.67	0.859	65.111(9)

with high probabilities of participation at the earlier and later stages of the evaluation; individuals in this class appeared to be the most stable participants from intake to 18 months, but exhibited reductions in probability of participation at 24 months.

Results of covariate analyses indicted that child's gender was predictive of membership in Class 1 relative to Class 3. The probability of being in Class 1 relative to Class 3 is greater for females than males. In addition, we found that child's race/ethnicity was associated with latent class membership. Respondents who were Hispanic or African American were relatively less likely to be members of Class 2 than of Class 3 compared with all other races/ethnicities.





### Conclusions

When retention is conceptualized as a set of patterns of dichotomous indicators of participation in each data collection wave, LCA indicates that distinct groups of participants can be identified that are distinguished by their probability of participating at each follow-up data collection wave. Further, families of female, non-minority children are more likely to exhibit patterns reflective of a high probability of subsequent failure to be retained in a longitudinal study. Special efforts at retention should be targeted toward families whose children have these characteristics.

Subsequent analyses will investigate the likelihood of latent class membership for each pattern, as well as variation of the latent class solution across sites in a multi-level context (i.e., individual-level and site-level). To determine site-level characteristics that predict variation in the individual-level latent classes, we will discuss a two-level LCA model. We will add a between-level portion of the model with site-level covariates. This will enable us to examine how the current classification model will change, and what site-level characteristics will impact the individual-level classification.

### References

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## Determinants of Retention in a Longitudinal Study using a Multilevel Modeling Approach

#### Presenting: Tesfayi Gebreselassie

Contributing: Robert Stephens, Connie Maples, Stacy Johnson, Tisha Tucker & Laura Whalen

### Introduction

In any longitudinal study, participant loss during follow-up can potentially bias the results of analysis because of differences between those who dropped-out and those who continue to participate. Survey organizations are keen to increase retention rates and enhance the quality of the data collected. Incentives have been used as a means of thanking respondents for their participation. In particular in a longitudinal study, payment of any kind may raise the expectations of respondents who will, in all future surveys, expect some payment or incentive (Singer et al., 1998; Singer et al., 1999). In this presentation, we use data from the longitudinal outcome component of the national evaluation of the Comprehensive Community Mental Health Services for Children and Their Families program to implement system of care funded through the Center for Mental Health Services, as well as site level information on communities participating in the evaluation, to investigate child, caregiver and site level characteristics that predict retention in the longitudinal outcome study at 6, 12, and 18 months.

When participants in one community have more in common with each other than with participants in other communities there exists a non-independence of observations. In order to investigate the relationship between site-level variables and individual outcomes we use hierarchical models that correctly account for the clustered nature of the data (Bryk & Raudenbush, 1992). For this presentation, the outcome of retention is modeled as an indicator variable showing whether a subject in the study completed all three of the 6, 12, and 18 month interviews or not. The sample includes only those participants for whom baseline data were available. Thus, predictors of this outcome will identify characteristics associated with complete participation in all waves of data collection in contrast to missing any data collection wave, and negative results would indicate characteristics that should be addressed to maximize the likelihood of retention.

### Methodology

The data for this analysis come from participants in the longitudinal outcome study component of the CMHS system of care initiative in communities initially funded between 2002 and 2004 by the Center for Mental Health Services to implement the system of care initiative. Site level information was gathered on 21 communities participating in the evaluation to investigate child, caregiver and site level characteristics that predict retention in the longitudinal outcome study at 6, 12, and 18 months. The site level data come from information gathered regarding evaluation staffing structure, management and interviewer stability, and other aspects of evaluation implementation for sites participating in the national evaluation. After eliminating cases with missing information, the data used in this analysis consisted of 1,329 children and families nested within 21 communities funded between 2002 and 2004.

Because the dependent variable is dichotomous we estimate a random intercept multilevel logistic regression model. We use Stata's GLLAMM (generalized linear latent and mixed models) module to estimate the two-level hierarchical linear model (GLLAMM Manual, 2004). The two-level model includes individual characteristics at Level 1 and site characteristics at Level 2. Individual-level covariates in the model included child characteristics (gender, age, race/ethnicity, school referral source, and CBCL total score); caregiver characteristics (work status, custody status); and the log of median family income per capita. Individuallevel covariates were group-mean centered. Site-level covariates included the total amount of incentives paid to clients over time, percentage of evaluation staff FTEs (i.e., fulltime equivalent positions) devoted to interviewer staff, stability of management staff, and whether management staff had previous experience in a system of care.

### **Findings**

Table 1 summarizes results of the full hierarchical linear model. Our preliminary analysis showed that, with the Level 2 model unconditional, the Level 1 model indicated none of the individual level predictors are statistically significant. In the full model that includes site-level characteristics, we found that increasing the total amount of incentives paid (*coefficient* = .002, p < .003) and increasing the percentage of interviewer FTEs (*coefficient* = .205, p < .008) increased the likelihood of retention up to 18 months in the longitudinal study.

Table 1
Results From a Random Intercept Multilevel Logistic Regression Analysis

	Full Unconditional	Full Conditional	
	Coefficient	Coefficient	P >  z
Site level variance (std. error)	0.903 (.199)	0.838 (.154)	
log likelihood	-803.398	-793.603	
Individual level characteristics			
Girl		-0.119	0.380
Age of child		-0.028	0.181
Race – white		0.112	0.461
CBCL total		0.009	0.214
Caregiver working		-0.092	0.482
Custody - biological parent		0.064	0.687
Log. of per capita median income		0.035	0.578
Site level characteristics			
Management has SOC experience	2	0.097	0.642
Incentive		0.002	0.003
Interviewer's FTE (%)		0.205	0.008

### Conclusions

Our findings indicate that when the outcome of retention is conceptualized as a dichotomous indicator of complete participation over 18 months of follow-up data collection, individual-level characteristics do not predict retention. When the influence of individual- and site-level characteristics are considered together in the same multi-level model our findings indicate that site-level influences predominate in explaining the likelihood of retention across all waves of data collection considered in the longitudinal outcome study. Not surprisingly, increasing total amount of incentives paid over the follow-up period was associated with increased retention in the study. This has implications for evaluation staffing decisions and resource allocations in conducting evaluations of longitudinal outcome studies.

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# Session 40 >> 5:00-6:00 pm >> Salon J

### **Topical Discussion**

## The National Network to Eliminate Disparities (NNED) to Eliminate Disparities: A New Structure to Address the "Wicked" Problem of Disparities

Presenting: Larke Nahme Huang, Mareasa Isaacs, Barbara Bazron, Nancy Carter & Holly Echo-Hawk Contributing: Rachele C. Espiritu

### Introduction

The national momentum for addressing disparities in behavioral health care is at an all-time high. National reports, including the *Surgeon General's Mental Health: Culture, Race and Ethnicity* (U.S. Department of Health and Human Services, 2001), the Institute of Medicine's *Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare* (Smedley, Stith, & Nelson, 2003), and the President's *New Freedom Commission on Mental Health's Achieving the Promise: Transforming Mental Health Care in America* (2003) all gave impetus to the dialogue on disparities. Taken together, these reports proclaim a public health imperative to meet the needs of diverse racial, ethnic and cultural populations in the United States.

### What is the issue?

In the U.S., many diverse cultural, racial and ethnic communities experience widespread inequities in access to quality behavioral health care. Inequities occur throughout the spectrum of care from (a) poorer outreach and engagement, to (b) prevention and treatment interventions, to (c) neglect of culturally appropriate recovery services and supports.

These disparities lead to poor individual, family and community outcomes, and become conditions that are entrenched, causing disparities to widen with each new generation. These disparities represent complex challenges that defy simple solutions.

There are many efforts currently underway to address disparities in health and behavioral health care. Around the country, there are pockets of excellence in reducing disparities. However, much of this activity remains fragmented and disconnected. Additionally, research and policy efforts addressing disparities often lack the connection to and depth of involvement of the very communities they seek to serve. Thus, the nuances and knowledge that comes from those who are on the "front lines" are missing from many of the current disparity strategies. There is a wealth of information, insights, and knowledge that is simply not being shared or used to enhance or create more effective strategies for eliminating disparities in our country.

### What is the solution?

Complex problems require social change built on organizing knowledge, developing an implementation infrastructure, and garnering political will. This is the foundation for the National Network to Eliminate Disparities in Behavioral Health (NNED).

In an effort to address these concerns and build on existing policy reports and recommendations focusing on reduction of disparities, the Substance Abuse and Mental Health Services Administration (SAMHSA) enlisted the National Alliance of Multi-ethnic Behavioral Health Associations (NAMBHA) to coordinate the development of the National Network to Eliminate Disparities in Behavioral Health.

Through a facilitated network structure, the NNED will:

 Coordinate knowledge and best practices by linking "pockets of excellence;"

- Foster new collaborative partnerships;
- Leverage resources through strategic initiatives;
- Support increased system coordination and service integration;
- Research and design "next practices;"
- Build an implementation infrastructure; and
- Advance political will.

In efforts to eliminate behavioral health disparities, the NNED will address issues of access, availability, quality and outcomes that are essential to the inclusion of all populations in the successful transformation of behavioral health care in the United States. Yet, to begin to reduce disparities, it is essential to target the issues of underrepresentation of people of color in quality behavioral health services and overrepresentation in more restrictive sectors of care such as child welfare and criminal justice. Understanding the interconnectedness of different service sectors involved in the behavioral health care of diverse communities is an essential underpinning of the NNED.

The NNED's vision is that *All culturally, racially and ethnically diverse individuals and families thrive in, participate in, and contribute to healthy communities.* The mission of the NNED is to build, partner with, and sustain a national network of diverse racial, ethnic and cultural communities and organizations to promote policies, practices, standards and research to eliminate behavioral health disparities.

The NNED is guided by the following principles and values:

- Excellence in behavioral health
- Community voice
- Collective advocacy and action
- Soft power
- Inclusion
- Respect
- Trust and reciprocity
- Strength-based policies, practices and research
- Lifespan focus
- Holistic view of health and wellness
- System intersections
- Flexibility

### How is the NNED structured?

The NNED is a network with three types of entities: (1) Community and Ethnic-Based Organizations and Networks (CEBONs) provide a wide spectrum of services, including behavioral health interventions, as well as tap into leadership structures within diverse communities; (2) Knowledge Discovery Centers (KDCs) have expertise in at least one of the NNED priority areas, and also have capacity in a core function such as training, policy development, program evaluation, or technical assistance; and (3) The National Facilitation Center has primary responsibility for coordination of the CEBONS and the KDCs; and, for facilitating dialogues, knowledge exchanges, convenings, resource identification and development among NNED entities, partners and the larger public.

### What are the NNED's initial priority areas?

- Public education and awareness of behavioral health issues in diverse communities;
- Identification and documentation of effective community outreach and engagement strategies;
- Development of a diverse workforce and effective training approaches;
- Documentation and dissemination of effective strategies to integrate primary care and behavioral health;
- Analysis and inventory of community-based evidence and interventions; and
- Cultural adaptations of evidence-based behavioral health interventions.

### References

- New Freedom Commission on Mental Health. (2003). Achieving the Promise: Transforming Mental Health Care in America. Final Report. U.S. Dept of Health and Human Services, Pub. No. SMA-03-3832, Rockville, MD.
- Smedley, B. D., Stith, A. Y., & Nelson, A. R. (Eds.). (2003). Unequal treatment: Confronting racial and ethnic disparities in health care. Washington, DC: Institute of Medicine of the National Academies, Board on Health Sciences Policy, Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care.
- U.S. Department of Health and Human Services. (2001). *Mental Health: Culture, Race, and Ethnicity—A Supplement to Mental Health: A Report of the Surgeon General.* Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services.

# Tuesday, February 26 Events

7:30 am	Registration & Networking Breakfast
8:15 – 8:30 am	Video: Steve Banks's Discussion on Research Methods
8:30 – 11:45 am	Plenary Sessions I & II
12:00 – 1:30 pm	Lunch on Your Own
1:30 – 2:30 pm	Brown Bag Discussion: LGBT Youth
1:30 – 2:30	Special session: Involving Stakeholders in Data Interpretation
1:30 – 2:30 pm	Concurrent Sessions 41–48
2:45 – 3:45 pm	Concurrent Sessions 49–56
4:0 – 5:00 pm	Concurrent Sessions 57–64
5:30 PM – 7:00 pm	Poster Sessions and Networking Reception
Dinner on your owr	1

## Tuesday Plenary

## SOC and Evidence Based Practices: Elevating the Discussion

### Session 1: 8:30 - 10:00 » Salons E & F

Moderator: Gary Blau Robert Friedman, Barbara Burns, Scott Henggeler, Janice Cooper

### Session 2: 10:15 – 11:45 AM » Salons E & F

### Moderator: Larke Huang Charles Glisson, Darcy Gruttadaro, Eric Bruns

On Tuesday, Feb. 26, the discussion intensifies as six leading experts delve into the topic of effective care for all children with mental health challenges and their families in accordance with system of care values and principles. For this first time, there will be two back-to-back plenary sessions, separated by a 15 minute break. Experts will share their perspectives on what is needed to better serve children with serious mental health challenges and their families. They will answer a number of questions including:

- What is meant when talking about evidence-based practices?
- How far along are we in developing evidence-based practices for children with the most serious mental health challenges and their families, and particularly children from diverse backgrounds?
- How might we create within communities and organizations the conditions that lead to application of effective practice with children and families?
- What are the implications for researchers and administrators?
- How does this concept of "organizational context" relate to each of the different levels, e.g., community, system, organization, program, and practice?

Perspectives will be provided from:

*Eric Bruns, PhD:* Psychologist and Assistant Professor at the Department of Psychiatry and Behavioral Sciences, University of Washington Medical School. As a leading researcher and conceptualizer about wraparound care, he works on developing and evaluating processes for delivering community-based services and supports for families with children with complex mental health needs.

**Barbara Burns, PhD:** Professor of Medical Psychology in the Department of Psychiatry and Behavioral Sciences at Duke University School of Medicine. She is a distinguished services researcher with a strong background in evidence-based practices and mental health policy. Aside from being a professor, Dr. Burns is also the Director of the Services Effectiveness Research Program and is currently conducting research on the dissemination of effective clinical interventions for youth with severe emotional disorders.

*Janice L. Cooper, PhD:* Director, Child Health and Mental Health, National Center for Children in Poverty (NCCP), a division of the Mailman School of Public Health at Columbia University. Dr. Janice L. Cooper's research has focused on quality of care for children and youth with attention-deficit/hyperactivity disorder (ADHD), cultural and linguistic competence and mental health financing.

*Charles Glisson, PhD:* Distinguished University Professor, Director and Founder of the Children's Mental Health Services Research Center at the University of Tennessee. For 20 years, he has been conducting and publishing nationally recognized research on children at risk and the organizations which serve them. He has written numerous articles in major social work, mental health, and organizational research journals, and has made presentations throughout the country on the organizational context of social and mental health services.

*Darcy Gruttadaro, J.D:* Director of the Child & Adolescent Action Center at the National Alliance for Mental Illness (NAMI). Darcy focuses her study on building effective partnerships and driving the debate in reforming the children's mental health system. She is also a member and advisor to numerous children's health care task forces and agencies including the American Academy of Pediatrics (AAP) Mental Health Task Force and the Treatment of Adolescent Suicide Attempters Study (TASA) at the National Institute of Mental Health (NIMH).

*Scott W. Henggeler, PhD:* Professor of psychiatry and behavioral sciences and director of the Family Services Research Center at the Medical University of South Carolina. As a developer of Multi-Systemic Therapy, his social policy interests include the development and validation of innovative methods of mental health services for disadvantaged children and their families, as well as efforts for redistributing mental health resources to services that are clinically effective and cost-effective and preserve family integrity.

## Tuesday Special Events

### 12:00 - 1:30 PM – Meeting Room 10

## Brown Bag Discussion: Research Collaborative for LGBT Youth and Familie

You are cordially invited to participate in an important first step toward the development of the Research Collaborative for LGBT Families and Youth. The overall outcome of the collaborative is to improve the access, appropriateness, availability and utilization of mental health and related services for lesbian, gay, bisexual, and transgender (LGBT) parents and their children and LGBT youth in need of such services. Bag lunches will be available for purchase prior to this session; stop by the information desk prior to 10:00 AM to order your lunch.

Panel: Katherine Lazear, Peter Gamache, & Sylvia Fisher

### 1:30 - 2:30 PM – Meeting Room 9

## Special Discussion: Involving Community Stakeholders in Data Interpretation & Dissemination

The purpose of this session is to share information and insight on the importance of and strategies for engaging and involving multiple stakeholders in the interpretation and dissemination of system of care evaluation data. As a result of this discussion, evaluators and community stakeholders, including families and youth, will learn how to collaborate together as partners for interpreting and disseminating evaluation data in the most meaningful way. Community panelists will share how they have successfully involved community partners in the interpretation and dissemination of data.

Panel: Katrina Bledsoe, Eileene Chappelle, Jeannette Truxillo & Becca Sanders

# Tuesday, February 26 - 1:30 pm

Special Session Room 9	Topical Discussion—Involving Community Stakeholders in Data Interpretation and Dissemination	Page 179
	Presenting: Katrina Bledsoe, Eileene Chappelle, Jeannette Truxillo & Becca Sanders	
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	Chair: Terje Ogden	
	Large Scale Implementation Model of Evidence Based Programs	
	Presenting: Terje Ogden	
	Evaluation of Program Effectiveness and Sustainability	
	Presenting: Kristine Amlund-Hagen	
	Implementing the PALS School-Wide Intervention Model	
	Presenting: Mari-Anne Sørlie	
Session 42 Salon B	Paper—Characteristics of Youth and Families Receiving Informal Support Services Presenting: Ebony Montgomery	Page 182
	Paper—Youth and Family Perspectives: Mental Health Needs and Access	Page 184
	Presenting: Diana McIntosh & Julie Geiler	
Session 43 Salon C	Paper—Evaluation of a Family Organization Integrating Local and National Evaluation Data	Page 185
	Presenting: James Cook, Nancy Kothandapany & Laura Weber	
	Paper— Utilizing Research Process to Implement Effective Parent to Parent Services	Page 187
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Session 44	Paper— Rural Residence and Unmet Need in Two Service Systems	Page 188
Salon D	Presenting: Anna Maria Brannan	-
	Paper— Small Town Systems of Care: Perceptions of Innovative Children's Mental Health Services in a Rural Setting	Page 189
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Session 45 Salon G	Symposium—Community Defined Evidence Models to Measure Practice Effectiveness in Diverse Communities	Page 190
	Chair: Ken Martinez, Discussant: Lynne Marsenich	
	Community Defined Evidence: A New Paradigm to Measure "What Works" in Communities of Color	
	Presenting: Ken Martinez	
	Supporting and Developing Evidence for Community Defined Practices in Diverse Communities: A Multi Site Model in Seattle, Washington	
	Presenting: Davis Ja	
Session 46 Salon H	Symposium—Risk Factors among Young Children Served in Early Childhood Systems of Care	Page 193
	Chair: Ilene R. Berson, Discussant: Gary Blau	
	Creating a System of Care Tailored to Meet the Unique Needs of the Early Childhood Population Presenting: Elizabeth Masten	
	The Reciprocal Relationship between Young Children with Severe Emotional and Behavioral Difficulties and Parenting Stress and Strain	
	Presenting: Joy S. Kaufman & Kim Shepardson Watson	
	Trauma Experiences of Children Served by Early Childhood Systems of Care	
	Presenting: Cindy A. Crusto & Meghan Finley	
	An Exploration of Factors Mediating Disruptions in Young Children's Relationships with Primary Caregivers	
	Presenting: Ilene Berson & Maria Garcia-Casellas	

Session 47 Salon I	Paper—Reducing Seclusion and Restraint Use with Children with Serious Emotional Disturbances	Page 198
	Presenting: Lynda Frost	
	Paper—Effectiveness of Multi-Systemic Therapy for Youth who Sexually Offend: Preliminary Findings	Page 199
	Presenting: Elizabeth Letourneau & Scott Henggeler	
Session 48 Salon J	Topical Discussion—Further Discussion on the Public Health Approach to Mental Health	Page 200
	Presenting: Rachele Espiritu, Joyce Sebian & Neal Horen	

# Special Session >> 1:30-2:30 pm >> Room 9

## **Topical Discussion**

## Involving Community Stakeholders in Data Interpretation and Dissemination

Presenting: Katrina Bledsoe, Eileene Chappelle, Jeannette Truxillo & Becca Sanders Contributing: Stacey Lee

#### Introduction

Partnerships between stakeholders lead to shared power and influence in decision making and a vested interest in transformation for systems change. This partnership is important in all phases of evaluation including: (1) planning and design, (2) implementation and data collection, and (3) interpretation and dissemination of results. This special session will focus on the importance of and strategies for engaging and involving multiple stakeholders with diverse perspectives in the interpretation and dissemination of system of care evaluation data. As a result of this discussion, evaluators, community stakeholders, including families and youth, will learn how to collaborate together as partners during evaluation planning, implementation, and data dissemination. The facilitator will guide the discussion by encouraging participants to share information and insight regarding stakeholder involvement in all three phases of program evaluation. A panel of experienced evaluators and a family representative will share how they have successfully involved community partners in all phases of program evaluation.

### Issues to be discussed

The facilitator will begin the session by introducing the topic and providing an overview of the session. A panel of experienced community representatives from two system of care communities (Phase IV and V) will present on how they have successfully involved stakeholders in evaluation activities and effectively incorporated diverse perspectives in all phases of program evaluation. In addition, the community representatives will field questions from the audience and provide community-level examples of their successes and challenges in building partnership between evaluators and community stakeholders. A team consisting of an evaluator and family representative from Harris County Systems of Hope will present strategies for a participatory evaluation in system of care transformation that can contribute to creating partnerships between professionals and stakeholders in the planning and implementation phases of the evaluation. The lead evaluator from Columbia River Wraparound in Oregon will present techniques for involving various stakeholders in interpretation and dissemination of evaluation data. In addition, this presenter will discuss positive aspects and challenges to involving numerous community stakeholders in the dissemination phase of evaluation. Dissemination products will be shared with audience members.

Finally, the session chair will facilitate a brainstorming session by asking participants to share their own perspectives regarding potential hurdles in engaging stakeholders, reservations in sharing interpretation and dissemination responsibilities, and possible strategies in overcoming these issues. Issues to be addressed should help participants think about barriers to partnerships and provide them with specific community level examples on how to go about working through them. The discussion will not only provide specific strategies but will also emphasize the importance of building and strengthening a partnership between the evaluators and community stakeholders. Session attendees will leave the session with specific ideas for stakeholder involvement in all three phases, as well as information regarding positive aspects and inherent challenges to this particular model of program evaluation.

#### Who should attend

Evaluators, families and youth, and other community stakeholders.

# Session 41 >> 1:30-2:30 pm >> Salon A

## Symposium Implementing and Evaluating Evidence-Based Programs Targeting Conduct Problems in Children and Youth in Norway

#### Chair: Terje Ogden Presenting: Terje Ogden, Kristine Amlund-Hagen & Mari-Anne Sørlie

A school-wide intervention program aiming at the prevention of behavior problems and the promotion of social competence through positive behavior support was implemented in order to promote evidence based practice in schools. The model is implemented in a step-by-step fashion and is gradually scaled up to meet demands from schools across Norway. The program was evaluated in a quasi-experimental effectiveness trial with four elementary schools. The outcome results were encouraging and high implementation quality and teacher collective efficacy were associated with positive student outcomes.

## Large Scale Implementation Model of Evidence Based Programs

#### Presenting: Terje Ogden

The Norwegian national implementation strategy is based on the collaborative efforts of a national center for dissemination, implementation and research and the local child and adolescent service system in the municipalities. The main components of the implementation strategy are (1) long term funding of programs and establishing a national center for program implementation and research coordinating policy, practice and research, (2) collaborative implementation of programs at the regional, county and municipal level, (3) a therapist and practitioner recruitment strategy of the service systems, (4) establishing comprehensive therapist/practitioner training, supervision and maintenance programs and (5) conducting research on child and adolescent behavior change and the implementation quality of the treatments offered. In order to increase capacity and meet the challenges of large scale implementation, the Norwegian Center for Child Behavioral Development (CCBD or the Behavior Center) was established by the University of Oslo. The center was from the outset granted long term funding by the Ministry of Child and Family Affairs in order to coordinate policy, practice and research. It is organized as a three tiered organization with implementation departments for children and adolescents, and a research department. The national strategy further includes an extensive system of quality assurance, including monitoring of treatment and program adherence, productivity and outcomes.

The CCBD has a national responsibility for the training, supervision, quality assurance and research on selected evidence based programs aimed at the prevention and treatment of conduct problems in children and youth. In this approach we combine a centralized dissemination (top down) and a local implementation (bottom up) model of implementation. Examining the indicators of long term sustainability reveals the shortcomings of the decentralized implementation approach and highlights the importance of a national strategy for the implementation of evidence based practices. The overarching goal of the implementation was to effectively reduce and prevent conduct problems. Risk reduction and the promotion of protective factors are at the heart of all programs implemented by the center.

Most programs have been evaluated in efficacy studies and some have been tested in effectiveness studies. The process and outcomes of large scale implementations, however, have seldom been studied systematically (Ogden, Forgatch, Askeland, Patterson & Bullock, 2005). The Norwegian PMTO implementation study was therefore organized as an international collaboration between the Oregon Social Learning Center (OSLC) and the CCBD in order to study the implementation of the OSLC Parent Management Training model in local agencies throughout Norway and across 3 generations of PMTO therapists. The study financed by National Institute of Drug Abuse (NIDA) and the Norwegian Ministry of Child and Family Affairs will examine factors contributing to adoption, adaptation, implementation and fidelity (Forgatch, 2002). The program developers anticipate that the method will be modified as a function of the time it is practiced in Norway. The hypotheses are that competent adherence to PMTO will be associated with positive intervention outcomes, that fidelity will change within PMTO therapists over time and that adherence to PMTO will drift across successive generations of Norwegian PMTO therapists (Ogden et al., 2005). Further, characteristics of agencies, therapists and families are expected to affect the extent to which professionals demonstrate competent adherence to the core intervention program components. The project is still in progress, but we expect that the results will contribute to our understanding of large scale implementation and sustainability of evidence based practices.

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# Evaluation of Program Effectiveness and Sustainability

#### Presenting: Kristine Amlund-Hagen

Two family treatment programs targeting conduct problems in children and youth, respectively, were implemented across Norway, starting in 1999; Parent Management Training (PMTO – the Oregon model, Forgatch, 1994; Patterson, Reid & Dishion, 1992) and Multisystemic Therapy (MST; Henggeler, Schoenwald, Borduin, Rowland & Cunningham, 1998).

The Oregon model of Parent Management Training (PMTO) was implemented in 1999 and eight years after the introduction of the training program, 208 therapists have been trained and certified at CCBD. Moreover, 190 have also been re-certified within 3 years which is a requirement for continuing to practice PMTO. The PMTO training program lasts for 1.5 year. The certification of therapists is based on PMTO expert evaluations of video tapes from therapist sessions. The Fidelity of Implementation system (FIMP, Knutson & Rains, 2003) is used in the assessments of therapist competence and treatment adherence. PMTO therapists participate in supervisory groups and network meetings on a regular basis.

The permanent training and supervision network consists of 5 PMTO specialists at the CCBD, 6 regional coordinators and 7 regional consultants. In addition to training and supervision, technical support to local therapist is offered by the national team. The essential activities and procedures instigated in order to secure sustainability of the program are monthly network meetings, 8 meetings per year in small supervisory groups and re-certification of therapist every third year. The number of children and families receiving PMTO has increased over the years as more therapists have been certified. In 2006, approximately 1,500 families went through treatment.

A randomised controlled trial has been carried out in order to investigate the treatment effectiveness of PMTO (Ogden & Amlund-Hagen, 2007). One-hundred and twelve children and their parents were randomly assigned to either PMTO (n = 59) or Regular Services (n = 53). The forthcoming publication concludes that the PMTO treatment program produced positive clinical outcomes compared to regular services. Treatment integrity measured by observation based FIMP scores in the PMTO group indicated higher scores were associated with increased parental positive involvement and effective discipline and also with greater treatment satisfaction.

MST is implemented across Norway with 23 teams (86 therapists and 25 team leaders), starting in 1999. The national support from the CCBD consists of site assessment conducted on a regular basis, 5 days introductory training, weekly telephone consultations, quarterly booster sessions, monitoring of treatment adherence and outcomes, and clinical outcome studies.

A randomized trial of MST was conducted during the first year of implementation with 100 adolescents randomly assigned to MST (N = 62) and Regular Services (N = 38). The results showed that the positive clinical outcomes in the US could be replicated in Norway for youth with conduct problems (Ogden & Halliday-Boykins, 2004). MST was more effective than regular services at reducing youth internalising and externalising behaviours and out-of-home placements, as well as increasing youth social competence. MST families were also more satisfied with treatment received compared to families receiving regular services. A follow up study (Ogden & Amlund-Hagen, 2006) of treatment effectiveness conducted two years after intake to treatment showed that MST was more effective than regular services in reducing out of home placement and internalising and externalising behaviour problems at three of four sites. Next, the sustainability of MST program

effectiveness across participant groups was examined during the second year of operation (Ogden, Amlund-Hagen & Andersen, 2007). The results showed that the clinical outcomes and family satisfaction with treatment in the MST group matched those achieved in the MST group treated during the first year.

In MST, program fidelity is monitored through regular site assessments and treatment fidelity through regular reports on therapist treatment adherence (TAM) from families. Supervisor adherence (SAM) to MST is measured through feedback from the therapists. A monitoring system is established in which all cases are registered at preand post-treatment, and follow-up information about place of living and problems related to drugs, criminality and acting out behavior is collected from parents at 6, 12 and 18 months after termination of treatment (Christensen & Taraldsen, 2007). These monitoring data indicate that the behavior change brought about by MST are to a large extent sustained over a period of 1.5 years. Among those going through MST treatment, the dropout rates are low and placement out of home is prevented for a majority of the adolescents, which is a major goal of the Norwegian MST service system.

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#### Implementing the PALS School-Wide Intervention Model

#### Presenting: Mari-Anne Sørlie

"Positive behavior, interactions and learning environment in school" (Norwegian acronym: PALS) is a school-wide intervention program aiming at the prevention of behavior problems and the promotion of social competence through positive behavior support (Arnesen, Ogden & Sørlie, 2006). The model is an adapted and elaborated version of the "School-wide Positive Behavior Support" model (PBS) (Sprague & Walker, 2005). It is a part of the Norwegian nationwide implementation strategy and combines modification of the social learning environment with direct teaching and behavioral interventions implemented by the school staff.

The model was first implemented and evaluated in 4 schools, starting in 2001. In light of the encouraging outcomes from this pilot study, plans for going to scale were made, targeting 51 schools in 2006 and 91 schools in 2007. The CCBD is responsible for the training of PALS implementers, each having the responsibility for consulting and supervising 4 schools. The implementation staff consists of 2 national consultants, 4 regional coordinators and 45 PALS implementers/consultants.

The universal school-wide and classroom systems were emphasized during the first year of implementation. During the second year, universal interventions targeting all students and selected interventions targeting students at risk were combined. Implementation teams with participants from staff, administration, parents and school psychological services were established at each school. Team tasks were to plan and implement interventions, develop the schools' own handbook, monitor the progress and outcomes, organize school-wide assessment of risk and protective factors, and introduce PALS to parents and staff. The teams attended monthly training and supervision sessions with the PALS project manager, and were responsible for the training of the school staff on a weekly basis.

The effectiveness was evaluated using a quasi-experimental design in four elementary schools two years after implementation (Sørlie & Ogden, 2007). An equal number of comparisons schools were included in the study. All comparison schools had initiated some type of school improvement projects in order to promote positive student behavior and/ or improve learning conditions.

Program Implementation Quality was measured using the Total Implementation Quality Scale (TIQS) based on The Effective Behavior Support Survey (Sugai, Horner & Todd, 2000) and The School-wide Evaluation Tool (Horner, Todd, Lewis-Palmer, Irvin, Sugai, & Boland, 2004). TIQS measures the integrity of interventions implemented school-wide and within the classroom context. The Collective Efficacy Scale (CES) developed by Goddard and colleagues (2000) was used as a program-independent indicator of how successful each school was in its efforts to establish consistent school-wide academic and behavior policy and practice.

Informants were students (N = 735) in  $3^{rd}$  to  $7^{th}$  grade and their teachers (N = 82). The reductions in teacher observed problem behavior after two years of implementation ranged from moderate to large, while the results based on student ratings of social competence and classroom climate were less encouraging. The positive behavioral changes observed in the PALS-schools were greater at the school level than at the classroom level. This might be attributed to the importance placed on implementing school-wide rules and consistent rule enforcement in PALS. Implementation quality and teacher collective efficacy were both significantly related to better outcomes in the interventions schools.

Among PALS schools, the school with the highest mean implementation score (TIQS) also had the greatest increase in teacher and student rated social competence and the largest decrease in teacher rated problem behavior as measured by change scores. The school that was ranked as the second best according to the total implementations scores was ranked second in increase in teacher rated social competence and decrease in problem behavior. Taken together, these results indicated that high implementation quality was associated with positive student outcomes.

The outcome study indicated that PALS is a promising intervention model for school-wide prevention of behavior problems, for the promotion of positive behavior and teacher collective efficacy. At a more general level the PALS-model illustrates the value of systematic school-wide interventions to reduce and prevent problem behavior. This implies systematic implementation of evidence-based comprehensive interventions at all arenas of the school and with contributions from participation of the whole staff.

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# Session $42 \rightarrow 1:30-2:00 \text{ pm} \rightarrow \text{Salon B}$ Characteristics of Youth and Families Receiving Informal Support Services

Presenting: Ebony Montgomery Contributing: Anna Krivelyova

#### Introduction

The Comprehensive Community Mental Health Services for Children and Their Families Program (the CMHI) is a federally funded program emphasizing a strengths-based approach to treatment of youth with severe emotional disturbances. Informal support services are one such example of a strength-based approach to services, which take into account the preferences of youth and families. Informal support services refer to services provided to the child and family without compensation from any formal service system, such as youth mentoring by a relative or friend, faith-based services, and the cultivation of positive relationships with a teacher or other community members. Data from the national evaluation of systems of care, funded by the Center for Mental Health Services (CMHS), were used to describe the receipt of informal services of children and families enrolled in systems of care and to examine the characteristics of children and families associated with the use of informal services.

#### Methods

The sample was drawn from communities funded in 2002–04 and was determined by the caregiver response to this item on the Multi-Sector Services Contact–Revised (MSSC–R) questionnaire at the 6-month assessment: "In the last 6 months, did your child and/or family receive informal support?" A non-missing response to this question denoted inclusion in the sample (n = 1,459). Intake data were from the Caregiver Strain Questionnaire (CGSQ; Brannan, Heflinger, & Bickman, 1998) and the Caregiver Information Questionnaire. Clinical outcomes at intake included the Columbia Impairment Scale (CIS; Bird et al., 1993) and the Child Behavior Checklist (CBCL, Achenbach, 1991). The MSSC–R was used to describe services at 6 months after intake into the system of care. Chi-square tests were used to test group differences in the dichotomous measures, and *i*-tests were used for continuous measures.

#### Results

Based on reported caregiver responses (n = 1,459), 35.8% of caregivers with children in the system of care reported receiving some kind of informal support services at 6 months after intake. Types of informal support services received by caregivers included: emotional support (87.6%, n = 522), physical support (26.8%, n = 522), financial support (22.4%, n = 522), transportation support (22.6%, n = 522), and informational support (37.2%, n = 522).

#### **Reported Measures of Caregiver Strain at Intake**

The CGSQ examines the degree to which caregivers are affected by the demands of caring for a child with emotional disturbances or behavioral problems. The individual items on the CGSQ are rated on a 5-point scale; higher scores denote greater strain. The composite measures of caregiver strain include global strain, subjective internalizing strain, subjective externalizing strain, and objective strain. Global strain measures the total impact of the child's emotional problems on the family and is a sum of the three CGSQ measures. Subjective internalizing strain describes internalized feelings the caregiver may experience such as worry or guilt. Subjective externalizing strain measures negative outward feelings such as embarrassment or resentment. The objective strain measure is indicative of disruptions in family life such as time lost from work, decreased personal time or increased financial need. The findings show that caregivers of youth receiving informal services at 6 months following entry into the system of care are more likely to report higher objective strain at intake than caregivers of youth who are not receiving informal services 6 months following intake.

#### Service Use Patterns of Youth Receiving Informal Services at 6 months

Compared to youth not receiving informal support services, youth receiving informal support services also were more likely to receive outpatient services such as crisis stabilization (17.1% vs. 12.7%, p <.05) medication treatment and monitoring (54.8% vs. 38.9%, p < .001), and assessment or evaluation (64.9% vs. 58.3%, p < .05) upon entry into the system of care. The remaining outpatient services amongst which no significant differences were found include group therapy (23.8% vs. 20.1%), individual therapy (70.0% vs. 68.4%), and family therapy (34.3% vs. 31.3%). Youth receiving informal support were also more likely to receive the following support services: case management (73.6% vs. 68.4%, *p* < .05), family support (42.3% vs. 25.0%, *p* < .001), recreational activities (37.7% vs. 19.7%, p < .001), after school programs (20.2% vs. 13.8%, *p* < .01), transportation (29.8% vs. 17.8%, *p* < .01), and respite (13.9% vs. 8.6%, p <.01). Other support services examined include family preservation (12.3% vs. 11.0%), day treatment (5.4% vs. 5.5%), behavioral/therapeutic aide (13.5% vs. 13.0%), independent living (2.4% vs. 1.7%), and transition (3.6% vs. 2.1%). Inpatient services analyzed include residential camp (3.2% vs. 2.7%), inpatient hospitalization (10.1% vs. 8.1%), residential treatment center (5.9% vs. 5.7%), therapeutic group home (1.0% vs. 1.7%), and therapeutic foster care (1.8% vs. 2.5%). No significant differences were found between youth receiving informal support services and those who are not with regard to inpatient services.

Name of Variable	Children Receiving Informal Support Services	Children Not Receiving Informal Support Services
Demographics and Child History		
Females $(n = 1, 435)$	30.59%	32.79%
Male ( <i>n</i> = 1,435)	69.41%	67.21%
Child's Age $(n = 1,022)$	13.4	13.6
American Indian or Alaskan Native <sup>c</sup> (n = 1,421)	3.48%	9.73%
Asian ( <i>n</i> = 1,421)	2.13%	1.00%
Black $(n = 1, 421)$	31.72%	34.73%
Native Hawaiian or Pacific Islander <sup>c</sup> ( <i>n</i> = 1,421)	3.48%	9.73%
White <sup>b</sup> $(n = 1, 421)$	49.13%	40.60%
Hispanic <sup>b</sup> $(n = 1, 421)$	17.21%	23.45%
Biracial or Multiracial $(n = 1,421)$	12.19%	11.50%
Family History		
Physically Abused <sup>a</sup> $(n = 1,378)$	26.52%	21.52%
Sexually Abused <sup>a</sup> $(n = 1,350)$	20.36%	15.31%
History of Drug Use <sup>a</sup> ( $n = 1,398$ )	12.23%	16.76%
Parent's Education grade 11 or lower <sup>a</sup> ( <i>n</i> = 1,398)	26.08%	31.53%
Family Income Level (Income < \$15,000/yr) ( <i>n</i> = 1,371)	47.71%	46.08%
Caregiver Age <sup>b</sup> $(n = 1,398)$	39.11	40.78
Other Adult Support <sup>b</sup> $(n = 1,426)$	78.65%	72.30%
Clinical Characteristics at Baseline		
CBCL Internalizing Problems > 63 $(n = 1,270)$	65.39%	62.58%
CBCL Externalizing Problems > $63 (n = 1,270)$	83.23%	79.10%
CBCL Total Problems > 63 ( $n = 1,270$ )	82.38%	80.98%
Columbia Impairment Scale Clinical Threshold > 15 ( <i>n</i> = 1,400)	83.98%	80.27%

Table 1 Demographics, Family History, and Clinical Characteristics at Time of Entry into System of Care

 $p < .05 \ b p < .01 \ c p < .001$ 

#### Table 2 Caregiver Strain Composite Measures

Caregiver Strain Questionnaire Subscales	Receiving Informal Support Mean Score	Not Receiving Informal Support Mean Score
Objective Strain <sup>a</sup> ( $n = 1,398$ )	2.87	2.73
Subjective Externalized Strain ( $n = 1,399$ )	2.47	2.46
Subjective Internalized Strain (n = 1,399)	3.75	3.68
Global Strain ( $n = 1, 395$ )	9.10	8.88

 $^{\circ}p<.05.$ 

#### **Summary and Conclusions**

This study examined intake characteristics of youth who received informal support services during the 6 months following entry into system of care services. Youth receiving informal support services differed from youth not receiving informal support services in terms of demographic characteristics, caregiver strain, and service use. To test the hypothesis of whether informal services serve to offset the stress that can encumber the family of a youth with emotional disturbances, future and subsequent analyses will look at the relationship between informal support services and caregiver strain and other outcome variables over time while controlling for other potentially confounding variables.

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# Session 42 >> 2:00-2:30 pm >> Salon B Youth and Family Perspectives: Mental Health Needs and Access

Presenting: Diana McIntosh & Julie Geiler

#### **Contributing: Monica Mitchell**

Acknowledgements: This project was funded by The Health Foundation of Greater Cincinnati

#### Introduction

Youth and family voice in service design planning is critical to develop services responsive to mental health needs. System driven designs, though well-meaning, can be inadequate without incorporating the youth and family perspective.

The Hamilton County Mental Health and Recovery Services Board received a three year planning grant from The Health Foundation of Greater Cincinnati to improve access to mental health services for school age youth. The first phase of this planning process was to assess needs from school administrators and agency staff perspectives.

The second phase was to incorporate the voice of the youth and families by answering the following broad questions: What are the mental health needs of school aged youth and their families? How do we design a system to improve access to meet these needs? This paper will share the major findings from the second phase and highlight implications.

### Method

#### Participants

Hamilton County, Ohio has 198 schools in 22 districts. In phase 1, school personnel reported the highest mental health needs were in youth grades 7-12 which guided the second phase of the needs assessment, surveying 7-12 graders and their parents/guardians.

The Ohio Department of Education categorizes the county districts into one of four clusters: Major Urban, very high poverty; Urban, low medium income, high poverty; Urban/Suburban, high median income; Suburban, very high median income, very low poverty. These clusters and randomized sampling were used to select which 7-12 grade classrooms to target. The resulting sample of youth and their parents/guardians represented diversity in age, race and economic status.

#### Instrument

Ohio Scales (Ogles, 1999) were used to measure problem severity, functioning, and hopefulness. Additional items were added to measure incidence of mental health problems and treatment, help-seeking behavior, attitudes and emotional well being, service location preference and barriers to seeking help (adapted from the Butler County survey, 2003). The result was a three-page, 93 item paper and pencil needs assessment survey that was quantitative in nature.

#### Procedure

Five thousand matched surveys, youth and parent/guardian, were delivered to sample schools in Spring, 2007. Instructions requested teachers administer and collect youth surveys in class and have students take the parent survey home to be completed. Parents could return the survey to school or by mail in a prepaid envelope. Incentives were offered in the form of drawings for gift certificates for teachers, youth and parents/guardians to increase response rate. The survey was completed by 486 parents/guardians and 2,745 youth.

#### Analysis

Analysis of the surveys was completed by a consultant using descriptive statistics, *t*-tests and the formula predetermined by the Ohio Scales methodology. Data was weighted to achieve representation of youth and parents/guardians of the county as a whole.

### **Findings**

Major findings of the survey were as follows:

- Youth and parents/guardians reported the most frequent problem severity item as arguing with others. Second for youth was can't seem to sit still, too much energy and for parents/guardians, yelling, swearing and screaming. The third most reported by youth was yelling, swearing and screaming, and by parents/guardians, refusing to do things teachers or parents ask. Even though parents and youth concur on two of the three items, youth report them at significantly higher levels (t(3105) = 9.98, p > .001)
- Higher levels of problem severity were reported by females than males, by 9th-12th graders than 7th-8th graders, by youth with grades of D-F than A-C and by districts with lower incomes.
- Twenty-three percent of the youth reported experiencing an emotional problem in the last six months, but less than 10% reported receiving professional mental health services. Only 17% of parents reported their youth had a mental health problem in the past six months.
- Youth reported the greatest difficulty functioning on the items being motivated and finishing projects (13%) and ability to express feelings (13%) while parents/guardians selected getting along with family (12%).
- Parents/guardians report youth functioning as significantly higher than youth (*t*( 3095) = -2.47, *p* > .01).
- Functioning scores were significantly higher for nonwhites than whites (t(3095) = 2.13, p > .01), and for students with grades of A-C than D-F (t(2494) = 20.56, p > .001). Functioning increased as level of income in the district increased.
- Males were significantly more hopeful than females (*t*(2990) = -1.67, *p* > .05) and 7th and 8th graders more significantly hopeful than 9-12th graders (*t*(2589) = -5.97, *p* > .001).
- Youth and parents/guardians most frequently report seeking help for an emotional or mental health concern from friends and family.
- Youth and parents/guardians report much higher future help-seeking behaviors than they report actual past experience.
- The first choice of treatment location for youth and parents/guardians was doctor/therapist/counselor's office followed by home based services. Forty seven percent of the youth responded they would never want to receive services in schools.
- Privacy (82% of youth), cost and whether anyone could help were the most frequently reported concerns about seeking treatment, with youth reporting higher responses to barriers than parents/guardians. Almost half of the youth did not know where to get professional mental health treatment.

#### Conclusion

The needs assessment suggests youth have greater mental health needs than parents/guardians are aware and may not seek professional help for many of them. These needs include such problems as arguing, yelling, not being motivated or able to express their feelings. Barriers such as cost, privacy and where the services are offered may be impacting their ability to seek help. In spite of the trend supporting school based services, almost half of the youth report never wanting mental health services in schools. This has implications for the field in terms of listening to the youth voice and offering an array of services in a variety of locations.

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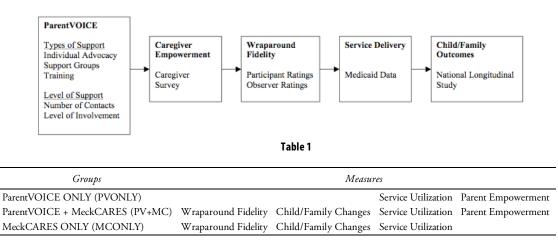
# Session 43 >> 1:30-2:00 pm >> Salon C Evaluation of a Family Organization Integrating Local and National Evaluation Data

#### Presenting: James Cook, Nancy Kothandapany & Laura Weber Contributing: Sheila Wall-Hill & Ryan Kilmer

ParentVOICE is a grassroots, family support organization serving families with youth who have severe emotional disturbances. ParentVOICE is staffed by trained parents and caregivers of children with behavioral and/or emotional health concerns, and provides a range of resources and supports, including: trainings, individual support, role modeling effective advocacy, referrals, and participation on boards and committees (see www.charmeck.org/Departments/MeckCARES/ ParentVOICE.htm). Like many family organizations, ParentVOICE recognized the need to demonstrate, with data, evidence of their impact on family-centered practice and on the family members they serve.

To develop a set of effective evaluative processes, ParentVOICE leadership sought the help of two university faculty members, who were the lead evaluators for the local system of care (SOC) site. First steps included ParentVOICE developing a logic model to articulate the hypothesized relationships between ParentVOICE activities and desired outcomes. In addition, there was a clear recognition that ParentVOICE would need to develop processes that would enable it to track its key activities, and the degree to which individual family members took advantage of ParentVOICE services and supports. This included the development of an Access database that allowed staff to record every family contact (i.e., nature and intensity/duration of contact, for whom, and when). Records of group events (e.g., support groups) indicate who attended, as opposed to simply the number attending. In tracking the duration of the contact, the most detailed records are kept (e.g., 15-minute increments) for the most intensive levels of support (individual phone, attendance at child and family team or IEP meetings). Steps have been taken to help ensure that all staff document their activities reliably. Because the partnership involved the lead evaluators of the local SOC effort, it was possible to build into the design data that are currently being collected as part of the ongoing local and national evaluation efforts, and these data are included in the overall theory of change for ParentVOICE (see Figure 1).

A series of steps, involving the ParentVOICE staff alone, select ParentVOICE staff with university faculty, and a broader array of stakeholders who were part of a facilitated sustainability planning effort, built on these initial steps. The logic model became more detailed, identifying specific indicators. Key aspects of the evaluation research design were specified more clearly, requiring additional discussions about how and under what circumstances informed consent would be needed. The overall evaluation design involves three different groups, with different data available for each of these different groups. Families served through ParentVOICE may or may not be served through the MeckCARES SOC initiative. Consequently, it is possible to assess differences between families who are served only by ParentVOICE, those served only by MeckCARES, and those served by both. These groups who will be compared on multiple measures, as shown in Table 1.



#### Figure 1 ParentVOICE Theory of Change

Wraparound fidelity is being assessed through the use of the Participant Rating Form (PRF; Cook et al, 2007) and the Team Observation Form, a derivation of the Wraparound Observation Form (Davis & Dollard, 2004). Child and family outcomes are being assessed through the measures included in the National Longitudinal Study of the National Evaluation (Holden, Friedman & Santiago, 2001). Service Utilization data are being derived from Medicaid data from the local county's Area Mental Health Authority, and Parent Empowerment is being assessed through phone surveys of ParentVOICE participants. The PV+MC families are being compared with the MCONLY families to assess whether ParentVOICE involvement is associated with improved wraparound fidelity, greater utilization of services, and improved youth and family outcomes. Differences in wraparound fidelity or service utilization could be a direct effect of ParentVOICE involvement in wraparound team meetings, helping the team function better and/or access services more effectively, or indirectly through improvements in the caregiver's ability to advocate for her family, or both. In addition, the amount and type of family support provided by ParentVOICE will then be used to test whether higher levels of involvement with ParentVOICE and/or involvement in more intensive family support efforts (e.g., individual-level support/advocacy efforts vs group training) are more strongly related to better fidelity, utilization and outcomes than relatively minimal involvement.

This paper provides a model for how parent organizations can, through partnerships with researchers, develop strategies to effectively evaluate the impact of family organizations in multiple ways within systems of care, using data that is already being collected through local and national evaluation efforts. These partnerships can also lead to capacity building and increased professional development (Kilmer et al, 2007), as well as additional resources, as evidenced by a proposal to NIMH for funding to improve the infrastructure that would facilitate communitybased participatory research with family support organizations, using ParentVOICE as a model for expanding participatory research. Initial results, showing the relationships between ParentVOICE activities and the local and national evaluation data, will be presented.

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# Session 43 >> 2:00-2:30 pm >> Salon C Utilizing Research Process to Implement Effective Parent to Parent Services

Presenting: Katherine Byrnes, Susan Corrigan, Victoria Frehe & Emily McCave

#### **Contributing: Sharon Barfield & Sharah Davis Groves**

#### Introduction

Parent to parent services are increasingly recognized as an effective component in the children's mental health service array (Ireys, Devet, Sakwa, 2002). The application of empowerment practice has created a continuum of roles for families in the systems of care spanning from involvement to leadership (Duchnowski & Kutash 2007). The perspectives family members bring to these roles helps elevate family voice in the system and shape activities that are meaningful to families, thus supporting a shift from a "provider-driven" to a "family driven" system of care (Osher & Osher, 2002). There is a dearth of rigorous study regarding effective professional parent practices in the context of the children's mental health service array. With an established infrastructure of professional parents since the early 1990s, the Kansas system provides fertile ground to develop a model of effective parent to parent practice. The purpose of the following study is to (1) describe effective professional parent practice and (2) illustrate how participatory action research (PAR) is utilized to maximize community impact.

#### Methodology

An initial study (phase I) describes effective professional parent practice. Professional parents, or Parent Support Specialists (PSS) as they are known in Kansas, provided insight regarding best sources of data to answer specific study questions, instrument development, and how to engage parents in focus groups. Semi-structured questionnaires were developed which guided an inquiry into specific domains of effective programs. In addition, these domains were utilized to develop a survey for PSS and parents.

A purposive sample of 8 (out of 27) Community Mental Health Centers (CMHCs) were selected based on stakeholder input regarding effective practices and representation of population density characteristics in the state of Kansas. Focus groups were conducted with parents, PSS, direct service staff (therapists and case managers), administrators and community partners (school staff). Researchers received 144 parent surveys and 42 PSS surveys.

The qualitative findings were categorized by two researchers. The survey findings were triangulated with the qualitative findings and a draft report was circulated for feedback. Ninety three draft reports were sent out to study participants and follow up phone calls were made to each participant. Members of the PSS statewide network provided feedback as well.

## **Key Findings**

- 1. The shared life experiences PSS have enhanced treatment credibility and parent involvement in CMHC treatment. The majority, 30 (75%) of 42 PSS are or have been parents of children living with a serious emotional disturbance (SED). These shared life experiences allow PSS to develop credible relationships with parents which instills hope, thus parents are more trusting in the treatment process. The family perspective is integrated within treatment when staff value and recognize the expertise PSS bring to the treatment process. Staff reported seeking out PSS for consultation to guide their interventions.
- 2. Effective PSS operate from an ecological paradigm which views families as the primary resource for their children's well-being. Thus, PSS teach parents constructive ways to be involved in their

children's lives and communities. Cumulative results indicate that the most helpful functions PSS performed on treatment teams are; (1) affirmation and emotional support, (2) peer support, (3) practical crisis coaching, (4) translating all perspectives on the treatment team, and (5) establishing goal-directed services. Based on their own experiences, PSS recognize the importance of being accessible when families are asking for help. From families' perspectives, accessibility contributes to the helpfulness of PSS interventions.

3. PSS are effective in agencies that embrace the family perspective brought to the treatment process by PSS. A code of ethics, regular supervision, peer training, and access to PSS peers facilitate PSS professional development and assist with the integration of the PSS role within the agencies.

Phase I findings and current literature were utilized to develop a proposal for continued study. Phase II began with dissemination of the phase I findings and the proposal for continued study to PSS and administrative groups across the state. The proposal is a quasiexperimental study that introduces additional elements of rigor (documenting the PSS intervention, establishing a baseline and a comparison group). Focus groups were conducted with PSS at their regional and statewide meetings (11). Detailed feedback was gathered on the proposal. Participants were also asked for assistance nominating sites for implementation of phase II. Two researchers analyzed the transcripts for themes. The feedback analysis illustrated how study activities were positively impacting PSS and their communities. In addition, PSS provided insight regarding effective dissemination of phase I findings to support further integration of the PSS role. An impact survey was developed to assess the effect of study activities on PSS and their communities overtime. The impact survey also provides an anonymous feedback loop to formalize PSS perspectives in the design of research activities. The impact survey data will be summarized and reviewed with PSS at subsequent regional and statewide meetings. The review of the impact survey findings will provide a venue for more discussion around designing research activities that meet needs within the system of care.

#### Conclusion

The PSS approach and statewide structure provide a foundation for transformation to a family driven system of care. Engaging PSS as partners in the research process is a positive step toward establishing family leadership in systems evaluation. Phase II study will provide opportunities for family members to get more involved in the research process (*conducting interviews, analyzing data, and interpreting and reporting results*). Future research will add to the growing evidence-base of effective parent to parent practices within the children's mental health services array.

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# Session 44 >> 1:30-2:00 pm >> Salon D Rural Residence and Unmet Need in Two Service Systems

#### Presenting: Anna Maria Brannan

Serious concerns have been expressed about access to mental health services in rural areas (Fox, Merwin, & Blank, 1995; Kelleher, Taylor, & Rickert, 1992; NIH, 2004). Among adults, rural mental health service utilization rates have been shown to be lower than urban rates for both outpatient and inpatient care (Lambert & Agger, 1995). Fortney, Rost, Zhang, & Warren (1999) showed that rural adults are less likely to access services and less likely to receive quality. Besides being underserved, rural residents, communities, and service systems are poorly understood in general. Very little is known about the impact of rural residence on children's use of mental health services. This study examined the predictors of unmet need for mental health services among children in two service systems. Of special interest was whether living in a rural area was related to children receiving services for their mental health problems.

#### **Study Population**

Data for this study come from representative samples of Medicaidenrolled children and families in two southeastern states. The Medicaid program in one state was operating under managed care while the other was a fee-for-service system. In-depth interviews were conducted with 592 children (4-17 years old) and their primary caregiver.

#### **Research Design**

Children met criteria for unmet need if they (1) had psychiatric symptomatology in the clinical range at baseline data collection on the Child Behavior Checklist (CBCL), and (2) received no formal mental health services in the subsequent 12 months. Data on child symptoms, psychosocial functioning, and demographic variables were collected from primary caregivers. Service use data were compiled from Medicaid claims. Identical methods were used across systems for reporting and managing service encounter data. Rural residence was operationalized as the proportion of the county's population who lived in Census-defined rural areas. Logistic regression analysis was applied to explore the predictors of unmet need for mental health services. Using a model building approach, we tested whether adding a new block of variables improved  $\chi^2$  given the change in degrees of freedom. The first block included rural and state variables. The second block added child and family demographic variables. The final block added child psychiatric clinical variables. The full model including all predictor variables was found to be the best fitting model using the likelihood ratio test  $[R^2 = .21; \chi^2 (10, p < .0001) = 94.69].$ 

#### **Principal Findings**

Being served in the managed care system was significantly associated with unmet need. There was no main effect for rural residence (i.e., proportion of county residents living in rural areas did not predict overall unmet need). However, the significant rural system interaction term indicated that rural residence was more positively associated to unmet need in the managed care system than in the fee-forservice system. Although severity of psychiatric symptoms predicted unmet need differentially across states, children with more impaired psychosocial functioning were less likely to have unmet need. Other variables associated with unmet need were being a girl, and being African-American.

#### Conclusions

These findings suggest that the cost cutting mechanisms of managed care systems may increase unmet need among children with emotional and behavioral disorders. Only in the managed care system did living in a more rural county increase the risk for unmet need for mental health services. It is possible that as access is curtailed, those in rural areas are more affected than those living in urban or suburban areas. In both states, girls and African-American children were at greater risk for unmet need.

#### Implications for Policy, Delivery or Practice

It is notable that the impact of rural residence differed across states and service systems. This finding suggests that efforts to improve access to services need to be tailored to local communities. It appears that comprehensive models for studying rural behavioral health services may not be as useful as carefully considered and specifically targeted efforts. Research suggests that efforts to increase access to care for girls and African-American children would be worthwhile across communities.

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# Session 44 >> 2:00-2:30 pm >> Salon D Small Town Systems of Care: Perceptions of Innovative Children's Mental Health Services in a Rural Setting

# Presenting: Michael Pullmann, Cheri Hoffman & Craig Anne Heflinger

For children experiencing mental health problems, access to services and family and community support is essential to their well-being. Despite the considerable amount of research demonstrating the needs of this population and the existence of numerous programs aimed at providing appropriate and effective services, extenuating factors often prevent children and families from accessing the care that they need. Families living in rural areas may experience service barriers that are more numerous, more difficult, more pervasive and different from barriers experienced by families living in urban areas (Harley, Bird, & Dempsey, 1999). Rural barriers may include heightened social stigma due to the interconnectedness of rural communities, a mistrust of health professionals or "outsiders" in some rural communities, a higher cost of service delivery due to lower volume of consumers, difficulty in transportation, a lack of consumer support groups, a lack of financial incentives for professionals to live in rural areas, and more (Sawyer, Gale, & Lambert, 2006). As a result, rural mental health utilization rates have been shown to be lower than urban rates for both outpatient and inpatient care (Hartley, Agger, & Miller, 2002; Lambert & Agger, 1995). Culturally competent systems will address issues specific to rurality.

The purpose of this study is to explore the supports and barriers to engagement in services for families with children that have serious emotional disturbance in rural Maury County, Tennessee, who are or have been involved with the Mule Town Family Network (Mule Town). Mule Town is an innovative collaboration between the state department of mental health, a mental health service provider and a nonprofit advocacy group that seeks to better serve the needs of children with SED and their families. Mule Town is a grantee site of the Comprehensive Community Mental Health Services for Children and their Families Program. The program utilizes a system of care framework to create a support system to help children succeed at home, in school, and in the community. This is done by building a team that includes formal and informal supports, such as case managers, teachers, doctors, therapists, neighbors and others who wrap services around the young person. Mule Town is a rare site in that it has combined staff from a family advocacy organization and a mental health center under one roof.

#### **Methods**

This study takes an exploratory, naturalistic approach to inquiry (Erlandson, Harris, Skipper, & Allen, 1993). Nine caregivers of children that had been referred to Mule Town for services and nine Mule Town staff were interviewed for 30 to 90 minutes each. Five caregivers were engaged in Mule Town services and four caregivers were never engaged beyond a few meetings. The interviews with caregivers were open ended and emergent, changing depending on the course of the interview. However, topics usually included the parent's perceptions of the child's problems, how families were referred to Mule Town, the experience of working with Mule Town, their belief of the community's perception of mental health services, the accessibility of services in their community, and their suggestions for improvements. Staff were asked about their job duties, their thoughts on Mule Town as an organization, their views on the dynamics of working on teams with both family advocates and mental health service staff, their relationships with co-workers, and suggestions for improvements.

### Results

While qualitative analysis is still underway, several themes have emerged from our interviews. The caregiver interviews revealed factors contributing to family burden. Specifically, eight of the nine caregivers who were interviewed discussed domestic violence, emotional abuse of the child, and serious substance use by one or both of the child's parents. These issues dominated many of the interviews, sometimes to the exclusion of what we had believed would be more salient issues, such as specific behavioral and mental health problems exhibited by the child. Domestic violence and parental substance use were identified as particularly difficult topics for Mule Town to address. Transportation was also a major theme for many of the parents, particularly single, unemployed mothers who were escaping domestic violence and did not own an automobile. This was especially true for caregivers who lived in rural areas of the county, and who felt trapped by the planning needed to secure transportation. We specifically asked about stigma that may be due to living in a rural county; contrary to our expectations, most participants did not feel that stigma was any different in this county when compared to urban areas. However, informal social support was lacking for the majority of the participants we interviewed, with many participants reporting a sense of isolation and a lack of community support. Many participants reported having few or no friendships or support outside of extended family members and, especially, the church. The role of the church was extremely important in many participants' lives; the church was cited as providing the transportation, emotional support, and practical help that they needed.

Staff interviews also had several themes. First, staff described a classic process of forming, storming, norming, and performing (Tuckman, 1965). The process of joining two different organizations under one roof (a family advocacy organization made up of family member employees, and a mental health center) was extremely difficult at first, and staff spoke about the problems in reconciling the differing norms, values, work requirements, and beliefs about job duties. There were strong indications that, though the working relationships between the two agencies had improved, it still felt like the two agencies worked parallel to each other rather than as an integrated whole. Staff also provided recommendations on ways to successfully navigate these issues, including open and honest communication, clear work boundaries, and public job descriptions. Staff did express a belief that stigma about mental health was more prevalent in rural areas, and some of them spoke to the difficulty in immersing Mule Town into the community. The lack of transportation in this rural community was an issue recognized by the staff, and they mentioned how that negatively impacted families' lives. Some staff also described a rural culture that required them to slow down and change their speech patterns when working with some families.

## Conclusions

These qualitative interviews provide insight into a unique system of care site that integrated staff from a family advocacy group and staff from a traditional mental health agency into one building and into the workings of this site. Both family and staff interviews revealed information specific to service provision and receipt in rural areas. Addressing rurality is an important issue in creating culturally competent systems. Because analysis is ongoing, our presentation will discuss these themes in more detail, as well as providing additional themes from the interviews.

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# Session 45 >> 1:30-2:30 pm >> Salon G

## Symposium Community Defined Evidence Models to Measure Practice Effectiveness in Diverse Communities

#### Chair: Ken Martinez, Discussant: Lynne Marsenich Presenting: Ken Martinez & Davis Ja

This symposium will present approaches to establishing evidence using cultural and/or community indices based on community-defined practices. The first presentation will propose a different paradigm to measure "what works" in communities of color by discussing the use of culturally-informed methodologies and measurement practices to distill the "essential elements" of successful practices. The goals are to influence policy and practice by positively influence academicians/ researchers, governmental entities and public and private funders to use appropriate culturally and community-defined evidence criteria when addressing the needs of populations of color. Additionally, an inventory of community defined evidence practices and current ESTs/EBTs/EBPs as well as cultural adaptations that have proven to work will be conducted and a research and evaluation agenda for the implementation and use of community-defined and based practices and ESTs/EBTs that are effective with populations of color will be proposed.

The second presentation presents an example of a multi-site evaluation of five community practiced based interventions which presents evidenced for a set of "promising practices." This study in Seattle attempts to establish evidence for practice based interventions established by five youth serving community agencies. As EBPs begin to dominate the funding landscape, many culturally diverse communities feel these EBPs ignore their experiences and successes with difficult to reach youth populations. In Seattle, funded by private foundations, this evaluation attempts to provide these agencies with evidence of the efficacy of their experience and efforts with difficult to reach youth populations. The overall strategy is to bring to bear evaluation resources that are often out of the reach of community based organizations serving diverse inner city populations. This presents a model effort in demonstrating that "promising practices" of these organizations may in fact be as successful as any EBP both in outcomes and in cost.

### Community Defined Evidence: A New Paradigm to Measure "What Works" in Communities of Color

#### Presenting: Ken Martinez Contributing: The Community Defined Evidence Project Work Group

#### Introduction

Disparities in mental health care for diverse populations are widening, especially as they relate to access, availability, quality, and outcomes of care. Collectively, ethnically/racially diverse populations experience a greater disability burden from emotional and behavioral disorders than do white populations (Huang, 2002; U.S. Department of Health and Human Services [USDHHS], 2001a).

In continuing efforts to ensure that individuals in need receive the best treatment available, policymakers, researchers and funders initially promoted the use of empirically-supported treatments (ESTs) and, more recently, the use of evidence-based treatments (EBTs) and evidence-based practices (EBPs).

The introduction of ESTs, EBTs, and EBPs would appear to be a solution to the misdiagnoses and poor outcomes that ethnically/racially diverse populations have encountered in the behavioral health system. However, it is equally as likely that ESTs and EBTs could exacerbate and deepen existing inequities if they are implemented without sufficient attention from policymakers, researchers, funders and practitioners to the existing cultural knowledge, beliefs, and practices that are respected and highly valued within diverse communities or what is now termed, practice-based evidence (PBE) (Isaacs, Huang, Hernandez, & Echo-Hawk, 2005). There is contemporary evidence of many effective and culturally appropriate practices in diverse communities that have never been formally measured empirically or documented in any manner.

#### **Population of Focus**

The introduction of ESTs and EBTs in the Latino community includes some that were designed for, and normed on, Latino populations and thus are effective in Latino communities, however there are many other ESTs and EBTs that were not designed or appropriately normed on Latino populations.

Despite having many years of practice-based evidence and experience to support traditional Latino beliefs and help-seeking behaviors, the lack of "credible scientific evidence" often prohibits the use of these supports. Research with behavioral health agencies and systems nationwide has identified a number of factors that improve access to services for Latinos, including establishing/maintaining a simplified and accessible intake process and focusing outreach to key community leaders and natural helpers (Hernandez, Nesman, & Isaacs, 2005). Such community-based practices have positively impacted Latino communities and have been deemed by communities to be "effective," yet they are not necessarily known beyond the community.

#### **Project Description**

The Community-Defined Evidence Project (CDEP), a partnership between the National Latino Behavioral Health Association (NLBHA) and the National Network to Eliminate Disparities (NNED) in Behavioral Health, proposes to evolve and contribute to a developing body of knowledge that takes into consideration worldview, cultural values and beliefs, and non-Western indigenous knowledge to assess the results of practices and treatments for Latinos.

We define community-defined evidence as a set of practices that communities have used and determined to yield positive results as determined by community consensus over time and which may or may not have been measured empirically but have reached a level of acceptance by the community. Each community's "level of acceptance" will likely vary based on community members' acceptance and support of the set of practices. As an alternative to ESTs and EBTs, we believe that by defining community-based evidence and identifying communitydefined and based practice criteria that yield positive results, the CDEP project will disseminate knowledge that will inform research, practice, policy and funding to acknowledge and recognize alternative methods of measurement of "effectiveness" in communities of color. This will ultimately influence the elimination of disparities. It is expected that the lessons learned from the process and the findings from this proposal will be applicable to, and adaptable with, other ethnic/racial groups.

#### **Project Aims**

The central goal of the CDEP is to discover and develop a model for establishing an evidence base using cultural and/or community indices that identify community-defined and based practices that work. Our other goals are to:

- promote the use of culturally-informed methodologies and measurement practices with Latino populations. Through participatory action research methods community members will help discover best practices, distill the "essential elements" of successful practices, and develop measurement criteria from those essential elements that may prove useful in measuring or evaluating community defined evidence;
- share the process, methodology, findings and lessons learned from this project with the other ethnic/racial groups so that they may apply the valuable knowledge gained in the discovery of community-defined evidence in their communities;
- 3. positively influence academicians/researchers, governmental entities and public and private funders to require the use of appropriate culturally and community-defined evidence criteria developed in this and subsequent work when addressing the needs of Latino populations;
- conduct an inventory of current ESTs/EBTs/EBPs and cultural adaptations to determine which have been developed/adapted for, or are applicable to, and effective with Latinos;
- influence policy and practice to include the yet to be discovered knowledge and expertise of communities in our research and funding of practices that work in communities of color by expanding our

knowledge base and our measurement of existing community practices through our collective voice and project findings; and

6. based on our findings, propose a research and evaluation agenda for the implementation and use of community-defined and based practices and ESTs/EBTs that are effective with Latinos to reduce disparities that exist in availability, quality, and outcomes of mental health care for all individuals and families.

The Community Defined Evidence Project will:

- Refine an Integrative Conceptual Framework and Logic Model that will guide the project.
- Identify and describe measurable community and/or culturally-based practices that support improved access to services and outcomes.
- Determine how identified and observed community-based practices can be measured (formally or informally) for effectiveness.
- Identify the common and varied characteristics among identified practices and define the "essential elements" of effective practices in Latino communities to develop criteria for community-defined evidence.
- Develop a national inventory of community-defined effective Latino community-based practices.
- Create issue briefs from project findings to influence future legislative and policy efforts in the areas of prioritizing funding for culturally-based research on racial/ethnic behavioral health disparities.
- Provide evaluation and technical assistance/mentoring/coaching to help guide agencies/organizations in developing their promising practices further.

### Supporting and Developing Evidence for Community Defined Practices in Diverse Communities: A Multi Site Model in Seattle, Washington

#### Presenting: Davis Ja

Evidenced based practices have helped change the paradigm in serving difficult to reach populations. With delinquency rising, efforts to halt the "revolving door" of multiple involvements with the justice system have been difficult. The State of Washington has increasingly pushed community based programs serving hard to reach and "at risk" youth towards the adoption of Evidenced based intervention models. More recently, the state has expanded the use of evidenced based practices (EBPs) through requiring that state matching dollars to counties be tied to the use of EBPs.

Subsequently existing community based organizations serving diverse communities have been adopting EBPs within their service models. However, the use of these EBPs have often come at substantial expense raising concerns over the costs of EBPs as well as whether diverse communities can be effectively served by these EBPs. For some community programs, the cost of these EBPs are prohibitive and may potentially lead to potential dissolution.

Although with some programs, this may be necessary in order to introduce greater program efficacy, many diverse communities EBPs as explicitly implemented by the models may in fact not meet the needs of the community and youth they serve. Although community models may not necessarily offer advantages over EBPs, they are most frequently involved directly in contextual and local conditions that require the greatest level of creativity in developing effective program interventions. Unfortunately, as with most diverse program models, these interventions have had little resources available for evaluation in order to determine program efficacy. The City of Seattle through the Reinvesting In Youth (RIY) project has provided support and funding for the development of EBPs for various communities in Seattle. However, community based organizations have also indicated strong resistance to the adoption of these models as there is little evidence that EBPs can be successfully transferred to all communities particularly with communities of color. Furthermore, given that most community agencies have had very little support or resources for evaluating their existing "home grown" or "organic" models derived from local conditions, the concern was that these potential models would be discarded without any attempt at reviewing their efficacy.

RIY was able to solicit and receive resources through multiple foundations to fund a three year evaluation of community developed practice models. A partnership was developed between RIY and a outside evaluation firm to recruit multiple community based agencies for this evaluation. Called the "promising practices" evaluation, six agencies were selected as representatives of a community intervention model that showed good "promise."

A multi site evaluation design was selected to be utilized in measuring the efficacy of the six agencies. It was also agreed that a EBP model would also be included in the design as well as a program representing a minimal intervention practice. Subsequently, within this model would be eight different program interventions aimed at "at risk" youth. Six of the agencies would represent community interventions while the seventh would represent a brief intervention program and a "gold standard" EBP would be the eighth program represented in this design.

Utilizing an empowerment evaluation approach (Fettersman & Wandersman, 2004), all five programs (one agency dropped out from the study) were trained on evaluation, including self-evaluation strategies for 16 hours. Each agency was trained to develop and refine their logic models and to develop a pictorial program theory. The program theory indicated their theory of change model for each agency. The theory of change illustrated a dynamic flow diagram of their interventions and its relationship to each initial, intermediate and long-term outcome. Using this pictorial model, common outcomes were developed that represented key outcome parameters for all program models. Measurement of these outcomes were decided by all agencies following a review of the challenges and benefits of each measure. All program administrators and staff adopted the Washington State Juvenile Court Assessment (WSJCA) despite the fact that it was a primary instrument for juveniles involved in the justice system and not "at risk" youth. The group felt it important to utilize an instrument recognized by the State and by many local funders as an effective "yardstick" for program performance.

Following the development of a Management Information System (MIS) system for each site and a review of the evaluation protocols, data collection occurred over a three year period. Each program also received a process and outcome evaluation. Data were collected from the MIS system and entered into SPSS 14.0. Analysis of the findings included the use of both qualitative and quantitative methods. Multi level modeling was utilized in judging the significance of the WSJCA in order to maximize the study sample size and power. For other measures, univariate statistics including paired sample *t*-tests were used to determine any changes in the gain scores for the youth.

Although significant issues and concerns were raised on the data collection process, the study was completed and findings indicated that most of the promising practice models were effective in serving their youth and their community. However specific variations in cost, efficacy and outcome are demonstrated in the results and in the comparative analysis.

Interestingly, the "gold standard" model EBPs was unable to collect outcome data in their study which prevented a direct comparison between the "promising practices" and the EBP. The cost analysis and findings may prove to be particularly important in future funding of "promising practices." Clearly the development of potentially effective community intervention models are demonstrated here. The concerns over evaluation resources may be a critical factor in the development of future effective community based practices. Implications are important for diverse and particularly "hidden" populations. Further findings and recommendations are included in the presentation.

# Session 46 >> 1:30-2:30 pm >> Salon H

## Symposium

## Risk Factors among Young Children Served in Early Childhood Systems of Care

#### Chair: Ilene R. Berson, Discussant: Gary Blau

#### Presenters: Elizabeth Masten, Robin Orlando, Joy Kaufman, Kim Shepardson Watson, Cindy Crusto, Meghan Finley, Ilene Berson & Maria Garcia-Casellas

In 2005 six early childhood system of care sites were funded by SAMHSA to begin to strengthen the connection between mental health services for young children, the early intervention system, the child welfare system, primary health care for young children, and child care providers and preschool programs. The Early Childhood Systems of Care have been working to evolve promising practices that establish and improve existing linkages between the children's mental health system and the early childhood, child welfare, and health care systems. Key stakeholders from these systems have engaged in collaborative planning processes designed to actively implement early childhood mental health systems of care. Over the six-year federal funding period, the early childhood systems of care are designed to improve and increase mental health and non-mental health services and supports provided for very young children consistent with system-of-care principles and best practices; link a newly created system of care with elements of the early childhood, child welfare, and health care systems; and provide comprehensive training and technical assistance to ensure that these linkages remain in place. Baseline data on young children and families served in the systems of care will be presented, and findings will highlight the effects of diverse collaborative efforts that have been implemented to provide young children and their families with intensive services that promote resilience and reduce risk factors.

## Creating a System of Care Tailored to Meet the Unique Needs of the Early Childhood Population

#### Presenting: Elizabeth Masten & Robin Orlando

In 2005, the System of Care Initiative (SOCI) was awarded a Substance Abuse and Mental Health Services Administration (SAMHSA) grant to serve children ages birth to six years of age. This grant enabled the expansion of the existing SOCI service population to include a new age range in four new communities in and around the city of Pittsburgh.

The creation of an evaluation plan was critical to begin the effective implementation of the many provisions of this grant. The foundation of the evaluation plan is the strategic plan that the Allegheny County Early Childhood Strategic Planning Committee created. This process provided the foundation for the development of a logic model. This model now serves as the road map for SOCI to ensure the achievement of the intended outcomes that were established by the committee. In order to gather evidence to determine progress with regards to those identified outcomes, Allegheny County added a battery of tools to the national evaluation protocol. These tools, in addition to other local and national evaluation activities, support SOCI's comprehensive implementation and monitoring of their evaluation plan.

Key stakeholders and families played and continue to play an essential role in SOCI's planning and evaluation activities. In order to ensure meaningful and consistent participation from family members, SOCI staff went to great lengths to infuse family-driven best practices throughout all activities. These best-practices include family pre-meetings, the provision of stipends to support participation and fairly compensate for shared expertise, the availability of childcare, food, and transportation, and meeting at times and places that are convenient for family members. SOCI also maintains a Community Evaluation Team that ensures continued involvement in evaluation activities and opportunities for learning about evaluation.

An overview of the strategic planning committee will be provided. This overview will include data highlighting the demographic make up of this group, role composition, system representation, attendance rates, and data collected via two satisfaction surveys that were given during the planning process. The data collected via the surveys provided vital information to ensure that the planning process was engaging and meaningful to the participants. An overview of Allegheny County's Starting Early Together program will be provided as a supplemental handout. This overview will include data highlighting demographic information of the children we are currently serving within our four partner communities. Demographic information will include gender, race, age, diagnosis, and system involvement.

## The Reciprocal Relationship between Young Children with Severe Emotional and Behavioral Difficulties and Parenting Stress and Strain

Presenting: Joy S. Kaufman & Kim Shepardson Watson Contributing: Ellen Vaughan, Amy Griffin, Elaine Fitzgerald, Kathy Carrier, & Tim Marshall

#### Introduction

Systems of care for children with severe emotional and behavioral difficulties have traditionally served a school-aged population (Manteuffel, Stephens & Santiago, 2002). There is clear evidence that intervening when emotional and behavioral difficulties begin to emerge makes a significant difference in both the cost of an intervention and its probable success (Strain & Timm, 2001; Kazdin, 1995). Research has shown that early childhood services that include home visiting and parenting education result in parents who are able to be more emotionally supportive and have more positive interactions with their children (Love, et al., 2002). Although there is a growing literature on the impact of child emotional and behavioral difficulties on caregiver strain (Angold, et. al, 1998; Taylor-Richardson, et al., 2006) this reciprocal relationship has not been examined in families where children under the age of 6 have severe emotional and behavioral difficulties.

#### Methodology

Building Blocks is a system of care developed to serve families who have children under the age of 6 who have severe emotional or behavioral difficulties. Along with providing comprehensive services to young children and their families, the initiative is also working to increase the capacity and expertise of individuals working within the system of care through training and coaching. Building Blocks is funded by the SAMHSA's Center for Mental Health Services as part of the Comprehensive Community Services for Children and their Families Program and provides an expansion of the mental health system of care in Southeastern, CT that has traditionally served school-aged children and their families. Building Blocks employs Positive Behavioral Supports (PBS; Carr, et al 2002) in our work with children and families through home-based services delivered by a team that includes a masters level clinician and a family advocate and through consultation to the early care settings that the children attend. The children enrolled in Building Blocks average 3.8 years of age, are predominately boys (75%) and mirror the population of the communities we serve with regard to race/ethnicity with 59% of our children Caucasian, 9% African American and 18% biracial (U.S. Census Bureau, 2005). About 22% of our population served to date is Hispanic/Latino. Over half (58%) of our families are self-referred and the referral issues include disruptive behavior (80%), excessive crying/tantrums (33%), persistent non-compliance (20%) and exclusion from preschool or child care (8%).

#### Measures

The measures included in these analyses represent a subset of those collected as part of the Building Blocks evaluation.

**Demographic and Descriptive Characteristics.** Child demographic characteristics include age, gender, and race and family demographics include household income, residential stability (number of times youth placed outside of the home), and whom the child resides with (biological mother, biological father, both parents, or other). Descriptive data include but are not limited to child and family risk factors.

*Child and Family Outcomes.* Child Outcomes include: problem behaviors (Child Behavior Checklist for Ages 1.5-5 (CBCL); Achenbach & Rescorla, 2000) and social emotional challenging behaviors: Brief Infant-Toddler Social Emotional Assessment (BITSEA); Briggs-Gowen & Carter (2006); Devereux Early Childhood Assessment – Clinical Scale (DECA-C), LeBuffe & Naglieri (1999). Family outcomes will include: caregiver strain (Caregiver Strain Questionnaire (CGSQ) Brannan, Heflinger, & Bickman, 1997), parenting stress (Parenting Stress Index -Short Form (PSI-SF), Abidin, 1995), and maternal depression (Center for Epidemiology Depression Scale (CES-D), Radloff, 1977).

#### **Findings**

#### **Data Analytic Strategy**

Preliminary data analyses will be conducted to determine whether variables violated any assumptions of normality and to determine if any data were missing. Analyses will be conducted to examine the relationship between child outcomes and family outcomes. Multiple linear regression analyses was utilized to predict parental/caregiver outcomes.

#### Results

Analyses were conducted with baseline data from 55 children and their caregivers participating in a system of care. Results from preliminary analyses revealed no violations of normality and one missing case for the Race/Ethnicity. Table 1 provides information on demographic variables. Multiple regression analyses were conducted to investigate the relationships between child symptoms and caregiver strain, stress, and depression. Predictor variables were the internalizing and externalizing subscales of the CBCL and the clinical scale of the Devereux Early Childhood Assessment (DECA).

Three multiple regression analyses were conducted for each of the caregiver/parental outcomes. The overall regression predicting caregiver strain was significant F(3, 48) = 19.317, p < .001. Of the three child symptom measures, only externalizing behavior was a significant predictor of caregiver strain,  $\beta = .595$ , t = 4.830, p < .001. The direction of the relationships indicates that more externalizing behavior problems were associated with more caregiver strain. Next, measures of child symptoms were also significantly related to parental stress, F(3, 48) = 26.031, p < .001. Internalizing problems approached significant at the trend level,  $\beta = .177$ , t = 1.654, p = .105, with the direction of the relationship suggesting that more internalizing problems were related to more parental stress. Externalizing behavior is a significant predictor of parental stress,  $\beta = .566$ , t = 5.023, p < .001 such that more externalizing problems was

related to more parental stress. The DECA was also significantly related to parental stress,  $\beta = -.219$ , t = -2.194, p < .05 with higher scores on the DECA (indicating greater strengths) related to lower levels of parental stress. Finally, child symptoms did not significantly predict caregiver depression. Although the overall regression was significant, F(3, 48) = 4.176, p < .05, none of the predictors was significant.

#### Table 1 Demographic Characteristics

Demographic Variable	Mean (SD) or Percentage
Child Age	3.84 (1.20)
Gender	
Boy	74.5%
Girl	25.5%
Race/Ethnicity	
Caucasian	58.8%
Latino	21.6%
African-American	9.8%
Biracial	17.6%
Living Situation	
Two Parents (Biological or Adoptive)	33.33%
One Parent and Partner	35.29%
Single Parent	15.69%
Other	15.69%
CBCL	
Internalizing	65.04 (8.22)
Externalizing	71.12 (11.97)
DECA	
Total Score	19.59 (9.82)
CGSQ	
Global Strain	8.13 (2.44)
PSI	
Total Stress	99.80 (22.24)
CES_D	
Clinical Score	17.84 (12.75)

#### Table 2 Regression Results

Outcome/Predictor Variable	Standardized ß	t Statistic	$R^2$	p Value
Caregiver Strain				
CBCL-Internalizing	.154	1.319	.037	.194
CBCL-Externalizing	.595	4.830	.341	< .001
DECA	122	-1.112	.027	.272
Parenting Stress Index				
CBCL-Internalizing	.177	1.654	.057	.105
CBCL-Externalizing	.566	5.023	.358	< .001
DECA	219	-2.194	.097	< .05
CES-D				
CBCL-Internalizing	.239	1.53	.049	.133
CBCL-Externalizing	.208	1.262	.034	.214
DECA	140	956	.020	.344

### Conclusions

This presentation highlights the reciprocal relationship between child functioning and parenting stress and strain and the need to focus on family level interventions when working with an early childhood population who evidence severe emotional and behavioral difficulties. More specifically, it appears that helping caregivers cope with child externalizing behaviors could be particularly helpful. Additionally, the presentation will review the intervention that is being provided to Building Blocks families with its focus on Positive Behavioral Supports within the family context. This information will be useful in informing the ongoing development of early childhood systems of care.

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# Trauma Experiences of Children Served by Early Childhood Systems of Care

#### Presenting: Cindy A. Crusto & Meghan Finley Contributing: Jo-Ann Gargiulo & Lesby Payne

This presentation will provide baseline and 6-month follow up data gathered from families participating in a longitudinal outcome evaluation of two Center for Mental Health Services (CMHS), Substance Abuse Mental Health Services Administration (SAMHSA) system of care communities in the northeastern United States. The first community seeks to transform mental health service delivery for children ages birth through five years and their families through the promotion of social/ emotional wellness and resiliency. The primary activities of this project are workforce development for caregivers and service providers, and comprehensive services to children with social, emotional, and/or behavioral challenges. The second community serves children aged birth through 11 years with social, emotional, and/or behavioral challenges and their families and seeks to establish a sustainable integrated system of behavioral health care, early care and education, and education.

Given the previous call and need for trauma-informed systems of care and services, the presentation will focus on the potentially traumatic experiences of young children in the systems of care. First, data collected using the Traumatic Events Screening Inventory - Parent Report Revised (TESI-PRR; Ghosh Ippen, et al., 2002) will be used to describe the different types of potentially traumatic events which children in the evaluation have experienced. Trauma histories reported by caregivers at baseline and traumas experienced during the first six months of system of care service receipt will be presented. Socio-demographic differences will be explored. Second, the study will explore the potential mediating role of children's emotion regulation and caregiver stress in the parenting role on the relationship between the number of different types of potentially traumatic events and children's mental health functioning (i.e., anxiety, depression, social and emotional well-being, internalizing and externalizing behaviors, protective factors, and behavioral concerns). Third, the socio-demographic variables that moderate the impact of the number of different types of potentially traumatic events experienced on children's mental health functioning will be explored. For those children identified as exposed to family violence (i.e., child abuse and neglect, exposure to intimate partner violence), the analyses described above will be conducted along with analyses to determine if there is a unique impact of family violence exposure on mental health functioning.

The ways in which these findings further inform and support a trauma informed systems of care (i.e., universal trauma screening and assessment, specialized trauma programs with integrated mental health and substance abuse services) will be discussed with a particular focus on young children.

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## An Exploration of Factors Mediating Disruptions in Young Children's Relationships with Primary Caregivers

#### Presenting: Ilene Berson & Maria Garcia-Casellas

Early childhood is a critical period for the onset of emotional and behavioral impairments. According to the National Center for Children in Poverty (NCCP), between 4-6% of preschoolers have serious emotional and/or behavioral disorders. Without early identification from screenings, assessment, and effective intervention these problems may escalate, and untreated mental health disorders can interfere with young children's functioning and future outcomes.

Early childhood mental health is influenced not only by the physical characteristics of the young child, but also the quality of the adult relationships in the child's life, the caregiving environments the child is in, and the community context in which the child and family lives. Although it has been hypothesized that changes in parenting predict changes in disruptive behaviors among young children, recent findings have suggested that proactive and positive parenting only has a moderate mediating effect on reducing the risk for conduct disorders among preschoolers (Garder, Shaw, Dishion, Burton, & Supplee, 2007). Conversely, frequent disruptions in family life and high parental distress are associated with persistence in socio-emotional and behavioral problems of young children (Briggs-Gowan, Carter, & Bosson-Heenan, 2006).

In early childhood settings, a child who is not secure in relating to others, doesn't trust adults, is not motivated to learn, or who cannot calm themselves, or be calmed enough to tune into teaching will not benefit from early educational experiences. In fact, more and more young children are being expelled from child care and preschool for behavior problems (Gilliam, 2005).

The Early Childhood Systems of Care have been working to evolve promising practices that establish and improve existing linkages between the children's mental health system and the early childhood, child welfare, and health care systems. Key stakeholders from these systems have engaged in collaborative planning processes designed to actively implement early childhood mental health systems of care. These efforts have brought together agencies, organizations, professionals, family members, and others with an interest in the funding and delivery of services to children with serious emotional disturbance in a cooperative effort to improve and increase mental health services and supports for these children. The early childhood system of care in Sarasota County, Florida was designed to improve and increase mental health and nonmental health services and supports provided for very young children consistent with system-of-care principles and best practices; link a newly created system of care with elements of the early childhood, child welfare, and health care systems; and provide comprehensive training and technical assistance to ensure that these linkages remain in place.

The Sarasota Partnership for Children's Mental Health is an early childhood system of care site in Florida that is working to strengthen the ways that Sarasota County meets the needs of young children and their families. The system of care has focused on linking the resources, services, and supports in the community to meet the multiple/ changing needs of children and families in a coordinated way. The target population highlights infants and young children through the age of 8 years who live in Sarasota County and are at risk of disrupted relationships due to: foster care placement or risk of placement, prenatal exposure to alcohol/other substances, expulsion or risk of exclusion from an early learning and care setting, and/or presence of other environmental stressors (i.e., domestic violence, poverty, caregiver mental illness). The child must have an emotional, behavioral, or mental disorder that is diagnosable under the DSM-IV (or DC-03, as appropriate to the child's age), and has been present for at least one year or, on the basis of diagnosis, severity, or multi-agency intervention, is expected to last more than one year; and requires multi-agency interventions involving two or more community service agencies.

Early childhood mental health was defined across three domains: experiencing and expressing emotions; forming close, secure relationships; and exploring the environment and learning. Young children rely on their parents and other parent figures (a.k.a. "primary caregivers") to figure out how to manage the full range of their emotions, and to feel safe and confident enough to explore their environment. This is how they learn. This is why parents and primary caregivers are so very important in early childhood. This priority identified by the community was translated into an important outcome, and we have tracked data to provide ongoing feedback on the success of the system of care in reducing disruptions in children's relationships with primary caregivers and family.

This study analyzed data on the reciprocal interaction between stress in the parent-child relationship and disruptions in young children's primary caregiving placements in order to identify indicators associated with positive change in children's problem behavior. Questions regarding the child's living situation, school placement, suspension, expulsion, family relationships, and parental distress during the past six months were looked at from instruments used as part of the national and local evaluation efforts. These instruments include the Caregiver Information Questionnaire, Education Questionnaire, Caregiver Strain Questionnaire, Behavioral and Emotional Rating Scale, Living Situation Questionnaire, and Parent Stress Index.

#### Methodology

#### Data Source

Data from the current study were drawn from the Sarasota Partnership for Children's Mental Health Evaluation. This protocol was designed by the National Evaluation Team at Walter R. McDonald & Associates, Inc. and ORC Macro to provide information on changes over time in children and families who receive services.

Criterion variables examined in the study were school disruption, home disruption, and family disruption. Predictor variables included parental distress, child's sense of belonging to the family, child's trust in a significant person within his or her life, positive family relationships, child's positive interaction with parents, and child's living situation.

#### **Data Collection**

Interview data were collected through face-to-face interviews. Families are invited to participate in the national evaluation at enrollment into the system of care. Baseline interviews are scheduled within the first 30 days after enrollment. Interviews average two hours in duration, and the overall response rate for the study was 97%.

#### Sample

Data for the current study were drawn from 65 families enrolled into the national evaluation from October 2006 to December 2007. Participants include the children and their caregivers served in the Sarasota System of Care. Of the children included in this study, 75% are male. Nearly 66% of the children are White, 24% are identified Black, and 10% were reported as multiracial. Approximately 13% are of Hispanic origin. Children enrolled are on average 5.2 years old (Range = 1 to 9 years old). The majority of the children are diagnosed with a Disruptive Behavior Disorder (35%), followed by 25% with ADHD (Combined or Hyperactive-Impulsive and Inattentive). Table 1 provides a summary of the descriptive characteristics of the children and families.

Table 1
Demographic Characteristics

Demographic Variable	Mean	Standard Deviation
Child Age (in months)	60.78	24.60
	Frequency	Percentage
Gender		
Male	49	75.38
Female	16	24.62
Race/Ethnicity		
Caucasian	47	72.31
Latino	10	15.63
African-American	13	20.0
Biracial	5	7.69
Living Situation		
Dual Caregivers	36	57.14
Single Caregiver PSI	27	42.86
Normal Range	30	46.15
Clinical Range	35	53.85
Income		
Poor	25	39.06
Low Income	33	51.56
Above Low Income	6	9.38

#### **Data Analysis**

Univariate analyses were conducted in SAS v.9.1.3 (SAS Institute Inc., 2005). Univariate analyses consisted of descriptive statistics, including frequencies, means and standard deviations, to gain an understanding of the distribution of the data. Chi-square and Fisher's exact tests were used to test the reciprocal interaction between stress in the parent-child relationship and disruptions in young children's primary caregiving placements. Both tests are used in the analysis of categorical data, but the Fisher's exact test is preferred when sample sizes are small. The tests examine the significance of the association between two variables.

#### **Findings and Implications for Practice**

Findings indicate that increased parental distress is associated with disruptions in the child's relationships with caregivers in the home (p = .0021; chi-square test), but it is not related to disruptions in early learning and care settings (see Table 2). Interventions that mediate parenting stress associated with difficult child interactions may help enhance continuity in the child's relationships within the family, but specific interventions focused on classroom conditions and teacher training may be needed within early childhood education settings to mediate expulsions or exclusions resulting from the child's emotional or behavioral problems. Implications for practice and staff training will be discussed.

Table 2 Results

Criterion/Predictor Variables	p Value
School Disruption	
Parental Stress	0.5813
Belonging	1.0000
Trust	0.4839
Positive Family Relationships	1.0000
Positive Interaction with Parents	1.0000
Living Situation	0.3947
Family Disruption	
Parental Stress	0.0021
Belonging	0.0243
Trust	0.4869
Positive Family Relationships	0.0158
Positive Interaction with Parents	0.0270
Living Situation	0.7006
Home Disruption	
Parental Stress	0.2448
Belonging	1.0000
Trust	1.0000
Positive Family Relationships	1.0000
Positive Interaction with Parents	1.0000
Living Situation	0.5717

## Session 47 >> 1:30-2:00 pm >> Salon I Reducing Seclusion and Restraint Use with Children with Serious Emotional Disturbances

#### Presenting: Lynda Frost Contributing: Melissa Cook

#### Introduction

Unnecessary use of seclusion and restraint presents serious risk of physical and psychological harm to mental health consumers, including children with serious emotional disturbances who interface with a variety of service settings.

Although seclusion and restraint are prevalent in many treatment settings, these practices are not evidenced-based and research does not support their utility in reaching therapeutic goals. Unfortunately, there currently are no evidence-based alternatives. SAMHSA lists "Seclusion and restraint alternatives" as an area of interest in its National Registry of Evidence-based Programs and Practices, but no interventions presently meet the criteria for inclusion in the registry.

Since 2003, the Hogg Foundation for Mental Health has focused its efforts in Texas on identifying and promoting the use of safe alternatives to seclusion and restraint across a variety of child serving agencies. This project aims to (1) develop state-wide cross-agency leadership committed to reduction; and (2) offer support, training, and technical assistance to Texas-based agencies serving people with mental illness.

#### Methodology

The Hogg Foundation has employed several strategies to encourage safer and more effective treatment practices for mental health consumers in Texas. With no evidence-based alternatives available, the Foundation set out to identify promising practices and employ strategies to translate those practices into a variety of treatment settings.

This effort was launched by compiling an expert advisory group with cross-agency representation and convening a meeting where state and national experts addressed ways that Texas agencies could encourage safe and appropriate alternatives to seclusion and restraint. This forum for sharing information with key stakeholders including providers, policymakers, advocates, and consumers not only raised awareness to the issue but also created a statewide commitment to exploring safer alternatives. Participants developed practical guidelines for providers and a framework for decision-makers to promote agency culture change regarding behavioral interventions, which was later published as a training tool applicable to a variety of home and facility-based settings (Hogg 2005).

Recognizing the key role of leadership and the barriers to isolated individuals changing agency culture, the Foundation sponsored a training for facility-based leadership teams interested in changing agency practice. Twenty-nine Texas organizations, represented by leadership teams of up to 14 members, attended a training institute based on a National Association of State Mental Health Program Directors curriculum, "Creating Violence Free and Coercion Free Mental Health Treatment Environments for the Reduction of Seclusion and Restraint," and developed comprehensive reduction plans for implementation in all levels of their organization and therapeutic milieu (NASMHPD, 2006). Eight months later, 23 of the 29 organizations returned for advanced training in workforce development, utilizing consumer voice in reduction strategies, and implementing trauma-informed care.

The Foundation's cross-agency approach was reinforced with the passage of Senate Bill 325 by the 79<sup>th</sup> Texas Legislature (SB 325, 2005).

The legislation created a cross-agency Behavior Management Task Force to identify seclusion and restraint reduction best practices to incorporate in new agency regulations that would provide uniformity in definitions, reporting, and training used by juvenile justice and human services agencies (HHSC 2006).

To support statewide commitment to exploring alternatives, the Foundation launched a cross-agency Seclusion and Restraint Reduction Leadership Group. The group, consisting of mental health consumers, advocates, and private and public agency representatives, serves as a resource by providing leadership to guide culture change in Texas agencies and identify new resources to support the effort.

#### Findings

The Foundation's initiative is still in process, therefore all findings are preliminary. Many of the 29 Texas-based agencies implementing reduction plans have reported diminished use of seclusion and restraint. They attribute these changes to revamping training, modifying the facility environment, collecting and analyzing data, and increasing consumer involvement. Reported reduction rates include:

- One children's residential treatment center converted two seclusion rooms into soothing rooms and reported over 50% reduction in seclusion and restraint incidents.
- 2. After focusing efforts on staff training, a juvenile probation department reported a 60% reduction in seclusion and restraint use.
- 3. Since attending the Foundation training institute, one private psychiatric hospital realized a 61% reduction in seclusion and restraint use campus-wide.

On the policy level, five state agencies are revising their regulations to incorporate best practices detailed in the Senate Bill 325 Report (HHSC). The Seclusion and Restraint Reduction Leadership Group continues to meet and successfully guided an application for a \$614,451 SAMHSA grant to explore alternatives to seclusion and restraint in Texas. More detailed evaluation of participating agencies is ongoing.

#### Conclusion

Lack of additional funds, a concern cited by many agencies considering change, does not bar adoption of alternatives. According to preliminary data, the following elements are significant in reducing seclusion and restraint use:

- Commitment and vision are essential. Leadership must prioritize seclusion and restraint reduction and support all employees in identifying and implementing key changes.
- A cross-agency approach promotes a uniform service environment and allows sharing of ideas and successes across treatment environments.
- *Consumers and family involvement* is critical to improving treatment environments and changing agency culture.
- *Data-driven review* of services ensures attention is directed to the most significant problem areas.
- *Multilevel strategies* for introducing promising practices throughout the agency lead to lasting culture change.
- *Workforce recruitment and retention* efforts should identify and develop skills in creating and maintaining a positive treatment environment.

Although research on evidence-based alternatives to seclusion and restraint use is still nascent, Texas agencies have identified promising practices that promote better outcomes with some of our most fragile children.

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# Session 47 >> 2:00-2:30 pm >> Salon I Effectiveness of Multi-Systemic Therapy for Youth who Sexually Offend: Preliminary Findings

Presenting: Elizabeth Letourneau & Scott Henggeler Contributing: Jason Chapman, Michael McCart, Charles Borduin & Paul Schewe

#### Introduction

This randomized clinical trial (RCT) provides the first empirically rigorous assessment of cognitive-behaviorally-based group treatment with a relapse prevention focus (i.e., usual services) typically provided to juveniles who sexually offend and in comparison with Multisystemic Therapy (MST; Henggeler, Schoenwald, Borduin, Roland & Cunningham, 1998), adapted for use with juveniles who sexually offend.

#### Methodology

Youth were referred by a State's Attorneys Office after adjudication or diversion for a sexual offense. Participants were randomly assigned to MST (N = 67) or Usual Services (US; N = 60) conditions. At baseline youth were M = 14.63 years (SD = 1.73). Three (2.4%) participants were female. Youth were Black (53.5%) or White (44.1%) and 30.7% indicated Hispanic ethnicity. Most index sexual offenses (88%) were serious misdemeanor or felony-level sexual offenses.

Outcome measures included the general delinquency scale of the National Youth Survey (Elliott, Ageton, Huizinga, Knowles, & Canter, 1983), the Deviant Sexual Interests and Sexual Risk/Misuse scales of the Adolescent Clinical Sexual Behavior Inventory (Friedrich, Lysne, Sim, & Shamos, 2004), an alcohol and marijuana use scale from the Personal Experiences Inventory (Winters & Henly, 1989), Externalzing and Internalizing scales from the Child Behavior Checklist and Youth Self Report (Achenbach, 1990, 1991), Family Cohesion and Adaptability Scales-III (Olson, Portner, & Lavee, 1985), and several scales assessing parenting and peer functioning from the Pittsburgh Youth Survey (Loeber, Stouthamer-Loeber, van Kammen, & Farrington, 1991). Caregivers also completed monthly assessments indicating school placement and any changes in youth's residence.

Data were collected at baseline, 6-months, and 12-months post-recruitment. Few participating families (5%) dropped out and intent-to-treat analyzes were conducted. Random regression models were estimated to account for nesting of time within youth. Covariates entered into each model included age at recruitment, race, and number of nonsexual prior offenses.

#### Findings

#### Individual

*Sexual Behavior.* RRM results indicated that, for both scales and both reporters, the MST condition scores showed improvements while the US condition scores remained statistically unchanged over time. Specifically, the predicted probability of caregivers reporting any deviant sexual interests declined from .76 to. 30 for the MST condition (versus .68 to .52 for the US condition). The predicted probability of caregivers reporting any sexual risk/misuse behaviors declined from .31 to .05 for the MST condition. The predicted probability of youth reporting any deviant sexual interests declined from .23 to .08 for the MST condition (versus .20 to .16 for the US condition) while the predicted probability of youth reporting any sexual risk/misuse declined from .59 to .24 for the MST condition and remained nearly unchanged (.56 to. 51) for the US condition.

*General Delinquency.* RRM indicated a significant time by condition effect for the generally delinquency scale. A negative linear effect emerged for youth in the MST treatment condition, indicating significantly reduced log-odds of self-reported delinquent behavior over time, with no such reduction for youth in the US condition. The predicted probability of reporting any delinquent behavior dropped from .73 (at Time 1) to .24 (Time 3) for the MST condition and remained essentially unchanged for the US condition.

*Substance Use.* RRM results indicate a significant *increase* in the log-odds of any substance use reported by youth in the US condition and a significant decrease in substance use reported by youth in the MST condition. Specifically, the predicted probability of youth reporting any substance use declined from .29 to .09 for the MST condition and increased from .19 to .39 for the US condition.

#### Youth Mental Health Functioning

Based on youth reports, a significant negative linear effect was detected for the MST condition, indicating that, over time, Externalizing scores decreased significantly for the MST condition. The slope for the US condition did not change significantly over time. Internalizing scores decreased significantly for both treatment conditions, per youth selfreport. Caregiver reports indicated significant reductions for Externalizing and Internalizing scores, with no significant between-groups differences.

#### **Family Relations**

*Family Functioning.* RRMs indicated a trend (p = .065) for MST caregivers (but not US caregivers) to report improved family cohesion. There were no significant differences for the Adaptability scale. Based on youth report, RRMs indicated significant improvements in family

adaptability and a non-significant trend (p = .060) for improved family cohesion for both treatment conditions, with no significant betweengroups differences.

**Discipline.** There was a trend (p = .057) for MST youth (but not US youth) to report improved discipline. Caregiver reports indicated significant improvements for discipline across both treatment conditions, with no significant between-groups differences.

#### **Peer Relations**

The Pittsburgh Youth Survey includes youth-reported measures of conventional peer activities, peer delinquency, and a "bad friends" scale that combines items from youth and caregiver report. RRM analyses indicated a significant difference between treatment condition slopes for the Bad Friends scale, supporting greater improvement for the MST condition. RRM results for the remaining two scales indicated no significant between group differences in slopes.

#### **School Attendance**

Monthly caregiver reports on youth school attendance indicated that more youth in the US condition (35%) than in the MST condition (27%) were expelled or removed from school, although this difference did not reach statistical significance.

#### **Changes in Youth Residence**

Regression analysis indicated that treatment condition was a significant predictor of number of moves, B = -1.74 (*SE* = .73), t = -2.39, p < .05. Specifically, youth in the US condition had more changes in residence (M = 2.52, SD = 5.22) than did youth in the MST condition (M = .91, SD = 2.71). Assessment of type of placement (i.e., mental health placements, incarceration, foster care, runaway) indicated that treatment condition was a significant predictor of ever experiencing a mental health residential stay, B = 1.38 (SE = .54), p = .01, with US youth experiencing more such placements.

#### Conclusions

These preliminary findings support the general hypothesis that MST can be effectively adapted to address the needs of youth who sexually offend. Importantly, MST was more effective than usual services in addressing seven of eight areas of functioning.

# Session 48 >> 1:30-2:30 pm >> Salon J

# Further Discussion on the Public Health Approach to Mental Health

#### Presenting: Rachele Espiritu, Joyce Sebian & Neal Horen

The National Technical Assistance Center is developing a monograph intended to drive the mental health filed forward in terms of our ability to take a more comprehensive approach to mental health including the entire continuum of services and supports from promotion to prevention to intervention. This monograph is being developed through SAMHSA's, Child, Adolescent and Family branch and the Prevention Initiatives and Priority Programs Development Branch. The purpose of the monograph is to present a conceptual framework for a public health approach to mental health grounded in values, principles, and beliefs, to link the array of environments supports, services and interventions from promotion, prevention, treatment, and recovery and to provide common definitions, language and milestones for the public health approach to mental health and promote their use by all stakeholders. Lastly, the monograph is intended to offer examples of promising and effective public health models, strategies and policies that community leaders and policy makers can use to implement a public health approach to mental health.

This topical discussion will present an opportunity for interested parties to both learn about the monograph as well as have input in the development of what is intended to be a driving force behind the federal efforts to take a more comprehensive approach to mental health. Participants will learn about the latest research on public health approaches, both nationally and internationally as well as the role of families and youth, clinical staff, administrators, researchers and policy makers in such an approach.

# Tuesday, February 26 - 2:45 pm

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# Session 49 >> 2:45-3:15 pm >> Salon A Implementation and Outcomes of Evidence-Based Practice: Results of Connecticut's MST Progress Report

Presenting: Robert Franks, Jennifer Schroeder, Christian Connell, Jacob K. Tebes & Dean Fixsen

#### Introduction

Despite the recognized importance of large-scale implementation of evidence-based mental health treatments (EBTs), few studies have examined the process of implementing such models on a statewide level. While there is an extensive and growing literature on "technology transfer" that looks at what it takes to move an EBT from the laboratory to the field, particularly in the area of substance abuse, most of the previous work in this area has studied the experience of a single agency or organization in adapting a new treatment technology and focuses on the organizational variables that facilitate or impede implementation. The processes involved in largescale technological innovation carried out on a statewide basis are largely unexplored. Further, the work that has been done on implementation has focused primarily on adult services. There are few, if any, studies of this process with regard to EBTs in the children's mental health field.

The statewide adoption of Multisystemic Therapy (MST), by two state agencies in Connecticut [the Court Support Services Division of the Judicial Branch (CSSD) and the Department of Children and Families (DCF)], provides a unique opportunity for such a study. MST is an intensive family and community-based intervention originally developed for youth with serious antisocial behaviors. It is based on a goal-oriented treatment plan developed in collaboration with the youth and family members and targets those behaviors that are contributing to the child's antisocial behaviors. MST has been extensively studied and has produced consistently positive outcomes, including reductions in recidivism and out-of-home placements as well as improved family relationships.

#### Method

The implementation component of this study draws on the review of implementation literature released by Fixsen, Naoom, Blase, Friedman & Wallace (2005) and on the work of Simpson (2002) on technology transfer in therapeutic services. Fixsen et al. reviewed research on program implementation in multiple domains, identifying stages of implementation and core implementation components. Six stages of implementation were identified ranging from exploration and adoption to innovation and sustainability, and core implementation components are addressed at both the individual provider and systems level. In addition, Simpson's theory of research to practice identifies four "Stages of Transfer" at the organizational and practitioner level including: (1) *exposure* to the new technology; (2) decision for *adoption*; (3) *implementation* on the ground, and (4) incorporation into ongoing *practice*.

These stages and factors were used as a framework for analyzing qualitative data drawn from over 30 audio recorded and transcribed interviews and focus groups with state agency leadership, juvenile court personnel, provider agency staff, and youth and families who received MST. Through these analyses, this study identifies how the relationship of the provider agency with the state has helped shape implementation at the provider level, how each provider agency's own organizational dynamics influenced adoption of and fidelity to the MST program model, the obstacles to and supports for broad scale EBT dissemination by state agencies, and recommendations for future efforts.

In addition, quantitative data on the length of employment of MST therapists and supervisors, measures of treatment and supervision fidelity,

and recidivism outcomes for all youth who received MST services in Connecticut from January 2003 to June 2006 (N = 1,850) were analyzed and are presented in the context of qualitative results.

#### **Findings**

Results from qualitative analysis of interviews and focus groups indicated that the decision to adopt MST across the state resulted from both state agency and community provider readiness. State agencies were looking for an effective evidence-based practice to replace other less effective existing programs for delinquent youth. Providers who successfully adopted MST showed an immediate fit with the "culture" of evidence-based practice (i.e., short-term, goal oriented, and in this case community-based therapies). These findings map onto the first two stages of both Fixen et al.'s and Simpson's model of transfer of services such that Connecticut demonstrated exploration of effective programs, assessment of the match between MST and the state's resources, and state and provider readiness to adopt MST.

When MST was initially disseminated throughout the state, communication with referral sources, judicial staff, community providers, and families was cited as the key factor to effective installation of MST, although this reportedly occurred less often than interview participants preferred. Factors related to successful implementation, both initially and when the program was operating at its fullest capacity statewide, included fidelity to the model, appropriateness of referrals, and family expectations for success and engagement. Data indicate that measures of parent-rated therapist fidelity correlate with therapist-rated youth outcomes at discharge. However, therapist and supervisor turnover was cited as impeding successful implementation. In order to reduce turnover, therapists and supervisors reported that staff must be a "good match" for MST and provider agencies must provide both financial incentives and consistent feedback and encouragement. Provider agencies with high turnover reportedly offered less consistent support and financial "perks," such as cell phones, laptops, and cars, which better enable therapists to respond to families in their communities. Quantitative data on length of employment confirmed therapist reports of high turnover at agencies that provided fewer supports to therapists. These findings help to inform recommendations for what Simpson and Fixen et al. respectively identify as ongoing practice and program innovation and sustainability.

#### **Conclusion & Implications**

The importance of this study cannot be underestimated. At the national level, Connecticut is one of the few states to adopt an EBT on a statewide basis, thus its experience can serve to inform federal policy-makers as well as other states interested in transporting such models into their systems of care for youth. At the state level, understanding of the MST experience can enhance future planning regarding EBT implementation as well as inform future resource allocation. At the local level, agencies can learn about the "real world" factors involved in implementing an EBT in a community-based setting.

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#### Presenting: Christine Walrath & Thomas Pavkov

#### Introduction

This study builds upon previous work indicating that both clinical and non-clinical characteristics are related to child medication status (Pavkov & Walrath, in press) by exploring factors contributing to medication status change from baseline to six-months and factors contributing to the perceived benefit of psychotropic medication use as indicated by caregivers. Currently, more children and adolescents are receiving psychotropic medications than ever before (Jensen, Bhatara, & Vitiello, 1999). Community based system of care programs are responding to children's mental health needs by providing accessible, effective, and comprehensive multi-dimensional services. While the effectiveness of these programs is a result of agency and system coordination, an integration and array of interventions/services has also contributed to the program's success (Pumariega, et al., 2002). Specifically, advancement in psychopharmacological treatment has been an important addition to community-based programming (Jensen, Hoagwood, & Petti, 1996).

Because these systems of care approaches use collaborative techniques in creating positive change at the child and practice level—involving the child and family members in medication decisions, in addition to any and all other service planning decisions—is paramount. This includes informing caregivers of risks and benefits of medication use, side effects and what to do if they occur, dose adjustments, and important drug monitoring (Pumariega et al., 2002). Bussing, Leon, Mason, and Sinha (2003) suggest that caregivers need to be more involved in direct treatment, as they have proved to be valid reporters when asked to manage their child's medication regimens and doctor visits. The present study explores these topics in the context of family-driven systems of care by asking the following questions: What factors drive the medication status change in psychotropic medication usage from "non-use" to "use"?; What are the perceptions of caregivers related to the positive and negative changes of psychotropic youth among children and youth?

#### **Methods**

#### Participants

The current study uses a subset of data collected as part of Longitudinal Outcome Study of the national evaluation from up to 29 communities funded between 2002 and 2004 (phase 4 data) Children enrolled in the Outcome Study with valid data on medication use at both baseline and 6-month follow-up were eligible for inclusion in the analyses (N = 850). Children in the current study sample were approximately 12.2 years of age on average, slightly less than two-thirds of the study sample was male (64.1%), and 62.2% of the children were Medicaid eligible. Nearly one-third of the sample indicated they were White (28.2%), 45.3% African-American, 24.9% Hispanic, and 6.4% Alaskan Native or Native American. Over one-third (35.6%) of the children were referred into their respective systems of care from the school system, 16.4% from the mental health, 9.8% from juvenile justice, 15.6% by caregiver or self referral, 6.6% from child welfare, and the remaining 15.6% from other sources. While all of the children entered their respective systems of care medication free, 18.4% were on medication for behavioral and/or emotional problems at the point of 6-month follow-up.

#### Indicators

The majority of data used in the current study were collected via caregiver interview at the child's intake into system-of-care services and during a 6-month follow-up interview. Specifically, caregiver report of child and family demographic and psychosocial information; child medication status; child Medicaid eligibility; child and family behavior and functioning were provided via structured interview. In addition, the Child Behavior Checklist total problem score (CBCL; Achenbach & Rescorla, 2000), the Columbia Impairment Scale total score (CIS; Bird, Shaffer, Fisher, Gould, Staghezza, Chen, Hoven; 1993) and the Caregiver Strain Questionnaire global strain score (CGSQ, Brannan, Heflinger, & Bickman, 1997) were used as indicators of child and family functioning at the time of the child's intake into service. Referral source information was obtained from record review.

Medication status was based on a caregiver question that asked at baseline and then again at 6-month follow-up about whether their child was currently on medication for behavioral or emotional problems.

#### Analysis

**Primary Analysis:** A logistic regression analysis was performed to identify predictors of medication use during the first six months of service, among children who enter the system medication free.

**Secondary Analysis:** Two independent logistic regression analyses were performed for a sub sample of youth (those taking medication at the 6-month follow-up point) to identify predictors of caregiver perceived beneficial and negative effects of the medication use.

#### **Findings**

Results the primary logistic regression indicated child's race/ethnicity and referral source were predictive of medication use at 6-month followup, as was there global impairment. Medicaid eligibility was marginally predictive of medication use at 6-month follow-up.

The secondary logistic regression analyses, performed only with the sub sample of children who were on medication at 6-month followup, indicated that few characteristics predicted perceived benefit of medication, including child problem behavior and functioning over the last 6 months. With that said, however, source of referral was predictive of perceived positive benefit and caregiver global strain was marginally and negatively associated with perceived medication benefit. Interestingly, referral source is also predictive of perceived negative effect of medication as is the child's overall total problems over the preceding 6 months. Caregiver strain, however, does not significantly predict perception of negative effect of medication usage.

#### Conclusion

Using Phase 4 data, the study findings related to the clinical and nonclinical factors contributing to change in medication status are consistent with those described by Walrath and Pavkov (2007) in their use of Phase 3 data. Specifically, referral source, ethnic background, global impairment and medication status are related to the transition from non-medication use to medication use. More research needs to be completed on phase 4 data related to the perceptions that caregivers have about the effects of medication use along with their understanding and monitoring of use.

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# Session 50 >> 2:45-3:15 pm >> Salon B Building Capacity of Community-Based Preschool Programs: The Process and Outcomes of an Organizational-Level Intervention

Presenting: Anna Malsch & Brianne Hood Contributing: Beth Green

#### Introduction

Entering kindergarten is a major milestone in the lives of children and families. The experience of starting school involves complex and significant change (Brennan, Bradley, Ama, & Cawood, 2003), that may be particularly challenging when children have disabilities (Rosenkoetter, Hains, & Fowler, 1994). Although a child's first day of kindergarten is a one-time event, transition to school "is a process in which child, family, school and community interrelate over time" (Pianta & Cox, 1999, p. 4). When transition is successful, children are engaged and feel positive about school, parents are partners in their children's learning, and schools provide experiences that value individual children and promote their success (Ramey & Ramey, 1999; Wright, Diener, & Kay, 2000). However, transition problems can have serious consequences for children, families, and communities. Research indicates that the early years of elementary school are critical (Raver & Knitzer, 2002), especially for children with challenging behaviors (Fox, Dunlap & Cushing, 2002). Early disruptive social interaction problems are associated with poor performance and academic difficulties that persist in later school years (Masse & Tremblay, 1999; Wright, Diener & Kay, 2000).

This paper describes the organizational-level intervention component of the Transforming Transitions to Kindergarten: A Family-Provider Team Approach (T2K) project. T2K aims to promote effective integration of children with emotional/behavioral challenges into community-based early childhood settings and ensure the successful transition of these children into kindergarten. This intervention was designed to increase the organizational capacity of early childhood and school settings and provide integrated supports to meet the needs of children and their families. We share lessons learned and findings related to the development, implementation, and testing of this two-year training and technical assistance intervention.

#### Methodology

The intervention sought to build organizational capacity in delivering mental health and transition services to at-risk children. Capacitybuilding activities included: (1) training program administrators, managers, supervisors, staff, mental health professionals, and key school personnel in best practices in early childhood mental health and transition; (2) developing strategic plans focused on strengthening mental health supports; (3) activities to support staff wellness; and (4) restructuring partnerships between early childhood program providers and mental health consultants. Specific activities were informed by a needs assessment which identified areas in which the Head Start programs needed support in their efforts to strengthen the mental health component of their programs.

The overall design for the research was a nonequivalent comparison group design, relying on staggered implementation of the intervention at two Head Start programs in the Pacific Northwest. During year 1, Head Start teachers and staff at Site A ( $N_{Time 1} = 62$ ,  $N_{Time 2} = 59$ ) received organizational training (evaluated by pre- and post-test data), while Site B served as the control. During year 2, Head Start teachers and staff at Site B ( $N_{Time 1} = 62$ ,  $N_{Time 2} = 78$ ) received the organizational training (evaluated by pre- and post-test data). One-year follow up data were collected at both sites for organizational outcomes ( $N_{Site A} = 58$ ,  $N_{Site B} = 51$ ). Measures included a self-reported perception and attitude survey adapted from the Head Start Mental Health Services Survey (2002), the *Teacher Opinion Survey* (TOS), and the *Index of Teaching Stress*.

#### **Findings**

Data from participant questionnaires are being analyzed using a General Linear Model with repeated measures, comparing changes over time in participants in the control group to changes over time among participants receiving the intervention. Preliminary analyses suggest that the intervention was effective in increasing knowledge and strengthening positive attitudes (agreement) in several areas including the link between mental health and school readiness, the Head Start program's approach to mental health, and the program-level support for staff (ts > 2.00, ps < .05). In addition, Head Start teachers and staff reported lower levels of job-related stress after participating in the intervention (ts > 2.00, ps < .05). This finding is especially relevant given the particular focus on staff wellness.

#### Conclusion

In this paper we describe an organizational level intervention that incorporated many "promising practices" in children's mental health as well as a focus on staff wellness and job-related efficacy. Our preliminary analyses indicate support for the effectiveness of such an intervention. The organizational capacity of early childhood programs to provide integrated supports that meet the needs of children with emotional/ behavioral challenges and their families so that they may remain in community preschools and transition successfully to kindergarten is critical. The knowledge gained from both the process and outcomes of this intervention will contribute to future capacity building efforts with the overall goal of establishing effective transition models to support children and their families.

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# Session 50 >> 3:15-3:45 pm >> Salon B The Impact of School-Based Systems of Care on Youth, Families and Schools

#### Presenting: Joy S. Kaufman & Stanley Bernard Contributing: Ellen Vaughan, Maria Brereton & Michelle Ellis

#### Introduction

During the past twenty years, the development of comprehensive systems of care for children and adolescents with serious emotional and behavioral disorders has become an important priority at the federal, state, and local levels. The push to develop systems of care grew from the recognition that services for children and adolescents with serious emotional and behavioral disorders were often inaccessible, restrictive, and fragmented (Knitzer, 1982; Stroul & Friedman, 1986) resulting in large numbers of children with mental health needs receiving inadequate or no care (Forness & Knitzer, 1992). A recent report (Foster et al, 2006) shows that one in five students are referred by schools for mental health services and that the majority of these services are performed by community-based agencies. Systems of care are designed to provide "a comprehensive spectrum of mental health and/or other necessary services which are organized into a coordinated network to meet the multiple and changing needs of children and adolescents with severe emotional disturbances and their families" (Stroul & Friedman, 1986). The need to link families, schools and community providers to work collaboratively to address the needs of students with severe emotional and behavioral challenges is clear (Eber & Keenan, 2004).

#### Methodology

The Partnership for Kids (PARK) Project is a school-based system of care for children with severe emotional and behavioral difficulties and their families in Bridgeport, Connecticut. PARK is funded by the SAMHSA's Center for Mental Health Services as part of the Comprehensive Community Services for Children and their Families Program. All youth enrolled into the PARK system of care attend a school where Positive Behavioral Interventions and Supports (PBIS) has been implemented and youth and their families receive school-based care coordination services and an array of wrap-around services individualized to the families' needs including, but not limited to therapeutic after school, therapeutic mentoring, psychiatric consultation, outpatient therapy, family advocacy, family empowerment, and youth empowerment. Parents/caregivers who elected to participate in a longitudinal outcome study responded to a series of questionnaires regarding their child's strengths, problem behaviors, parenting stress, and the services their child is receiving and youth age 11 and older responded to questions about their strengths, functioning, substance use and exposure to violence. Service utilization data were collected from all funded programs and as part of PBIS office referral data were for a disciplinary matter.

The youth participating in the Park Project are among Bridgeport's most impoverished and are representative of the city. Sixty-four percent of the sample is male and 34% female. Youth range in age from 5 to 18 (M = 11.70; SD = 3.49). The racial/ethnic backgrounds of participants are 55.5% Latino, 33.6% African-American, and 5.5% White. There are 2 biracial youth, 1 Asian American, and 4 youth without race/ethnicity data. This sample mirrors the population in Bridgeport with regard to the African-American youth, but the proportion of Latino youth in this sample is higher and the proportion of Caucasians is lower than the population in Bridgeport (U.S. Census Bureau, 2005). Ninety-five percent of caregiver respondents were family members with 78% being a biological parent. Among parents, 44% had not received a High School diploma, a rate higher than the demographics of Bridgeport. Of participants who reported an annual income (36%), 91% reported annual income less than \$35,000, placing them below 150% of the federal poverty rate which in Connecticut makes them eligible for entitlements such as Medicaid.

#### Measures

The measures included in these analyses represent a sub-set of those collected as part of the PARK Project evaluation.

*Demographic and Descriptive Characteristics.* Child demographic characteristics include age, gender, and race. Family demographics

include household income, residential stability (number of times youth placed outside of the home), and whom the child resides with (biological mother, biological father, both parents, or other). Descriptive data include but are not limited to child and family risk factors.

*Child and Family Outcomes.* Child Outcomes to be examined will include: problem behaviors (Child Behavior Checklist; Achenbach & Rescorla, 2001); behavioral and emotional strengths (Behavioral and Emotional Rating Scale, Epstein, 2004); substance use (GAIN-Q, Titus & Dennis, 2004); depression (Reynolds Adolescent Depression Scale, Reynolds & Mazza, 1998); and, anxiety (Revised Children's Manifest Anxiety Scale, Reynolds & Richmond, 1978). Family outcomes will include: caregiver strain (Caregiver Strain Questionnaire, Brannan, Heflinger, & Bickman, 1997) and parenting stress (Parenting Stress Index, Short Form, Abidin, 1995).

*Service Data*. Data related to services includes utilization data for all wraparound services that were funded by the project.

**School Data.** School staff completed an office referral each time a student was sent to the office for a disciplinary matter. These data include the number and types of incidents by student. Additionally, school climate data were collected at each school to assess success for the PBIS intervention; the school-wide impact will be factored into the analyses.

#### **Findings**

*Data Analytic Strategy.* Preliminary data analyses will be conducted to determine whether variables violated any assumptions of normality and to determine if any data were missing.

Linear mixed models analyses will be conducted to determine the impact of services in improving outcomes. Finally, sequential regression will be employed to determine if there are differential outcomes for youth who present with specific risk factors (e.g., school failure, substance use, exposure to violence or parental substance abuse).

#### Conclusions

Communities implementing systems of care for children's mental health often struggle to get schools to the table, the PARK Project has successfully partnered with local schools and the school district in Bridgeport, CT. This presentation will highlight how PARK used partnership and collaboration with families, providers and the school district to implement a system of care in the Bridgeport community. We will share data that will help to inform how school-based systems of care can impact on child, family and school outcomes. This information will be useful in informing the ongoing development of school-based systems of care as schools across the country try to integrate mental health systems into their academic framework.

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#### Presenting: Janice Cooper & Yumiko Aratani

#### Introduction

This presentation aims to share preliminary results from NCCP's Unclaimed Children Revisited National Survey of Children's Mental Health Directors (Fall 2006) and a California case study that queries state system leaders and key stakeholders about evidence-based practices (EBPs). Presenters provide up-to-date trends of state and county-level initiatives and strategies in promoting the appropriate use of EBPs for children and youth, with a focus on California.

States increasingly incorporate the use of EBPs in their mental health systems, such as the National Demonstration Project (Drake, Becker, Goldman, & Martinez, 2006). State mental health authorities can play critical roles in the success of state-wide implementation of EBPs based on financing, regulations, leadership and training (Isett et al., 2007). Previous research suggests that for child mental health systems, implementation of EBPs in the context of the system of care is only slowly gaining traction (Sheehan, Walrath, & Holden, 2005). Research is also clear that the transportability of EBPs depends on the engagement of key players such as providers, community leaders, family members and youth. Providers' characteristics and perception towards EBPs play an important role in their dissemination (Baumann, Kolko, Collins, & Herschell, 2006). Equally important is the role of family members and youth and their knowledge about empirically-supported practices (Gruttadaro, Burns, Duckworth, & Crudo, 2007). However, few have studied the process of translating state and county-led EBP efforts in children's mental health to community settings (Hemmelgarn, Glisson, & James, 2006). We also know little about the involvement of other stakeholders like community leaders, families and youth in the dissemination or knowledge acquisition process (Bates, 2005).

The researchers will address:

- 1. What major strategies do states and territories undertake to promote the appropriate use of EBPs?
- 2. What major strategies do county and state agencies use to promote EBPs in California?
- 3. What common barriers do providers face in the uptake of EBPs in California?
- 4. What do youth and families know about EBPs?
- 5. What role do youth and families play in the implementation of EBPs?

#### Methodology

This study uses multi-level, multi-method analyses to address states' and local communities' responses to the need for empirically-based child mental health treatment.

For the national study, surveys were sent to children's mental health directors in 55 states and US territories. Fifty states and two U.S. territories responded. Through a combination of close- and open-ended questions, state children's mental health authorities (CMHA) were asked: (1) whether they implemented specific strategies to promote the appropriate use of EBPs; (2) what types of support the state CMHA provided; and (3) to provide detailed descriptions of the strategies they used.

In California, in-person and phone interviews were conducted with system leaders (N = 187), providers (N = 46), and stakeholders (youth, family members and community leaders) (N = 171) in 11 counties between January-October 2007. State and county system leaders were asked how they support mental health providers to adopt and appropriately implement EBPs. Providers were asked: (1) to estimate the proportion of their practice that was evidence-based; (2) to give their opinions on the push toward evidence-based treatments; (3) to identify

the most common barriers they perceived in the implementation of EBPs; and (4) to review the strengths and challenges of current training efforts. Stakeholders were asked: (1) whether they knew of common evidence-based practices and (2) what these practices meant to them.

#### **Preliminary Findings and Conclusions**

Findings from the national survey reveal that the overwhelming majority of states (over 90%) report that they implemented initiatives to promote the use of evidence-based practices. More than 75% of states and territories report support for provider training and technical assistance. Approximately 40% of responding states also report academic partnerships and state dissemination of EBPs as major strategies.

In California, largely through the work of the California Institute of Mental Health, there have been state-wide efforts to train providers and provide technical assistance to communities since 2003. County leaders report implementation of specific evidence-based practices such as The Incredible Years, CBT, and parent-child interactive therapy. However, while many providers have received training from the state, they report limited adoption due to factors such as funding and poor fit with culturally/ linguistically diverse populations.

Preliminary results from youth and family interviews in California reveal that few have ever heard of EBPs or specific practices. While community leaders report being more knowledgeable about EBPs, their views of their practicality and relevance were mixed. Our results to date suggests that despite the systematic efforts reported by state and county policymakers and administrators, significant gaps exist in the dissemination of EBPs in local community settings.

The project investigators will explore the implications for policy.

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# Session 51 >> 3:15-3:45 pm >> Salon C Impact of Training and Coaching on Wraparound Fidelity: Results of Field Evaluations and Practice Research

#### Presenting: Jim Rast Contributing: John VanDenBerg

This paper presents a model for implementing evidence-based practices on a wide scale within community programs across sites using wraparound as defined by the National Wraparound Initiative as the evidence-based process to be implemented. The presentation begins with a description of the need to and challenges for implementing wraparound on a large scale. A model of implementation is presented and field evaluations about the first three elements of the model are described. One looks at enhanced interviewing strategies for staff selection. The second looks at staff training and shows that training alone improves fidelity but not to an acceptable level without coaching. Two field evaluations are described that examine strategies to improve the impact of training on fidelity of wraparound. In another field evaluation the impact of coaching and supervision type and frequency was examined on the time for staff to reach fidelity. In the final field evaluation the use of specific skill based monitoring for coaching was compared to more principle focused supervision.

Wraparound emerged in the 1980s as a value-driven approach to providing community-based care for children, youth and their families. Only recently has there been agreement on the primary elements of the model (Burns and Goldman, 1999: Bruns et al., 2004), standardized methods to measure fidelity to the process (e.g., Suter, et.al. 2005), and a specified model of service delivery (Walker et al., 2004: Walker & Bruns, 2006). Such steps are important because implementation research using a variety of measures and methodologies has demonstrated that the quality or fidelity of wraparound varies greatly (Walker, Koroloff, & Schutte, 2003) and that the fidelity of the process directly correlates with the outcomes for children and families (Rast, O'Day, and Rider, 2005; Rast, VanDenBerg, Earnest, and Mears, 2004). Research has shown that high fidelity wraparound has been effective in engaging and empowering families, producing good outcomes for children and families while reducing high cost services. Research has also shown that low fidelity "wraparound" has not engaged families in the process, has produced poorer outcomes for children and families and often increases the cost of services (Rast, Bruns, Brown and Peterson, 2008; Bruns, 2007; Rast, Vetter, Poplin and VanDenBerg, 2007). In order for families and youth to feel confident in the system's ability to help and support them, a major transformation must occur.

One of the challenges for implementing high fidelity wraparound has been moving from pilot projects to wraparound implemented within and across community-based programs. Fidelity assessments have consistently documented that the wraparound being offered through these programs does not reach or sustain the fidelity levels associated with the best outcomes for children and families. Based on the work of Fixen, Naoom, Blase, Friedman, and Wallace (2005), we have developed a model of the core components of wraparound. The first is the selection of staff to provide wraparound. One of the significant challenges in providing high fidelity wraparound is getting staff to fidelity levels and then maintaining them in their jobs. Early fidelity studies found that it took an average of 9 months for facilitators to reach high fidelity and programs report turnover in positions close to 100% per year. An examination of exit interviews in three programs found that many of the people hired to do wraparound did not understand the expectations of the job and that many did not feel well suited to the demands. The addition of clearly described expectations, behavioral rehearsals, and attention to personality match for the job have resulted in decreases in turnover from 60-90% of staff after one year in these three programs.

The next elements in the implementation model are training and coaching staff. Two field evaluations of the impact of training and coaching on the fidelity of wraparound as measured by the Wraparound Fidelity Index and Vroon VanDenBerg practitioner credentialing tools are discussed. The first study compared the level of fidelity following training and then the level following coaching for 18 facilitators in a community mental health system. The results show that training moved staff about one third of the way between baseline levels and expected high fidelity levels as scored on the Wraparound Fidelity Index. With ongoing coaching support the facilitators in this study were able to achieve high fidelity scores. The second study was done in Nevada as part of a controlled evaluation of the impact of wraparound compared to practice as usual for 67 children and youth in the child welfare system. A multiple baseline design with initial training followed by field based coaching was used to assess the impact of fidelity. The results show that training alone improves fidelity somewhat but not to an acceptable level without coaching.

Coaching is a time intensive and expensive part of the implementation model. Two field evaluations are described that examine strategies to improve the impact of training. These look at how follow-up practice data can be used to guide curriculum development and that the impact of identifying specific skill sets and behavioral rehearsal can significantly improve the impact of training. These studies across six groups of trainees demonstrated that improvements in training strategies could significantly increase fidelity of practice immediately following training.

In another field evaluation the impact of coaching and supervision type and frequency was examined on the time for staff to reach fidelity. This study compared the use of supervision as needed, to low frequency scheduled supervision and coaching, to proactive and frequent coaching and found that proactive coaching and supervision can cut the time to fidelity by almost 50%. In the final field evaluation the use of specific skill based monitoring for coaching was compared to more principle focused supervision. The use of skill sets and frequent credentialing decreased the time to fidelity by over 40%. A final example of the use of skill sets to evaluate progress towards fidelity points to the need for flexibility when working with different populations of individuals in the wraparound process. Presenting: Janis Prince Inniss & Robert Paulson

#### Introduction

This paper will present the results of the Bridging Information Gaps in Services for Kids and Youth (BIG SKY): Meeting the Mental Health Needs of Children in the Child Welfare System research project funded by the Florida Agency for Health Care Administration (AHCA). A number of studies have shown the rapid escalation of the use of psychotropic medications among children and adolescents (Thomas, Conrad, Casler, & Goodman, 2006), including antipsychotic drugs (Olfson, Blanco, Liu, Moreno, & Laje, 2006), that triggered the concern for looking at this issue in Florida. There was a particular concern for children with mental health problems in the child welfare system because of their special vulnerabilities. Apart from medication, another response to problem behaviors is to place children in restrictive environments. Both of these are expensive and intrusive interventions, so the study was designed to understand how individual, organizational and systems factors generally lead to the use of either, while in other cases children are served successfully in their communities with less restrictive interventions.

### Methodology

This mixed methods study included the analysis of Medicaid claims data from July 2005 to September 2006, pulled for the study population to examine mental health service patterns; the study population consisted of children who wind up with either psychotropic medications that are inconsistent with practice guidelines (behavioral pharmacy outliers), or out-of-home residential mental health services (deep-end service use).

The case studies consisted of chart reviews, and interviews of personnel working with two Community-Based Care (CBC) lead agencies in Florida—one metropolitan and the other rural. The populations of the areas were considerably different in terms of socioeconomic characteristics and ethnic composition. Researchers conducted chart reviews of 32 child cases and 50 in-depth interviews with court, agency, and state department representatives, along with clinical staff from across the child welfare system. Interviews were also conducted with eight of the youth identified for the chart reviews and represented both site locations. Finally, an expert panel was convened to reflect upon and integrate the literature review, administrative database analyses and case study findings. The panel generated practice guidelines and recommendations for strategies to improve the system.

## **Findings**

Perhaps the most surprising finding from the quantitative data was how much practice patterns vary by district across the state; this was most likely a result of historical factors and the independent operations of the twenty Community Based Care lead agencies. The service use data for the sample showed that a small number of children received a great amount of deep end services. The "ideal" pattern of deep-end services occurring only after extensive outpatient and pharmacy services, occurred in only 4% of the cases (N = 192), and in only 8% (N = 444) were deep-end services followed by pharmacy and outpatient "aftercare" services. Seven percent of cases received deep-end services for most of the study period (N = 392).

Between formal reviews and court orders, there were sufficient checks and balances to monitor deep end placements for children with mental health problems in the child welfare system. However, a distinction must be made between over medication and over usage as all data indicated that there was a reliance on medications in responding to problem behaviors.

The need for cross training and further education of almost everyone involved in the major systems was another major problem identified. Most importantly, providers in the child welfare system did not have sufficient knowledge about mental health issues and mental health personnel did not fully appreciate the abuse and neglect experiences of children in child welfare or the concerns of the child welfare system around safety, stability, and permanence.

Given the importance of services in supporting placement stability and its potential for reducing the need for medications and more restrictive settings, it was disappointing to discover that children were receiving "old services to fit new problems." While the expert panel identified evidence based programs for children in child welfare with mental health issues, there was limited, if any, availability of such practices. Crisis services and behavioral analysts were also under-utilized. There was a general lack of capacity to titrate the intensity and location of services to meet the immediate needs of children and caregivers to maintain placement stability. Similarly, there was not a "whatever it takes" approach for pragmatically matching supports and services to the immediate needs of children and caregivers. In fact, children were rarely asked what they needed and except for behavior analysts, psychosocial treatments were not oriented towards their behavior which was causing placement instability as well as underlying issues such as trauma or neglect. Because problem behaviors often precipitated residential or group settings-including juvenile justice facilities-this frequently led to children with externalizing disorders being placed together, although such groupings are contraindicated.

#### Conclusions

There was consensus that the only way to break this progression into residential placements and the use of medication was through comprehensive assessments and prompt services tied to the assessments; effective services should be provided quickly before problems escalate. The absence of evidenced based interventions provided in a timely manner led to an unfortunate progression where medication and restrictive placements were seen as "quick fixes," and the only available alternatives.

Children in child welfare are served by multiple systems so system coordination is very important. While there was some coordination at all levels, there were few structures in place to have joint assessments, treatment planning or integrated service delivery. When children were referred from one system to another, there were too often hand offs rather than ongoing involvement; frequently these hand offs did not provide adequate information and preparation for a smooth transition, especially for older children aging out of foster care.

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# Session 52 >> 3:15-3:45 pm >> Salon D Establishing Case Rates, Then Managing Within Them

#### Presenting: Shannon Van Deman & Knute Rotto

#### Introduction

Choices, Inc. is a nonprofit 501(c3) organization built in 1997 to manage systems of care in Indiana. Currently, Choices operates systems of care in Indiana (Dawn Project), Ohio, and Maryland. Consistent with the core values of systems of care, our programs give people a say in their care process and let them choose the services and supports they believe will make a positive difference in their lives. Our programs serve youth with emotional and behavioral issues. These youth are at-risk for or have a history of residential placement, and they represent a substantial financial burden to the systems mandated to serve them.

In most locations, Choices manages costs within a per youth per month case rate paid by the referring agency (i.e., child welfare, juvenile justice, education, and mental health). Consistent with the necessary conditions for implementing high-quality service planning, this funding structure provides the flexibility needed to deliver individualized, family-driven, community-based, strength-based, and culturally competent care (Walker, Koroloff, & Schutte, 2003). Through the case rate structure, child and family teams (which include the youth, family members, a care coordinator, and representatives from the referral agency, providers and other individuals identified by the family) have the ability to develop service coordination plans and to purchase services that help the youth succeed in their schools and communities. This process eliminates hierarchies and the process of budget approvals. Teams have the flexibility to do whatever it takes for success and make decisions autonomously. An additional benefit of the case rate is that it helps the referring agencies manage their budgets.

Establishing an appropriate case rate can be difficult. It is important to make sure that the case rate is high enough to cover the cost of services, but not so high that referral agencies are breaking their budgets. Another challenge is learning how to manage within the case rate without impacting the decision making of the child and family teams. The purpose of this paper is to introduce methodologies for dealing with these two challenges: (1) establishing an appropriate case rate and (2) managing within it.

#### **Methodology and Findings**

In the managed care literature, there are three things that you need to know or be able to estimate in order to set and manage a case rate: how many youth will use services, how many units of services will each youth use, and how much does one unit of service cost (Broskowski, 1998). Once this is known, the key to managing the case rate is to manage each one of those factors to the extent possible.

With consultation from Anthony Broskowski, Choices developed a cost model to aid in case rate setting decisions. Distributions are defined by inputting minimum, modal, and maximum observed or expected values. For example, Choices has found that anywhere from 5% to 23% of the youth enrolled in the Dawn Project will use mentoring services at any one time. Of those youth, they will use an average of 70 hours per month at a cost of \$10 to \$45 per hour. Once all of the distributions are defined for all of the possible services a simulation can be run. The simulation goes through thousands of iterations probabilistically selecting instances from each of the defined distributions to come up with a cost per iteration (i.e., a cost per theoretical youth). When the simulation is complete it produces a distribution of possible costs per youth per month. This distribution can be used to set the case rate by examining the probabilities associated with the various costs. For example, Choices usually tries to select a case rate that will allow us to break even or make money 60% of the time and lose money 40% of the time.

After a case rate is selected, the task becomes one of managing within it. Fortunately, the parameters used to establish the case rate can be used to manage the case rate by coupling them with operations management methodologies from the manufacturing world. For example, Pareto diagrams are used to determine which services use 80% of the service dollars. Typically there are only a handful of the services that use the majority of dollars. This makes managing the case rate easier, and allows one to dedicate resources where they will make the largest impact. Control charts are created using the parameters defined when populating the cost model to set lower and upper bounds. For example, Figure 1 depicts a control chart showing the proportion of youth using educational mentoring services with a lower bound of 5%, an upper bound of 23%, and an expected value of 14%. Once the bounds are set, the observed mean is added to the control chart for evaluation. As Figure 1 shows, the observed mean was above the upper bound for most of the 2006-2007 school year. This means that more youth received educational mentoring than anticipated. To look at this trend in isolation, it suggests expenditures might surpass revenues of the case rate. However, trends rarely happen in isolation and as the proportion of youth using educational mentoring increased, the proportion of youth being placed in residential treatment decreased.

#### Conclusion

#### Figure 1 Educational Mentoring Proportion of Users



The case rate funding structure can be a powerful tool for a system of care. It provides the necessary flexibility, allows decision making to stay with the child and family team, and helps the referring agencies manage their budgets. At the same time, figuring out the appropriate case rate and then managing within it can be a daunting task. Fortunately, methodologies have been developed that help overcome these challenges. Cost modeling can be a powerful tool to help set up the initial case rates and Pareto diagrams and control charts can be used to manage within them.

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# Session 53 >> 2:45-3:45 pm >> Salon G

#### Symposium

# Using Administrative and Other Data Sources to Address Disparities in Care for Ethnically and Racially Diverse Populations

#### Chair: Larke Nahme Huang

Presenting: Kamala Allen & Glenn Gamst

This presentation will describe several initiatives that have used existing administrative state or organizational data to track gaps in care and bias in decision making, and develop organizational cultural competency plans.

## Using Administrative and Other Data Sources to Address Disparities in Care for Ethnically and Racially Diverse Populations

#### Presenting: Kamala Allen

With work that began with health plans serving predominantly Medicaid beneficiaries and continues with the National Health Plan Collaborative, CHCS is working to identify ways to improve the quality of health care for racially and ethnically diverse populations. Each of the Collaborative health plans is evaluating provider-, member- and community-targeted approaches that use race and ethnicity data to determine the effectiveness of these approaches in reducing gaps in care and improving the quality of care racial and ethnic populations receive.

## An Overview of the CBMCS Multicultural Training Program: Implications for Community Mental Health

#### Presenting: Glenn Gamst

Today's presentation will provide a brief overview of the California Brief Multicultural Competence Scale (CBMCS) and a 32-hour multicultural training program that is derived from the CBMCS selfreport cultural competence instrument. The instrument and training program will also be briefly contextualized into a broader cultural competence mental health service delivery framework called the Multicultural Assessment Intervention Process (MAIP) model.

During this millennium, the United States is rapidly becoming a multicultural society. Training for service providers now encompasses the needs, problems, and mental health concerns of the entire population. This training can effectively bridge the gap between research-based psychological science and applications for community practice. The CBMCS Multicultural Training Program, Dana, Gamst, and Der-Karabetian (2008) addresses both concerns by expanding the existing counseling psychology cultural competency triadic training model. The triadic model embraces knowledge, beliefs, and skills developed for this purpose that stimulated secondary models and a number of measuring instruments and dramatically altered the nature and content of professional training to provide services for racial/cultural minorities. However, this model does not include a number of marginalized groups with multiple identities inadequately served by the triadic training model cultural competency definition (e.g., Arredondo, 2002). This new focus includes "the social and political rights and needs of racial/

ethnic minorities, women, gays and lesbians, individuals with disabilities and the elderly" (Heppner, Casas, Carter, & Stone, 2000, p.5). Recent American Psychological Association guidelines for several of these groups are consistent with social justice objectives in the training of professional psychologists (Aldorondo, 2007; Enns & Sinacore, 2005; Hage, 2005; Toporek, Gerstein, Fouad, Roysircar, & Israel, 2006).

Triadic model measuring instruments are incomplete for professional training to provide services for these diverse client populations with multiple identities in a variety of health, mental health, and rehabilitation settings. The (CBMCS; Gamst et al., 2004), a new instrument, measures triadic model components and incorporates these new populations by a fourth factor. The CBMCS renames triadic model constructs as Multicultural Knowledge, Awareness of Cultural Barriers, and Sensitivity and Responsiveness to Consumers; the added factor, Sociocultural Diversities (formerly called Nonethnic Ability), explicitly addresses the following diverse multiple identities: socioeconomic status, disabilities, older adults, lesbians/gay men, and heterosexual women/men. The effectiveness of the CBMCS Multicultural Training Program on subsequent mental health service outcomes to these consumer populations remains to be demonstrated and documented. These four constructs and the factors describing their contents are congruent with independent, nonempirical formulations of healing conditions (Fischer, Jome, & Atkinson, 1998) and cultural sensitivity (Ridley, Mendoza, Kanitz, Angermeier, & Zenk, 1994).

The CBMCS Multicultural Training Program is designed to be applicable across mental health settings and providers with different professional backgrounds and affiliations. This training program will continue to evolve, based in part on feedback received from users and ongoing program evaluation efforts. Findings from outcome research will evaluate the effectiveness of the training process and the utility of an empirically derived training model. Use of the CBMCS Multicultural Training Program should contribute to improving the quality of mental health services for consumers across the spectrum of minority populations.

The CBMCS Multicultural Training Program is one part of a larger organizational cultural competence mosaic we call the Multicultural Assessment Intervention Process (MAIP) model. The MAIP attempts to respond to the burgeoning multicultural adult and child/adolescent population by embedding culturally competent assessment and intervention services at the consumer, agency, and community levels. This model is consistent with the California statewide public sector cultural competency initiative and a recovery-oriented vision for quality mental health care. In practice, this model provides an agency the means to assess key cultural variables (e.g., ethnic/racial match, acculturation status, ethnic identity, provider self-report cultural competence) and allocate precious agency/staff resources (e.g., ethnic-specific and ethnic-general interventions). All of which can be tracked at the individual consumer level and linked to clinical outcome (see, Costantino, Dana, & Malgady, 2007; Gamst, Rogers, Der-Karabetian, & Dana, 2006).

# Session 54 >> 2:45-3:15 pm >> Salon H Creating the Organizational Capacity to Serve Families with Parental Mental Illness: The Implementation of Family Options

#### Presenting: Kathleen Biebel & Katherine Woolsey

## Introduction

While the majority of adults living with psychiatric diagnoses are known to be parents, there is surprisingly little attention given to the needs of these adults and their families (Nicholson et al., 2004). Children with serious emotional disturbances are more likely than not to have a history of family mental illness, with 40% reporting a history of parent psychiatric hospitalization (Hinden et al., 2004). A national survey of programs for parents with mental illness and their children identified only 20 programs across the U.S. geared specifically to meet the needs of these families (Hinden et al., 2006). To date, few studies have contributed to the evidence-base describing and evaluating these interventions (Hinden et al., 2006).

Critical to implementing interventions for parents with mental illness and their children is an understanding of the environment in which these interventions exist. Fixsen et al. (2005) suggest that there are multiple levels of influence involved in successful implementation. These levels include: core implementation components (i.e., training, coaching, mentoring); organizational components (i.e., administrative structure, personnel issues, and sustainability); and influence factors (i.e., the external political, cultural, and community environment). How these levels of influence interact can both facilitate and impede the implementation process, and consequently affect implementation outcomes. The interaction between these levels is rarely static, and varies by stage of implementation.

Limited research exists exploring the role of organizational context when implementing innovative interventions. One study of change across mental health residential units suggested organizational factors contributing to successful implementation included support at all levels of the organization, standardized operations and procedures in place to sustain the intervention, and clear communication pathways and technology to support information exchange. Commitment of leadership and allocation of resources for extra costs associated with the intervention, e.g., equipment, consulting, training, are important for organizational change (Fixsen et al., 2005)

Understanding organizational context is of key importance when adopting and sustaining an innovative intervention. This is particularly relevant when implementing an intervention for parents with mental illness and their children in a traditionally adult-serving mental health organization. The paradigm shift required from "thinking about adults" to "thinking about families" can present a myriad of issues such as conflicting goals between the organization and intervention, the need to clarify roles of administrators and staff, and encouraging a new intervention while still supporting the existing organization often with the same limited resources.

University of Massachusetts Medical School researchers are currently conducting a multi-year study developing, implementing, and testing a family-care management intervention for parents with mental illness and their children, Family Options. The study has two components, one examining outcomes for parents and their children, and a second studying the process of implementing the intervention. The implementation study addresses the research question, "what does it take to implement an intervention for families in an agency traditionally focused on the needs of individual adults?" The purpose of this presentation is to present preliminary findings describing the organizational context of a traditionally adult-serving community mental health program, Employment Options, Inc., as they implement a familycentered, strengths-based intervention for families living with parental mental illness.

#### Methodology

**Participants.** The data described in this presentation are drawn from interviews with key informants who are directly involved with the intervention (n = 8). All employees directly involved with the intervention during the course of the study received an invitation to participate in the research.

*Interviews.* Researchers used ethnographic interviewing techniques with study participants. At each interview participants were asked, "What has been happening with the implementation process?" As data collection progressed, researchers identified follow-up probes to target specific topics introduced during previous interviews, in an effort to clarify and further understand certain issues. Interviews lasted on average 20-30 minutes. Ninety-six interviews were conducted over 23 months of data collection.

**Procedure.** Interviews were tape recorded and researchers took hand written notes. Audio recordings of each interview were transcribed and entered as text data into QSR N6 software. If no audio recording of an interview existed, researchers entered transcripts created from interview notes into N6.

**Analysis.** Qualitative data from interview transcripts were coded and content-analyzed for concepts and themes based on research objectives and the implementation knowledge base. Major themes were summarized and compared across participants. Meta-analysis strategies focused on exploring, identifying, and understanding emerging themes.

#### **Findings**

Preliminary analyses of key informant interviews describe components of the organizational context that facilitate the implementation of the Family Options intervention. These components include:

- Coordinating logistics and operations
- Coordinating communication and meetings
- Standardizing methods of operation
- Attending to staff performance
- Allocating internal resources

#### Conclusion

The role of the organizational setting during intervention implementation is an often discussed yet rarely studied phenomenon. An organization sets the stage for the hands-on implementation while being the conduit or barrier to outside influence factors. These findings contribute to the implementation knowledge base by identifying facilitators and road blocks when introducing a new intervention into an organization. Recommendations will be useful to agencies interested in replicating the intervention, and will lay the ground work for studying organizational implementation issues in a variety of mental health settings.

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# Session 54 >> 3:15-3:45 pm >> Salon H Mental Health Communication Training for Pediatric Primary Care Providers: Impact on Disparities

#### Presenting: Jonathan Brown & Lawrence Wissow Contributing: Anne Gadomski

Acknowledgements: We are grateful to the families and providers who participated in the study. Dr. Barry Lewis helped refine the training methods and Drs. Scott Krugman, Gaurav Kumar, and Steve Shearer provided guidance on training family physicians. The National Institute of Mental Health (RO1MH62469) funded this research.

#### Introduction

Pediatric primary care providers (PCPs) play an integral role in the system of care for children with mental health needs. Often the first health professionals to identify mental health problems in children, PCPs are one of the gateways to mental health specialists and, for many children, they are the only source of mental health services (Farmer et al., 2003; Horwitz et al., 1998).

However, child mental health problems are often not discussed during primary care visits (Garrison et al., 1992). Communication about mental health may be particularly poor with minority families, who may have negative perceptions of mental health services (Gary, 2005; Bailey & Owens, 2005) or use terminology unfamiliar to the PCP to describe mental health concerns (Guarnaccia, 2005). The resulting gaps in communication may explain why many minority children with mental health needs either do not receive services (Kataoka et al., 2002) or receive them later than their Caucasian counterparts (Hough et al., 2002). Improving PCPs' communication with minority families about mental health may increase the extent to which emerging problems are identified and impairment is prevented, especially among minority youth.

This presentation reports the child and parent outcomes of a brief training for PCPs to improve communication with families about child mental health; also discussed is whether the training differentially improved the mental health status of minority youth.

#### **Methods**

The training involved three hour discussions with a child psychiatrist structured around videos of providers demonstrating mental health communication skills, each followed by practice session with standardized patients and self-evaluation. PCPs learned to encourage parents and children to discuss mental health, partner with families to understand the context of problems and agree on treatment, and increase expectation that treatment would help. Training was tested at 13 sites throughout rural New York, urban Maryland, and Washington, DC. Providers were randomized within site to receive training. Children 5-16 years old making routine visits were enrolled into the follow-up evaluation if they screened "possible" or "probable" for mental disorder according to the parent-reported Strengths and Difficulties Questionnaire (SDQ) (Goodman, 1999) or if the PCP identified the child as having a mental health problem. Families were then followed for six months to assess the change in child mental health (SDQ) and in parent emotional distress (General Health Questionnaire)(Goldberg & Hillier, 1979). Generalized estimating equations (GEE) were used to examine the difference in the change in parent and child outcomes between the treatment and control group. Statistical interactions tested whether outcomes were differentially associated with the child's race and ethnicity.

#### Results

Fifty-eight providers (31 trained and 27 controls) and 418 children (248 patients of trainees and 170 patients of controls) participated. Eighty-eight percent (n = 367) were followed for 6 months after the training. The SDQ identified 72% of children in the six-month follow-up as having a mental health problem. Fifty-four percent were non-Latino Caucasian, 30% non-Latino African-American, 12% Latino, and 4% other race/ethnicity. There was a greater reduction of mental health impairment among minority children who were patients of trained PCPs compared with those who were patients of control PCPs ( $\Delta = -0.91$  points, 95% CL -1.8 to -0.01). Parents of children who visited a trained PCP experienced a greater reduction in emotional distress than parents of children who visited a control PCP regardless of race/ethnicity ( $\Delta = -1.7$  points, 95% CL -3.2 to -.11).

#### Conclusion

Brief communication training for PCPs reduced both parent emotional distress and minority children's mental health impairment across a range of problems. The training may have differentially reduced impairment among minority children because PCPs acquired skills to help families clarify their mental health concerns and tailor treatment to family preferences, which differ according to race/ethnicity (Pumariega et al., 2005). Trained PCPs may have been able to increase minority parents' trust in the helpfulness of treatment (Richardson, 2001).

Broad-based communication training may complement interventions focused on specific disorders and may facilitate the reduction of disparities. This type of training may improve cultural competence in a manner that does not stereotype treatment according to race or ethnicity. Instead, the training helps PCPs understand families' perspectives on mental health problems and their treatment preferences.

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# Session 55 >> 2:45-3:15 pm >> Salon I A Large Scale Needs Analysis Based on Statewide Quantitative and Qualitative Data

Presenting: Ryan M. Quist

#### Introduction

Family involvement and interagency collaboration are key components of Children's Systems of Care (U.S. Public Health Service, 2000). Family input is important at all levels of system delivery and throughout the administrative and managerial decision-making processes (Jivanjee & Robinson, 2007). Collaboration between various agencies serving the Children's Mental Health client population is necessary for advancing and promoting continuity of care. Promotion of children's mental health must involve agencies such as schools, the juvenile justice system, social services, and physical health care providers (Morrissey, Johnsen & Calloway, 1997).

In California, the Children's System of Care is experiencing an evolutionary leap forward, and the planning process for these advances is based on intensive feedback from a broad range of key stakeholders. In November, 2004, a community initiated proposal was approved by California's voters referred to as the Mental Health Services Act (MHSA), which allocated over \$250 million for community mental health services during its first year. In addition to generating funds, the proposition explicitly specified an intensive planning process driven by consumers and community stakeholders. With an emphasis on meeting localized community needs, California's counties were required to submit proposals for how the funds would be used and the proposals were required to specify how consumers and community stakeholders contributed to the development of the plans.

#### **Recovery Instead of Medicaid**

To briefly describe the rather complex but well-defined MHSA legislation, funds from a 1% tax on all individuals with an annual income of \$1 million or more will go to (1) Community Planning, (2) Community Services and Supports, (3) Prevention and Early Intervention, (4) Innovative Programs, (5) Capital Facilities and Technology, and (6) Education and Training for the mental healthcare workforce. At least 50% of the funds must go to "Full-Service Partnership" (FSP) programs. FSPs are defined with conceptual and programmatic characteristics very similar to wraparound programs and include specific caseload ratio requirements. Beyond the FSP programs, funds are primarily intended for enhancing the existing system. All of these programs must focus on meeting the needs of the "unserved" and "underserved." Finally, throughout the MHSA legislation, one of the most consistent themes throughout is a very strong emphasis on the concept of "Recovery" to promote strength-based mental health treatment practices and to release service providers from Medicaid's deficit-based orientation.

#### **Current Focus**

This presentation focuses on a large-scale needs analysis focusing on data and feedback from consumers, family members, community representatives, and representative from collaborating agencies.

# Methodolgy

#### **Unmet Need**

The most heavily weighted criterion used to make state-level decisions regarding allocation of MHSA funds was county-level estimates of the prevalence of "Serious Mental Illness," which is equivalent to the designation of "Seriously Emotionally Disturbed" more frequently referenced when discussing children's mental health services. County-level estimates were calculated based on population characteristics such as age, gender, and ethnicity.

While recognizing the limitations of these estimates, comparing data on local prevalence rates to data on the number of children receiving services results in an estimate of "unmet need," and unmet need estimates provide a basis for making comparisons to identify geographically distributed service disparities. Unmet need was aggregated based on geographic region and complex maps of data using GIS (Geographic Information Systems) software. Also, unmet need data were used to understand equity across children's mental health services in comparison with programs focusing on other age groups.

#### Qualitative, Community-Based Feedback

MHSA legislation explicitly required feedback from consumers, family members, community representatives, and representatives of other service providing agencies. Stakeholder input was integrated throughout the planning process and at all levels of the decision-making process.

As an example of the local processes used to collect qualitative data, results will be presented from Riverside County. With a population around 2 million people, Riverside County is more populous than 16 of the United States. To collect local, qualitative data, extensive outreach and awareness campaigns promoted attendance at 102 focus groups and community forums distributed throughout the full geographic range of Riverside County. In total, there were 15 groups held for non-English speaking, Spanish-speaking individuals. In less than two months, these forums elicited feedback from 1,127 individuals. In addition to responding to standardized questions regarding the communities mental health needs, attendees were asked to prioritize the issues and needs discussed.

Leadership councils comprised of representatives from the same range of stakeholders were responsible for translating communitybased qualitative data into specific plans for developing and expanding programs to address the identified priorities.

# **Findings**

At the state level, quantitative needs analysis data were used for distributing MHSA funds. The distribution / allocation formula will be presented.

At all levels of the planning process, including planning at the state level, advisory committees were assembled with membership consisting of consumers, family members, community representatives, service providers, and representatives for other agencies. These advisory committees were responsible for reviewing the data that resulted from the qualitative needs analyses as well as other statistical data available on a broad range of topics. After reviewing the data, these advisory committees were responsible for drafting plans for how to address the priority areas identified. At the county level, draft plans were publically posted for another round of feedback. After county plans were revised based on the resulting feedback, they were submitted to the California State Department of Mental Health where they were vetted to make sure that they did not deviate from the initiative's legislated scope. Since the MHSA passed, over 90% of California's 58 counties have completed this needs analysis process and begun implementing programs and plans funded by the MHSA.

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# Session 55 >> 3:15-3:45 pm >> Salon I

# The Rule or the Exception: A Framework for Addressing Co-Occurring Mental Health and Substance Use Disorders in an Effort to Effectively Respond to What Families Say They Want in Treatment

#### Presenting: Kelly Graves, Terri Shelton & Claretta Witherspoon

## Introduction

Despite the fact that the data highlight that co-occurring disorders are the rule rather than the exception when working with children and adolescents presenting with mental health challenges (Armstrong & Costello, 2002), most of the work in applying system of care in mental health has not fully integrated the risk for substance abuse in the discussion. This paper will: (1) provide an overarching framework to the importance of assessing and treating co-occurring mental health and substance use disorders within a system of care/family-centered framework, and (2) report data-driven responses to what families say they want in treatment.

Beginning with a brief discussion of the various definitions of cooccurrence and co-morbidity along with national rates of co-occurrence (Center for Substance Abuse Treatment, 2007), this presentation will review the Conceptual Framework for Co-Occurring Mental Health and Substance Abuse Disorders that has been nationally disseminated through the National Association of State Alcohol and Drug Abuse Directors and the National Association of State Mental Health Program Directors (2005). Within this framework, there is an assumption that all children fall along the spectrum of substance use and mental healthrelated symptoms. This framework also supports service coordination by severity rather than by diagnostic category, with the premise that service systems should respond to the severity across these axes (mental illness and substance use) in a coordinated fashion. This system of care-like framework allows treatment planning to be individualized, comprehensive, family-focused, and supportive to the needs of the child and family. Several states (e.g., Arizona, Michigan, Georgia, and many

more) have implemented this framework with some success. Following an overview of this framework, the presenter will briefly discuss principles that guide systems of care for people with co-occurring disorders and common trajectories of the onset of mental health versus substance abuse disorders along with a description of North Carolina's collaboration with SAMHSA's Co-Occurring Center for Excellence (COCE) to develop a state action plan to address co-occurring disorders through the North Carolina Adolescent Abuse Treatment Grant.

## **Focus Groups**

Using this framework as a guide, the NC Adolescent Abuse Treatment Grant workgroup began collecting data for multiple sources. There is a particularly strong commitment among the partners involved to seek the voices and experiences of several family-based groups directly involved with adolescent substance abuse issues. Therefore, in the last year, seven focus group sessions were conducted with caregivers of substance-involved youth, as well as one focus group session with youth who were using substances. Each focus group had between 12 and 21 family members in attendance. These focus groups occurred across the state of North Carolina in seven different counties. The focus groups were convened to explore participants' personal experiences and provide their insights into ways they could be more involved in their child and family team centered around substance use. Each session was audio-recorded and transcribed.

## **Initial Findings and Interpretations**

Findings and interpretations represent major themes and perspectives of the sessions as summarized by multiple observers and readers.

Youth Want to Take the Lead on Their Child and Family Team. There was a repeated focus on supporting youth and families to claim ownership of their child and family team meeting by allowing youth and family members to have a chance to talk about issues that *they* see as relevant rather than the conversation being steered by the provider. Youth claimed that if they were able to speak more, they would feel that they could take more of a lead in their treatment process.

*Increase Youth and Family Communication*. Both youth and adults echoed the idea that they would like to have an increased voice at the table. Reporters indicated that goals are given to them rather than developed with them to address substance-abuse issues as well as other needs. In order to feel comfortable with speaking up more, youth and families reported that providers should not use jargon.

*Keys to Successful Team Meetings*. Several youth identified keys to what makes a team meeting work. One youth reported that it is frustrating when a meeting is held about him, but he is not able to come to the meeting. Another youth reported that too often people who say that they are coming to the meeting do not show up, which results in a lack of trust and a sense of abandonment. The resounding message was that youth and families want to be educated on their role in the treatment process so that they can be empowered to lead their treatment rather than follow.

## **Discussion and Implications**

Additional themes will be identified and reported as part of the presentation. A family member will specifically discuss why these themes are important when treating an adolescent with co-occurring mental health and substance abuse issues. For example, mental health professionals sometimes disregard substance use issues if youth are not given an opportunity to talk regularly during team meetings about their behaviors. With the clear message from one youth that "you need to know me before you can build a plan for me," it is imperative that we allow youth and families to take the lead in their treatment so that a comprehensive plan that includes substance abuse goals (if relevant) can be established.

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# Session 56 >> 2:45-3:45 pm >> Salon J Topical Discussion

# Cultural Adaptation of Evidence Based Practices: State, Tribal and Private Foundation Experiences

Presenting: Holly Echo-Hawk, Betty Poitra & Rick Ybarra

#### Background

The development of evidence-based practices (EBPs) has been a major force in improving the quality of mental health services. EBPs are ways of delivering services to people using scientific evidence that has shown that the services actually work, based on the results of rigorous evaluations.

The need for EBPs was highlighted in the Surgeon General's Report on Mental Health (1999), which emphasized the gap between science and practice, and called for an increase in the use of EBPs in mental health. The President's New Freedom Commission on Mental Health Report (2003) reinforced the call to promote and adopt EBPs with documented positive outcomes, thus advancing the transformation of the entire mental health system. For example, treatments like cognitive-behavioral therapy (CBT), shown to be efficacious in numerous treatment studies across researchers are considered more likely to yield positive outcomes than treatments without such data.

Although providing EBPs for people of color with mental illnesses would appear to be a logical way to increase the quality of care received and its outcomes, this approach has been controversial. Many ethnic minority communities raise concern that minority populations were not included in clinical trials of EBPs and thus the impact of culture on EBP treatment efficacy is unknown. Given the significant ethnic/ racial differences in how people conceptualize mental illness, recognize their own distress, communicate their distress to others, seek help, and participate in treatment, it is clear that culture matters.

Consideration of the impact of culture on access to treatment, treatment provision, and treatment efficacy has been minimal, yet EBPs are being adopted and promoted by private insurers and state and local governments across the nation in the name of increasing quality of services and optimizing financial investments. As a result, many funders in multicultural communities now require the use of EBPs in provider contracts and the service delivery systems are presented with the problem of having to "fit" EBPs to mental heath consumers of color with little guidance on standards for adaptation for culture, language, and context.

Fortunately, real-world experiences and studies of cultural adaptation of EBPs are evolving. Although the corresponding evidence-base is also evolving, it appears that services would be more likely to yield positive outcomes for ethnic minorities if the EBPs are culturally-adapted to the population. Isaacs, Huang, Hernandez & Echo-Hawk (2005) suggest two approaches for ensuring culturally competent evidence-based practices for children and families of color:

- · Cultural adaptations of existing evidence-based practices, and
- Utilization of culturally-specific interventions, also known as practicebased evidence (PBE) models

The Minnesota Department of Human Services (DHS) Mental and Chemical Health Division began a multiyear collaboration with its partners Metro State University, Minneapolis Community and Technical College, and Prairieland Addiction Technology Transfer Center. These organizations have been working together on a motivational interviewing (MI) train-the-trainers project for mental health providers and chemical health counselors to learn how to deliver basic training in motivational interviewing. Special efforts were taken to recruit professionals from diverse communities to be part of the MI Train-the-Trainers Project. The first 6 months trainees learned about and received training on MI with technical assistance and support from the Motivational Interviewing Network Trainers (MINT). Trainings were then scheduled and conducted throughout the State over a period of 6 months. MI contains several values related to Native people:

- MI is embodied in the Native cultural value system (*respect, listening and learning*)
- MI is about moving the client/counselor to a more "*relational*" place
- MI is about *spirit*, a feeling/sensing style of communication and partnership between client and counselor versus techniques
- MI counseling approach is an *empathic*, *non-confrontational* style

A subcommittee is currently developing a manualized culturally relevant MI curriculum for Native people with support from the MI committee.

Challenges in the delivery of MI to Native people include the need for consumers to see MI as *something of value* (before consumers/ recipients can embrace MI, be comfortable with MI and understand how MI will benefit them), developing competencies through continued supervisions, coaching and mentoring, and the need to recruit Native Americans as trainers. In addition to the challenges noted, this collaborative is exploring distance learning through Interactive TV and how to better identify, contract and train professionals and parprofessionals on a particular supervision style that is standardized in MI.

Other tribal examples of cultural adaptations of EBPs include the experiences of the American Indian and Alaska Native systems of care (1994-2007) that have approached cultural adaptation from a range of perspectives. In addition, the Indian Country Child Trauma Center (www.icctc.org) provides rich information on cultural adaptation of Parent-Child Interactive Therapy, Trauma-Focused Cognitive Behavioral Therapy, and Children with Sexual Behavior Problems Therapy.

#### **Issues to be Discussed**

In 2006, the Hogg Foundation for Mental Health (http://www. hogg.utexas.edu/programs\_cc.html) announced awards to five Texas organizations to adapt the delivery of evidence-based practices (EBPs) to be compatible with the cultures of the populations of color served by these organizations (Latinos and African Americans). Such cultural adaptations are the focus of the Foundation's Cultural Adaptation Initiative. The five grantee organizations will work closely with the Foundation and various expert consultants, provided resources and technical assistance throughout the three-year grant period and make adaptations at the administrative, service delivery, and clinician levels to make treatment consistent with their client populations' cultures and to support their implementation efforts. The Foundation's objectives for the initiative are to increase the availability of effective mental health services for people of color in Texas and to generate new knowledge about cultural adaptations of EBPs.

Participants will learn from the experiences from the state of Minnesota, tribal communities, and the Hogg Foundation for Mental Health which funds EBP cultural adaptation efforts within the state of Texas.

# Who Should Attend

Those interested in contemporary issues related to the implementation and adaptation of culturally competent services.

## References

Isaacs, M.R., Huang, L.N., Hernandez, M., and Echo-Hawk, H. (2005). The road to evidence: The intersection of evidence-based practices and cultural competence in children's mental health. Washington, DC: The National Alliance of Multi-Ethnic Behavioral Health Associations. [http://www.systemsofcare.samhsa.gov/ResourceGuide/ccebp.html]

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	Responding to Evolving Evaluation Needs in a Comprehensive Early Childhood Initiative Presenting: Michael P. BatesContributing: Prashant Rajvaidya	
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# Session 57 >> 4:00-5:00 pm >> Salon A The Progression of Multisystemic Therapy (MST) Adaptations: Pilot Studies to Large Scale Dissemination

#### Presenting: Scott W. Henggeler

The purpose of this paper is to describe the general process by which standard Multisystemic Therapy (MST; Henggeler et al., 1998) is adapted for use with other challenging clinical problems and eventually transported to community-based MST programs. The usual path to dissemination is as follows:

Adaptation Pilot >> Efficacy Trial(s) >> Effectiveness Trial(s) >> Transportability Pilots >> Mature Transport >> Proactive Dissemination

In the case of MST for serious juvenile offenders, for example, Henggeler conducted the initial pilot study in Memphis. The success of this work led to efficacy research conducted by Borduin in Missouri and effectiveness trials conducted by Henggeler in South Carolina. Success here led to early dissemination efforts (i.e., transportability pilots). Lessons learned from these early dissemination attempts have informed the large scale dissemination work of MST Services as well as the important independent replications of Leschied in Canada, Ogden in Norway, and Timmons-Mitchell in Ohio. The entire process took more than 20 years to complete!

As the effectiveness of MST in treating serious juvenile offenders became known to the larger practice and research communities in the 1990s, several groups of investigators have used standard MST as a platform for the development of adaptations to treat other serious clinical problems, including psychiatric problems, child abuse and neglect, substance abuse, problem sexual behaviors, and health care conditions such as diabetes, HIV infection, and obesity. Importantly, and as described next, each of these adaptations is progressing along the pilot study to dissemination continuum noted above. Although this carefully reasoned process will hopefully take fewer than 20 years to complete, we are primarily concerned with developing effective and sustainable interventions.

## **Adaptation Pilot Studies**

In cases where adaptations to the standard MST model might produce an effective intervention for a challenging clinical problem, relatively low cost pilot research is conducted to determine the feasibility and preliminary effects of the adaptation. Ellis and Naar-King have conducted several pilots on adaptations for youth failing to adhere to medical health care recommendations (MST-HC) in domains such as poorly controlled type 1 diabetes, obesity, asthma, and HIV infection. Similarly, the Building Stronger Families Project, currently being piloted in Connecticut, is integrating MST-CAN (Child Abuse and Neglect) and Reinforcement Based Therapy, which is an evidence-based treatment of parental substance abuse. If outcomes from the pilot are favorable, such work will be used to support efforts to obtain funding for a more rigorous evaluation of this MST adaptation. Importantly, for reasons of program fidelity, all research on MST adaptations includes investigators who developed the adaptations.

## **Efficacy Trials**

The purpose of a controlled efficacy trial is to determine whether the adaptation can achieve desired clinical outcomes under relatively favorable intervention conditions. Thus, for example, Borduin's efficacy trials have included him as the clinical supervisor and highly qualified doctoral students as the therapists within a university-based program. Likewise, Rowland's adaptations for psychiatric problems included considerable supervision from MST-trained psychiatrists at the Family Services Research Center. If results from the efficacy trials are positive, the adaptation is ready for rigorous evaluation in community treatment settings.

## **Effectiveness Trials**

The purpose of a controlled effectiveness trial is to examine the effectiveness of the adaptation in more usual practice settings and to identify barriers to such effectiveness. For example, Swenson has recently examined the effectiveness of MST-CAN provided by an MST team based in a community mental health center, and Bor and McDermott are conducting an effectiveness replication in Australia. Similarly, an effectiveness trial for psychiatric problems was completed in Hawaii several years ago, and an effectiveness trial for problem sexual behavior has recently been completed in Chicago.

## **Transportability Pilots**

The purpose of the transportability pilots is to test the feasibility of the adaptation in several MST community programs. The pilots are kept very structured, under close oversight by adaptation developers (e.g., Swenson for MST-CAN, Borduin for problem sexual behavior, Rowland for psychiatric problems), and, if appropriate, protocols for broader dissemination are developed under the leadership of MST Services.

## **Mature Transport**

As with MST for serious juvenile offenders, broader dissemination of the adaptation will occur when (a) we are reasonably confident that the intervention protocols will achieve the desired outcomes if implemented with fidelity, and (b) the training and quality assurance procedures are sufficient to support the effective implementation of the intervention protocols. The transport experts, MST Services and its Network Partners, take the lead in national and international transport and implementation efforts.

## **Proactive Dissemination**

The objective of dissemination strategies is to cultivate awareness of and interest in using a product or service. For MST and other evidencebased mental health and substance abuse treatments, the development/ evaluation of effective strategies to proactively disseminate the model (that is, to encourage adoption of the model) is in its infancy.

# Session 58 >> 4:00-4:30 pm >> Salon B Longitudinal Impact of Family Functioning on Children Served in Systems of Care

Presenting: Jeffrey Anderson Contributing: Eric Wright & Harold Kooreman

## Introduction

To date, the extent to which caregiver strain, family functioning, and family resources improve over time among families of children in a SOC remains unclear. Likewise, the link between changes in family functioning and outcomes for children with SED receiving treatment in a SOC has yet to be examined. Thus, this study provides valuable insight into improvements in the role of family-based factors on the success of youth in systems of care.

# **Methods**

Data were compiled by Macro International from interviews with the caregivers of students enrolled in a national evaluation of the Comprehensive Community Mental Health Services for Children and Their Families Program.

#### **Dependent Measures**

*Child Behavior Checklist (CBCL).* This was a caregiver rated report used primarily to assess behavior and emotional problems among children and adolescents ages 4 to 18. Scores on all scales can range from 50 to 100. Researchers have reported adequate reliability and construct validity for the CBCL.

*Behavioral and Emotional Rating Scale (BERS).* The BERS assessed the emotional and behavioral strengths of young people. The overall strength score can range from less than 70 to over 130. Appropriate levels of reliability and convergent validity have been found with the BERS.

## **Independent Measures**

*Family Resource Scale (FRS).* The FRS is a 30-item scale designed to assess the adequacy of a family's resources. For this analysis, only the overall resource score was used.

*Family Assessment Devise (FAD).* The FAD general scale is a set of 11 questions designed to measure interaction patterns in families that are both healthy and unhealthy. Average FAD general scale scores can range from 1 to 4.

*Caregiver Strain Questionnaire (CGSQ).* The CGSQ is a 21-item scale that assesses the impact on caregivers of caring for a child with emotional and behavioral problems. Only the Global Strain score is analyzed as it has been found to be the most reliable and valid measure of strain.

**Demographics and referral source.** Sex was coded as male/female, with male as the reference group. Race was coded as Caucasian/non-Caucasian, with Caucasian as the reference group. Age was a child's age at the time s/he enrolled in the system of care. Referral source indicated court or corrections; education; physical health care agency; child welfare; self or caregiver; and other. Mental health agency served as the reference group.

#### **Analytic Strategies**

For both dependent measure (CBCL and BERS), a separate longitudinal model was fit in which the dependent variable was modeled with a straight-line change model. Our focal substantive interest in this paper is on the effect of the time varying family functioning predictors (FRS, FAD, CGSQ), all of which were centered for interpretational ease. Models were fitted using the linear and nonlinear mixed effects models package in R.

# Results

Sample Characteristics. A total of 8,518 youth had sufficient data to be included in the overall outcomes analyses. The typical youth in the analysis was Caucasian (47.5%), male (65.8%), referred to the system of care from a mental health agency (33.8%), and 12.0 years of age (SD = 3.6) at the time he or she was enrolled into the system of care. Sufficient data for inclusion in the overall outcomes analyses were available for 8,315 caregivers and families. Most caregivers in the analysis sample had at least a high school diploma or GED (69.7%); had an annual family income of less than \$35,000 (72.3%); and were just over 40 years of age (M = 40.5, SD = 9.9). Caregivers described family histories characterized by high rates of domestic violence (48.1%), mental illness (53.9%), criminal activity (44.6%), and substance abuse (61.9%). At the time of their enrollment into services, caregivers reported that they had on average moderate global strain scores on the CGSQ (M = 2.9, SD = 0.9); somewhat adequate family resources as measured by the FRS (M = 3.6, SD = 0.7); and generally positive family functioning scores on the FAD (M = 2.9; SD = 0.5).

**CBCL.** The unconditional means model (see Table 1) shows the overall grand mean of CBCL scores to be 67.22 (p < .001). An examination of the unconditional growth model for the CBCL shows that the initial status of the sample is 69.41 (p < .001) and the slope is -1.93. (p > .001). Next, we added the predictor variables of interest (see the Interactions (no random) model in Table 1) to the growth model. This model was determined to be the best fitting model of the contending models because it had the smallest AIC. In this "final" model, the slope, -.92, was statistically significant (p < .001) as before. Each of the time varying family functioning variables were significant (p < .001) and each of the interactions among the family functioning variables also were significant.

**BERS.** The unconditional means model (see Table 2) shows the overall grand mean of BERS scores to be 42.04 (p < .001). The unconditional growth model for the BERS shows that the initial status of the sample is 40.94 (p < .001) and the slope is .93. (p < .001). This model was determined to be the best fitting model of the contending models because it had the smallest AIC. In this "final" model, initial status is 43.86 (p < .001). In this "final" model, the slope, -.15, was not statistically significant, indicating that it was not the passage of time itself that lead to a change but rather other things that lead to improvements in the BERS.

#### Table 1 Multilevel Models of Change for the CBCL

		Model	
	Means Only	Growth	Interactions
Parameter			
Intercept	67.222***	69.406***	73.805***
-	(67.003, 67.440)	(69.180, 69.633)	(72.990, 74.620)
Wave		-1.931***	-0.920***
		(-2.022, -1.841)	(-1.007, -0.832)
FRS			-0.022***
			(-0.029, -0.014)
FAD			-0.956***
			(-1.282, -0.631)
CGSQ			5.696***
			(5.532, 5.861)
FRS x FAD			0.023**
i to a li le			(0.009, 0.037)
FRS x CGSQ			0.012***
III a v edoq			(0.005, 0.019)
FAD x CGSQ			0.625***
1710 x CG3Q			(0.331, 0.920)
FRS x FAD x CGSQ			0.016**
110 x 171D x CG5Q			(0.004, 0.028)
Referral Source			(0.004, 0.028)
Court/Corrections			-1.828***
Court/Corrections			(-2.443, -1.213)
Child Welfare			-0.032
Clilid wellate			(-0.713, 0.649)
Other			-1.375***
Other			
DI • 111 1.1			(-2.161, -0.589
Physical Health			-0.070
. 100			(-1.891, 1.751)
Self/Caregiver			-1.099**
			(-1.828, -0.369
Education			0.020
			(-0.510, 0.550)
Female			1.141***
			( 0.582, 1.699)
Race			-1.421***
			(-1.893, -0.948)
Race x Female			-0.257
			(-1.081, 0.568)
Age			-0.391***
			(-0.454, -0.328
s	7.514928	6.449378	5.693115
Pseudo R2		0.263	0.426
AIC	164042.100	161385.300	119512
BIC	164066	161433	119690.3
LL	-82018	-80687	-59732.98

Table 2 Multilevel Models of Change for the BERS

	_	Model	
	Means Only	Growth	Interactions
Parameter			
Intercept	42.044***	40.938***	43.855***
Wave	(41.797, 42.291)	(40.667, 41.210) 0.934***	(42.937, 44.773) -0.147
wave		(0.830, 1.039)	(-0.044, 0.058)
FRST		(0.050, 1.055)	0.018***
			(0.009, 0.027)
FADTA			5.533***
			(5.142, 5.924)
CGSQ			-5.026***
			(-5.223, -4.829)
FRST x FADTA			-0.034***
			(-0.050, -0.017)
FRST x CGSQ			-0.017***
			(-0.025, -0.009)
FADTA x CGSQ			-0.912***
EDGE FADEA COCO			(-1.268, -0.556)
FRST x FADTA x CGSQ			-0.019*
			(-0.033, -0.004)
Referral Source			
Court/Corrections			-0.441
			(-1.134, 0.253)
Child Welfare			-1.305***
Other			(-2.073, -0.539)
Other			0.506
Physical Health			(-0.371, 1.382) -0.284
i nysicai i icaitii			(-2.266, 1.697)
Self/Caregiver			-0.157
0			(-0.963, 0.649)
Education			-0.207
			(-0.802, 0.388)
Female			-5.609***
_			(-6.238, -4.981)
Race			1.656***
Race x Female			(1.127, 2.184)
Nace x remaie			-0.985* (-1.909, -0.062)
Age			-0.008
			(-0.079, 0.062)
S	8.624	8.036	7.132334
Pseudo R <sup>2</sup>		0.132	0.316
AIC	167968	167388	127658.8
BIC	167992	167436	127837.6
LL	-83981	-83688	-63806.42

Note. \*p < 0.05, \*\*p < 0.01, \*\*\*p < 0.001. Note. Values in parentheses denote the lower and upper 95% confidence limits.

Note. \*p<0.05, \*\*p<0.01, \*\*\*p<0.001. Note. Values in parentheses denote the lower and upper 95% confidence limits.

# Discussion

Our findings suggest that improvements in family resources and in family functioning can enhance the improvements observed over time at the child level, both in terms of reducing symptoms and increasing strengths. At the same time, we find that higher levels of caregiver strain can have a deleterious effect on child outcomes, negating many of the overall improvements observed in symptoms and the development of psychosocial strengths. The importance of family-related characteristics on patterns of change among children in SOCs is further reinforced by the consistently significant interaction effects. These suggest that our three measures of family context together modify their individual effects somewhat. Most notable, however, caregiver strain appears to counter the generally more positive effects of improvements in family resources and functioning on the child outcomes. Overall, the findings highlight the highly interrelated nature of different dimensions of family life on children's mental health and underscore the need to consider the multiple dimensions that shape the family's influence.

# Session 58 >> 4:30-5:00 pm >> Salon B An Empirical Investigation of a Parent Support Program: Parent Connectors

Presenting: Albert Duchnowski & Krista Kutash Contributing: Nancy Lynn

## Introduction

While much progress has been made in providing access to special education programs for children who have disabilities, the outcomes of these programs have been disappointing. To help improve educational outcomes there is a critical need to develop strategies to increase the effective involvement of families in the education of their children, especially for children who have disabilities. The outcomes for children who have emotional disturbances continue to be the poorest compared to those for children with other types of disability as well as for peers without disabilities (Wagner, Kutash, Duchnowski, & Epstein, 2005). The importance of these issues is further heightened by the observation that the education of students who have emotional disturbances is considered to be one of the greatest challenges facing the public schools today (Adelman & Taylor, 2000) and it is estimated that 20% of the children in the United States have a diagnosable emotional disturbance (Burns, Hoagwood, & Mrazek, 1999).

This presentation describes the development, implementation, and evaluation of a program providing parental support to families with children identified as having emotional disturbances (ED) and educated in special education programs in public schools. The goal of the project is to improve outcomes for children and their families through parent participation in an effective, school-based parent-to-parent support program which links, through telephone calls, experienced "Parent Connectors" (who have a child that receives services) with parents who have a child with ED. The project is being implemented through a unique partnership of teachers, a family advocacy group, and researchers who have collaboratively constructed a format for conducting a parent support program that can be consistently implemented and evaluated in terms of adherence to the conceptual model.

# Methodology

This is a random controlled trial evaluating the effectiveness of a support program for parents of children with ED who are educated in separate Special Education Centers, the most restrictive public school setting. Parents who have a child with ED and who have experienced some success in navigating the system were trained to become Parent Connectors. They deliver support to parents in the study through weekly telephone calls. Teachers of the children are trained to use the strategies manuals from our previous study. Parents were randomly assigned to the Parent Connector Group (n = 47) or the Teacher Only Group (n = 46). In the "Teacher Group," the comparison condition, parents and students interact with teachers who have received training and resources to increase parent involvement in the education of their children. In the "Parent Connector Group," the experimental condition, direct parent support is supplied through telephone calls in addition to the specially trained teacher. Mental health services for children were provided through counselors at the school.

The participants in this project include the parents of children with ED (N = 93) and their children. The students (N = 93) were primarily male (74%), Black (57%), and 14 years of age. The majority of students displayed emotional and behavioral difficulties as measured the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997). Parents reported an average of 4.5 people living in the household including the target child and a median income of \$25,200. Nearly half (43%) of families were living below the 2004 poverty thresholds.

Parents were interviewed twice over the course of one school year: once in the beginning of the school year and again at the end of the school year. The Vanderbilt Mental Health Services Efficacy Questionnaire (VMHSEQ; Bickman, Earl, & Klindworth, 1991) was used to measure self-efficacy expectations, behavioral intentions, personal mastery, and other experiences related to advocating for a child's mental health services. In addition, information was collected from the school (absences, discipline, and the number of hours of school counselor service) during the school year. Students were administered a brief achievement test assessing math and reading (Wide Range Achievement Test–3; Wilkinson, 1993). Data were collected on a number of outcome variables, however due to limited space, only a few of these variables will be discussed in this presentation.

# Findings

Parent Connectors reported making an average of 53 phone calls and offered 4.7 hours of individualized support to each of their assigned parents over the nine-month course of the study. The topics most discussed include issues dealing with family life and school.

When examining the outcomes variables, several areas of improvement were noted for families in the Parent Connector group. Reading scores for students in the Parent Connector group improved over time, while scores for students in the comparison group decreased over the school year. Students in the comparison group spent, on average, more nights in a detention center than those students in the Parent Connector group during the school year. School counselors also reported providing greater numbers of hours of mental health services to students in the Parent Connector group than students in the comparison group. Parents in the Parent Connector group reported improvements in their feelings of self-efficacy as measured by the VMHSEQ. Parents in the comparison group, however, showed a decrease in their reported feeling of self-efficacy over the same time frame.

# Conclusion

In conclusion, preliminary analyses of the data collected from the project show that a telephone support project for the families of students with emotional disturbances is not only feasible but can be successful in improving the outcomes of these families. Improvements in both the academic and emotional functioning of children were noted.

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# Session 59 >> 4:00-4:30 pm >> Salon C An Evaluation of a Wraparound Service Program using Real-Time Methods

Presenting: Brian Pagkos, Heidi Milch & Mansoor Kazi

# Introduction

Youth with serious emotional disturbances are often involved with a multitude of service providers, such as mental health agencies, education assistance, child welfare or social service departments, and juvenile justice systems (Burns & Friedman, 1990). This façade of comprehensive services is not suitable, as they may be present but scattered in coordination (Whittaker & Pfeiffer, 1994). Wraparound services provide a comprehensive approach to treatment and have an ideology that is strengths based (Carney & Buttell, 2003). Care Coordination, a part wraparound, is a strength-based, family driven process that works to empower families and decrease or eliminate the need for service providers while increasing and maximizing families' connections and use of natural supports. This presentation will present findings from an evaluation recently conducted on wraparound services coordinated by Gateway-Longview, Inc. a social service agency in Buffalo, NY, and will discuss their implications for practice.

# Method

## Sample

As a secondary analysis, we chose all youth who had at least two records of the Child and Adolescent Functionality Assessment Scale (Hodges, 1995) and who received wraparound services coordinated by Gateway-Longview between February 2006 and July  $31^{s}$ , 2007. Our sample consisted of 58 youth with a mean age at referral of 16.22; 61.4% were male, 41% (n = 24) were white, 32.8% (n = 19) black, 13.8% (n = 8) were Puerto Rican, 10.3% (n = 6) bi-racial, and 1.7% (n = 1) American Indian. The average length of stay was 9.33 months (SD = 4.24).

## Approach

The effects of the intervention were explored using real-time evaluation techniques, which include capturing the context and process of an intervention and relating these components to the achievement of outcomes. This approach results in an understanding of where the intervention is more or less likely to be effective: what works, for whom and in what contexts (Kazi, 2003). Anchored in pragmatism, these methods transform stakeholders into research team members to assist in the evaluation. As a result, meaningful findings are achieved and services can be delivered to maximize youth improvement.

## Analysis

Paired samples *t*-tests were used to determine the magnitude of change between first and last outcome measures. Spearman correlations between improvements in the total score and contextual variables were calculated to examine patterns in the data. If a pattern is statistically significant, it alerts us to the variables that might be influencing the outcome. The last step in the analysis is to determine what variables *are* influencing the outcome. Statistically significant results from the correlations are entered into a forward conditional binary logistic regression model, in which odds ratios or likelihoods are calculated. In addition, Hierarchical Linear Modeling was used to benchmark growth rates in total CAFAS scores.

Three sets of primary outcomes were analyzed: Child and Adolescent Functionality Assessment Scale (CAFAS) measure results (total and subscale scores), changes in behavior related to juvenile delinquency (number of probation violations and number of delinquencies) and behaviors related to academics (school attendance, school suspensions, expulsions). A variety of contextual (progress notes, identified strengths and problems, amount and types of services) and demographic (gender, ethnicity) variables were recorded as well.

# Findings

# **Results for Practice**

The majority of youth (n = 46) improved on their total CAFAS scores over time. On average across all youth, the baseline score was 96.75 ( $\beta$ 00 = 95.75, n = 41, p = .000), signifying moderate to marked impairment at baseline, and total scores in CAFAS decreased by 13.27 points per measure ( $\beta$ 10 = -13.27, n= 41, p = .000), which is a positive finding. The paired sample *t*-test between first and last CAFAS total scores was statistically significant (t = 7.366, p =.000) with a medium effect size of .467 (p = .000). Rates of improvement for the total CAFAS scores were high for both youth in shortened length of stay (84.8%, n = 28) and not shortened length of stay (72%, n = 18).

It was found that 95.5% of those that received direct care worker/mentoring services improved in total CAFAS scores compared to those who did not receive the service who improved (69.4%) ( $r_s = 0.312$ , p = 0.017, n = 58). In regards to the CAFAS school subscale, those who received extra units of care coordination (reserved for emergencies) and those who received services related to clothing and personal needs were, respectively, 5.2 (Exp(B) = 5.2, p = .032) and 16.01 (Exp(B) = 16.019, p = .021) times less likely to improve. In regards to the CAFAS home subscale, those who received direct care worker/mentoring services were 8.2 (Exp(B) = 8.273, p = .014) times more likely to improve. Youth who received direct care worker/mentoring services were involved in shortened length of stay were 13 times more likely to improve in their CAFAS mood subscale (Exp(B) = 13.168, p = .011).

## **Results for Program Development**

For this sample, Gateway-Longview provided the majority of total (83.64%) and direct care worker/mentoring (1018.15 hours) services. A cross tabulation of primary worker by youth improvement on total CAFAS scores was constructed. A few workers were identified as having 100% of their cases improve in total CAFAS scores while one worker had only 40% improvement. Other investigations of this type led to small but notable relationships between outcomes and race of worker in that youth with non-white workers improved at greater rates than those with white workers. The results of such analyses are particularly helpful to guide supervision practices (furthering the investigation of what works and in what contexts), identify unmatched assignment of cases, and assess the need for worker training.

# Conclusion

Findings for this evaluation were positive and shed light on possible mechanisms for change within the context of the intervention. Use of real-time evaluation results in essential program information and, when combined with stakeholder involvement, can lead to great improvement in outcomes for youth.

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# Session 59 >> 4:30-5:00 pm >> Salon C Findings in Support of Communities of Practice for Practice Change

Presenting: Melanie Barwick & Julia Peters Contributing: Alexa K. Barwick

# Background

Practitioners in health and mental health are increasingly being encouraged to adopt evidence-based practices (EBP), including empirically supported treatment and assessment methods. They face important challenges, such as reducing the time between research and practice, determining how best to implement evidence-based practices, increasing their readiness for change, and addressing the clinical utility of these practices. These challenges are encouraging the development of new knowledge translation (KT) strategies. This research addressed the need for new and innovative KT strategies in healthcare that can support practice change and, ultimately lead to improved health outcomes. The context for this study is Ontario's children's mental health sector where 120 organizations comprising over 4,100 practitioners have been mandated since 2000 to use a standardized outcome measurement tool to monitor client response to treatment and service outcomes (CAFAS). Using a new group of practitioner trainees randomly assigned to either a community of practice (CoP) group or a practice as usual (PaU) group, we investigated practice change and knowledge uptake. Communities of practice are groups of people who share a concern, set of problems, or enthusiasm about a topic, and who deepen their knowledge and expertise about a topic by interacting on an ongoing basis. They are part of a wider tradition of collaborative small group learning environments related to CME, education, and adult learning theory.

## Primary (1-5) and Secondary (6-7) Research Questions

- 1. Does CoP participation lead to greater practice change compared to practice as usual?
- 2. Does CoP participation lead to greater practitioner CAFAS knowledge than practice as usual?
- 3. Is CoP support associated with better client outcomes?
- 4. Do practitioners in a CoP environment report greater satisfaction with this type of support compared to practitioners in PaU environments?
- 5. How does learning and knowledge sharing occur in a CoP environment?
- 6. Do CoP practitioners have a lower rate of client treatment attrition compared to PaU practitioners?
- 7. Is readiness for change associated with practice change? How?

## Method

*Measures:* This area of research is relatively new, and few established measures or methodologies exist for evaluation. As such, where possible, measures with established psychometric properties have been used, and some have been modified from their original form. Certain questionnaires were developed expressly for this study because changes are specific to the practices and knowledge related to the CAFAS measure.

#### **Practice Change Measures**

*Practice Change Questionnaire:* This questionnaire was developed because no appropriate measure exists that could be applied here. Rated by each participant at 1, 6, and 12 months, this questionnaire assesses the degree of practice change in specific practitioner behaviours relating to "best practice" CAFAS use.

*Client Outcomes: CAFAS Export Data:* Service providers currently export non-identifiable Child and Adolescent Functional Assessment Scale (CAFAS) data to the Hospital for Sick Children on a quarterly basis. Organizations with which participants are affiliated were asked to include the data field "rater identification" along with other exported data in order that we could identify how frequently practitioner participants rate the CAFAS for each of their clients, thus providing a real world indicator of practice change in the direction of an identified CAFAS best practice, i.e., periodic assessment of treatment response.

**Commitment to Change (CTC):** CoP participants were asked to specify a change to be made following each CoP "meeting" and to designate a level of commitment to implementing the intended change on a CTC form provided. The level of commitment was rated on a Likert scale ranging from 0 to 4. The specificity of the intended change is associated with cognitive clarity, whereas the Likert scale captures strength of emotion. At the subsequent CoP gathering, CTC forms were returned to participants who were asked to report their practice change or lack thereof, and reasons underlying their behaviour (intent - behaviour gap). CTC scores were reduced to an average CTC score across all CoP events. Statements of practice change were also analyzed using qualitative methods to identify pervasive themes as well as outliers.

**Reflective Practice Journal:** "Stop and think" breaks will occur during each CoP event. During these periods of 5 to 10 minutes, participants will be asked to jot down reflections, ideas, and thoughts into a CoP journal. Journal entries may also be made outside the CoP times. Journals will be collected for qualitative analysis at the end of the study.

#### **Topic Knowledge**

**CAFAS Knowledge Questionnaire:** 10 items measuring specific knowledge related to clinical use of the CAFAS scale were developed based on frequently asked questions collected over the last 5 years and determination by the CAFAS experts regarding the importance of the knowledge for accurate, reliable use of the tool in clinical practice. Data were reduced to a total CAFAS knowledge score. Investigator-developed questionnaires to assess practitioner knowledge about particular content topic are an accepted approach for measuring knowledge change.

#### Satisfaction with Supports Available

**Satisfaction Questionnaire:** Ten items assessed practitioner's level of satisfaction with the multiple CAFAS support methods available to the field, as well as the range of supports used by individuals over time. Data were reduced to a total satisfaction score and compared using *t*-tests.

## **CoP Process**

*Field Notes & Interviews:* A trained ethnographer (project coordinator) undertook observational and reflexive field notes for all CoP meetings and conducted in-depth interviews with a sample of 8-10 randomly selected project participants following the last scheduled CoP. All meetings and interviews were audiotaped and transcribed verbatim and converted into the format required for use with NVivo. Detailed ethnographic field notes of observations and reflections were also entered into this program. All transcripts, field notes, CTC statements, and reflective practice journal entries were coded and analyzed for themes using Diekelmann's seven-stage approach for the analysis of qualitative data. Codes were devised to capture examples of knowledge exchange, discussion topics, main messages, and lessons learned, in addition to any "best practices" developed by the group.

#### **Organizational Readiness for Change**

*Modified Organizational Readiness for Change Scale:* The original ORC includes 115 Likert-type items (5-point Likert response) on 18 content domains that takes 10 minutes to complete. It has satisfactory reliability and validity with samples in the addictions field. A modified version used with child and youth mental health practitioners demonstrated moderate but lower reliability (Cronbach alpha .60) due to the deletion of several original items. Scale items cover four major areas: motivation and readiness for change, institutional resources, personality attributes of the staff, and organizational climate.

#### **Client Attrition/Drop Out from Treatment**

*Time in Treatment.* It is possible that periodic CAFAS rating creates greater rapport and engagement with clients, and this may in turn affect treatment retention. CAFAS data were examined for the length of time "engaged" in treatment.

*CAFAS Outcome Data:* Exported CAFAS data contains information about reasons for case closure, i.e., treatment not needed, treatment completed, dropout.

#### **Client Outcomes**

**CAFAS Outcome Data:** Exported CAFAS data were compared (total CAFAS score) for clients of practitioners in both groups.

#### Results

At this time, only the commitment to change (CTC) data have been analyzed, however the presentation will address all of the study findings. We are, however, encouraged by the perceptions of our participants and preliminary analyses of the data, and believe there is support for the CoP method. Practitioners completed CTC statements at each CoP and indicated their anticipated level of change on a 5-point Likert scale. At each subsequent CoP, they revisited previous CTC statements, rated the actual degree of change realized and identified any "barriers to change" that may have impeded their intent to behave in a particular way. Analysis generated three main themes: "knowing," "doing," and "sustaining." Furthermore, the CTC themes changed according to practitioners' temporal status in the CoP lifecycle, i.e., whether the CoP was beginning to form or had taken hold and could be categorized as more "mature." CTC ratings were higher than actual or realized degree of change ratings, suggestive of the complexity and time required for behaviour change. Findings support the potential of CTC methods and reflective practice to bring about change in practice. Dedicated time on the job should be given to reflective practice in order to promote readiness to change.

Although remaining hypotheses remain to be explored, with data collection having just ended in September 2007, we are able to report that the CoP practitioners have opted to continue with the CoP experience even though funding has ended. This is an important finding, given that all practitioners in this group had to travel between 1 to 3 hours to attend a full day meeting. Thus, CoP participation seems to have outweighed any opportunity costs experienced by the practitioner. A second finding that we can now report is that organizations in the CoP condition exported data to the implementation team at the Hospital for Sick Children, whereas none of the PaU organizations provided a data export. This suggests that the CoP supported organizations are more advanced in their implementation of the CAFAS tool relative to their PaU counterparts.

# Session 60 >> 4:00-5:00 pm >> Salon D

# Symposium

# Effective Financing Strategies for Systems of Care: Examples from the Field

#### Chair: Mary I. Armstrong

#### Presenting: Beth Stroul, Mary I. Armstrong, Sheila Pires, Jan McCarthy & Ginny Wood

This symposium discusses findings from the study, Financing Structures and Strategies to Support Effective Systems of Care. The study uses a case study design to test a conceptual theory regarding a hypothesized set of financing structures and strategies, and investigates and describes how these factors operate separately, collectively, and in the context of states and local communities to create effective financing policies for systems of care. Initial study tasks included convening a panel of financing experts, including state and county administrators, representatives of tribal organizations, providers, family members, and national financing consultants to develop a list of critical financing strategies and study questions. The critical financing strategies were used to create the first study product - a self-assessment tool, outlining seven important areas, to assist service systems or sites (states, tribes, territories, regions, counties, cities, communities, or organizations) to develop comprehensive and strategic financing plans for systems of care. This symposium discusses these seven areas, highlighting practical examples from states and communities engaging in promising practices in these areas, drawing on site visits to a select sample of states and communities.

# Financing Strategies Related to Realignment and Re-Direction of Resources

Presenting: Beth Stroul & Mary I. Armstrong

## Introduction

This section of the symposium describes and provides examples of two of the seven structures that are integral to developing a strategic financing plan;

- Identifying spending and utilization patterns
- Realigning funding streams and structures

The identification of current spending and utilization patterns is an important first step in the development of a strategic financing plan for systems of care. The maze of funding streams that finance children's mental health services must be better aligned, better coordinated, and often, redirected, to provide individualized, flexible, home and community-based services and supports.

# **Methods**

Site visits were conducted to states and communities identified by experts in the field as having promising practices. Each site is asked to identity key informants prior to the site visit. Guidance is provided so that the selected key informants have intimate knowledge of policy and operational decision-making related to financing strategies and knowledge of the outcomes achieved by these strategies, including the fundamental role they play in the development and sustainability of effective systems of care. The study team developed a semi-structured interview protocol that was reviewed and modified, again, with the expert panel. The protocol questions relate to the set of critical financing components, as well as current challenges, priorities, and system expectations.

## Findings—Examples from the Field

- 1. Financing Strategies that Identify Current Spending and Utilization Patterns Include:
  - A. Determine and Track Utilization and Cost Hawaii

**Regular Tracking and Reporting of Utilization and Cost Trends.** Since 1997-98, the state children's mental health system has systematically tracked mental health service utilization to determine the amount of services to purchase from provider agencies. The Child and Adolescent Mental Health Division (CAMHD) produces a financial report on a regular basis (monthly and quarterly) that analyzes information regarding financial resources and expenditures.

B. Identify the Types and Amounts of Funding for Behavioral Health Services Across Systems (i.e., map cross system funding) *Central Nebraska* 

*Mapping Cross-System Funding to Establish a Case Rate.* Central Nebraska analyzed and "mapped" expenditures across child-serving systems to establish a case rate to support its system of care. The state and the region believed that through partnering across systems and with the regional family organization, they could provide more appropriate care with better outcomes for families and youth at a lower cost.

# 2. Financing strategies that Realign funding streams and structures include:

#### A. Using Diverse Funding Streams from Multiple Agencies

Virtually all of the sites studied draw on multiple funding streams, as shown in Table 1.

Table 1 Use of Multiple System Resources

Source	Arizona	Hawaii	Vermont	Central Nebraska	Choices	Wraparound Milwaukee	New Jersey
Mental Health	Х	Х	Х	Х	Х	Х	Х
Medicaid	Х	Х	Х	Х	Х	Х	Х
Child Welfare	Х	Х	Х	Х	Х	Х	Х
Juvenile Justice	Х	Х	Х	Х	Х	Х	Х
Education	Х	Х	Х	Х	Х	Х	
Substance Abuse	Х			Х			Х
Developmental Dis.	Х	Х			Х	Х	
Health			Х				

## B. Maximize Federal Entitlement Funding

#### Improving Medicaid Eligibility Determination for Youth in Juvenile Justice

The **Arizona** Department of Health Services (ADHS) and juvenile justice have collaborated to improve Medicaid eligibility determination for youth in juvenile justice.

In **Hawaii**, Medicaid eligibility level is 300% of the federal poverty level. S-CHIP is a Medicaid expansion and covers additional children.

In **Vermont**, Medicaid and S-CHIP are highly integrated. Medicaid covers uninsured children up to 223% of the federal poverty level, and underinsured children up to 300%. S-CHIP covers uninsured children between 225% and 300% of the federal poverty level.

#### C. Redirect Spending from "Deep-End" Placements to Home and Community-Based Services

All of the sites have implemented strategies to redirect resources from deep-end placements to home and community-based services and supports. This is an absolutely critical financing as home and community-based capacity must depend on redirected resources to a great extent.

#### Arizona

Using 1115 Waiver to Develop Home and Community-Based Services. The Arizona behavioral health system, working in partnership with the state Medicaid agency, significantly expanded the array of covered services and supports by adding new service types to the Medicaid benefit and expanding service definitions of already covered services.

#### D. Support a Locus of Accountability for Service, Cost, and Care Management for Children With Intensive Needs

These may be either a government entity as found in **Hawaii**, **Central Nebraska** and **Wraparound Milwaukee**; a private agency as found in **New Jersey**; or a nonprofit entity as found in **Vermont** and at **Choices**.

#### E. Increase the Flexibility of State and/or Local Funding Streams and Budget Structures

In **Hawaii**, local lead agencies have significant flexibility in the use of resources and the child and family teams determine how resources will be used for each individual child and family. **Arizona, Central Nebraska, Choices, and Wraparound Milwaukee** use managed care approaches and managed care financing mechanisms (capitation and case rates) which allow for the flexible use of resources to meet individual needs.

#### F. Coordinate Cross-System Funding

The sites use various mechanisms to coordinate funding across child-serving systems. In **Hawaii**, memoranda of understanding have been negotiated between the mental health system and the Medicaid agency, as well as with the child welfare, education, and juvenile justice systems. **Vermont** enacted legislation mandating interagency coordination and establishing local and state interagency teams that address the coordination of resources and services.

# G. Incorporate Mechanisms to Finance Services for Uninsured and Underinsured Children and their Families

#### Hawaii

Using General Revenue to Finance Services for Uninsured/ Underinsured and Allowing Families to Buy Into Medicaid. Recently, the state added a mechanism to fund behavioral health services through general revenue funds in the category of "mental health only." This category was created to serve youth not eligible for services through other mechanisms, but who are determined to be in need of mental health services by the Child and Adolescent Mental Health Division (CAMHD) Medical Director.

# Financing Strategies Related to Comprehensive, Customized Service Arrays and Family and Youth Partnership

Presenting: Sheila Pires & Jan McCarthy

#### Introduction

This section of the symposium describes and provides examples of an additional two of the seven structures that are integral to developing a strategic financing plan;

- Financing appropriate services and supports
- Financing to support family and youth partnerships

Financing to cover this broad array of both clinical and supportive services is a fundamental requirement of systems of care.

Financing strategies are needed to support partnerships with families and youth at the service delivery level in planning and delivering their own care and at the system level in designing, implementing, and evaluating systems of care. Financing to fund program and staff roles for family members and youth also reflects a system of care that is committed to partnerships, as does financing for family- and youth-run organizations.

#### Method

Site visits were conducted to states and communities identified by experts in the field as having promising practices. Each site is asked to identity key informants prior to the site visit. Guidance is provided so that the selected key informants have intimate knowledge of policy and operational decision-making related to financing strategies and knowledge of the outcomes achieved by these strategies, including the fundamental role they play in the development and sustainability of effective systems of care. The study team developed a semi-structured interview protocol that was reviewed and modified, again, with the expert panel. The protocol questions relate to the set of critical financing components, as well as current challenges, priorities, and system expectations.

## Findings—Examples from the Field

#### 1. Financing strategies for appropriate services and supports include:

A. Individualized, Flexible Service Delivery

Most of the sites incorporate flexible funds that can be used to pay for services and supports that are not covered by Medicaid or other sources. **Arizona, Hawaii, New Jersey,** and **Vermont** designate funds for this purpose. Typically, child and family teams can access these funds to provide ancillary services and supports as needed. In other sites, such as **Central Nebraska and Wraparound Milwaukee**, the managed care financing approaches make the resources within the system inherently flexible and available to meet individualized needs.

#### Choices

*Creating Categories of Flexible Funds for Discretionary Services and Supports.* The service codes that can be provided include 11 categories of flexible funds. The flexible funds are used to finance supports, but the expenditures must be within the care plan structure, and the plan must document how such expenditures will support the service plan goals for the child and family.

#### B. Support and Provide Incentives for Evidence-Based and Promising Practices

A range of evidence-based approaches are supported in the sites. Their strategies range from establishing billing codes for specific evidence-based practices to providing financial support for the initial training and start-up or developmental costs involved in adopting evidence-based practices.

#### Arizona

In addition to its commitment to fund a wraparound approach throughout the system, the system currently is also funding Multisystemic Therapy (MST), Functional Family Therapy (FFT), Multidimensional Treatment Foster Care in Maricopa County only, and Dialectical Behavior Therapy.

#### Hawaii

There are financial incentives for using evidence-based practices, including evidence-based decision-making and using practices that produce results.

## C. Promote and Support Early Childhood Mental Health Services

In **Arizona**, the behavioral health system has collaborated with Part C to develop workshops in early childhood mental health, to create an assessment tool for the 0 to 5 population and accompanying training for providers. **Vermont's** Child Find system, with responsibility given to the Department of Education, is charged with identifying and evaluating young children who are eligible for services under Part C.

## D. Support Cross-Agency Service Coordination

Cross-agency service coordination at the service delivery level is financed by the sites, typically by financing dedicated care managers through various mechanisms.

## Hawaii

Using State-Employed Mental Health Care Coordinators. These care coordinators are responsible for the individualized service planning process, involving the convening of child and family teams to develop and implement a Coordinated Service Plan (CSP). The care coordinators are responsible for authorizing and coordinating the services specified in the plan across providers and agencies and developing collaborations with other agencies.

## New Jersey

Using Care Management Organizations with Care Managers. Cross-agency care management is provided through New Jersey's Care Management Organizations (CMOs), which are non profit organizations specifically created to perform this function. The CMOs are funded through performance-based contracts with the New Jersey Department of Children and Families.

## 2. Financing strategies to support family and youth partnerships include:

## A. Support Family and Youth Involvement and Choice in Service Planning and Delivery

In **Arizona**, family and youth participation on child and family teams is one of the core principles of the system. The managed care system pays for child care, transportation, food, and interpreters as needed.

In **Hawaii**, child care may be provided if the family member has to fly to another island to participate in a child and family team meeting. Transportation and food are funded out of ancillary funds. Hawaii Families As Allies provides training for families on how to participate in service planning (such as training in advocacy, communication, how to speak up, how to become informed about what services are available, etc.)

#### B. Finance Family and Youth Involvement in Policy Making

Arizona, Hawaii, Vermont, Central Nebraska, Choices, & Wraparound Milwaukee provide payments and supports for family and youth participation at the policy level. The mechanism used in all of these sites is a contract with a family organization which, in turn, provides payments and supports to family members and youth.

## C. Finance Services and Supports for Families and Other Caregivers *Arizona*

*Covering Services and Supports to Families Under Medicaid.* Medicaid can pay for family education and peer support, respite, behavioral management skills training and other supports to families if these supports are geared toward improving outcomes for the identified child. Medicaid also can be used to pay for transportation and interpretation services for families. Arizona also defines "family" broadly.

# Financing Strategies Related to Cultural and Linguistic Competence, Workforce Capacity, and Accountability

#### Presenting: Ginny Wood

#### Introduction

This section of the symposium describes and provides examples of the final three of the seven structures that are integral to developing a strategic financing plan:

- Financing to improve cultural and linguistic competence and reduce disparities in care
- Financing to improve the workforce and provider network
- Financing for accountability

Financing strategies are needed to support leadership capacity for cultural and linguistic competence at the system level and to allow for analysis of utilization and expenditure data by culturally and linguistically diverse populations. Financing strategies are needed to support a broad, diversified network of providers that is capable of providing the wide ranges of services and supports. In addition, financing is required for a focal point of accountability for systems of care.

# Methods

Site visits were conducted in states and communities identified by experts in the field as having promising practices. Each site is asked to identity key informants prior to the site visit. Guidance is provided so that the selected key informants have intimate knowledge of policy and operational decision-making related to financing strategies and knowledge of the outcomes achieved by these strategies, including the fundamental role they play in the development and sustainability of effective systems of care. The study team developed a semi-structured interview protocol that was reviewed and modified, again, with the expert panel. The protocol questions relate to the set of critical financing components, as well as current challenges, priorities, and system expectations.

# **Findings**

- 1. Financing strategies to improve cultural and linguistic services and reduce disparities in care include:
  - A. Provide Culturally and Linguistically Competent Services and Supports

#### Arizona

*Covering Cultural Services.* Certain cultural activities can be paid for by the managed care system, though not with Medicaid dollars. The managed care system also uses "promotores," outreach workers and counselors for the Latino community, which it covers in a number of ways, e.g., as "health promotion," family support, or peer support under Medicaid.

B. Reduce Disparities in Access to and Quality Of Services and Supports Hawaii

**Providing Incentive Pay to Work in Underserved Areas.** There are special financing mechanisms to provide services in underserved geographic areas. Incentive pay that is 10% above the standard pay scale is offered as an incentive to work in underserved areas. In addition, transportation is paid for providers to fly to the Islands, and travel time is considered billable time.

# 2. Financing strategies to improve the workforce and provider network include:

A. Support a Broad, Diversified, Qualified Workforce and Provider Network

#### Wraparound Milwaukee

**Building an Extensive Provider Network.** Wraparound Milwaukee has a very large provider network of over 200 providers, which is diverse and meets the qualifications Milwaukee has developed. No formal contracting with providers is used. The broad provider network is overseen by Wraparound Milwaukee's Quality Assurance Office.

#### B. Providing Adequate Provider Payment Rates.

Purchasing Primarily Home and Community-Based Services. To create incentives for providers to develop and provide home and community-based services, Arizona set higher payment rates for services delivered in out-of-office settings. Both Choices and Wraparound Milwaukee purchase primarily home and community-based services, in effect, creating a strong market for these services and incentives for providers to develop home and community-based service capacity.

#### 3. Financing strategies for accountability include:

#### A. Incorporate Utilization, Quality, Cost, and Outcomes Management Mechanisms

The sites studied make extensive use of mechanisms for tracking information related to service utilization, quality, cost, and outcomes and use this information for system improvement.

#### Vermont

**Reporting State and Local Performance Information.** At local and state levels, the system of care incorporates a variety of utilization, quality, cost, and outcomes management mechanisms. Local agencies have a schedule of reported utilization and cost data to the state, and these are routinely reported.

#### Choices

Using an Integrated Management Information System. An integrated management information system, called *The Clinical Manager* (TCM), was developed as a tool for system management in both the clinical and fiscal arenas. TCM encompassing all aspects of Choices' data requirements.

#### B. Utilize Performance-Based or Outcomes-Based Contracting

Performance or outcomes-based contracting is not utilized widely in the sites studied.

#### Arizona

Using Performance Standards in Contracts with Regional Behavioral Health Authorities. The Arizona Dept. of Health Services, Division of Behavioral Health Services' (ADHS/BHS) contract with Regional Behavioral Health Authorities (RBHAs) include penalties for poor performance.

#### Choices

**Developing a "Score Card" for Provider Outcomes.** Choices is working to develop a "score card" which would provide indicators for providers regarding the outcomes of particular services by provider.

#### C. Support Leadership, Policy, and Management Infrastructure for Systems of Care

In **Vermont**, the Department of Mental Health is the lead state office for children's mental health. Vermont's system of care legislation (Act 264) identifies agency partners and their responsibilities, as well as the fundamental partnership with families.

**Choices** is the focal point for system management for highneed youth in Marion County, Indiana; Hamilton County, Ohio; and Montgomery County and Baltimore City, Maryland.

**Milwaukee** has created a focal point for the management of high-need youth through Wraparound Milwaukee, which is financed through multiple cross-system funding streams.

#### D. Evaluate Financing Policies to Ensure that they Support and Promote System of Care Goals and Continuous Quality Improvement Hawaii

Using Strategic Plan Goals and Progress Assessment. The new strategic plan specifies financing policies and strategies to promote the system's goals. This has set the stage for assessment of the effectiveness of these financing strategies during the course of implementing the strategic plan for the next period.

#### Wraparound Milwaukee

**Collecting and Using Data on Cost Savings.** Milwaukee does not have cost/benefit data *per se*, but it does have data available showing the cost savings for youth who would otherwise be in residential treatment or correctional placements and for children in child welfare who are in more permanent living arrangements.

#### Conclusion

There are many factors that have to be considered when developing a strategic financing plan. These include a host of contextual, environmental, fiscal, and other factors that may impact the sites in the future.

# Session 61 >> 4:00-5:00 pm >> Salon G

# Symposium

# Integration of Primary Care and Behavioral Health Care for Diverse Communities

# Chair: Mario Hernandez

#### Presenting: Teddy Chen & Cynthia Newbille

Individuals and families from diverse communities more readily seek help for physical and mental health problems in primary care settings. This session will present different models of integrating mental health and primary care, challenges and solutions, and strategies for documenting improved access, quality and outcomes of care.

# The Bridge Project: An Effective Model of Providing Behavioral Health to Asian Americans

Presenting: Teddy Chen

# Introduction

Asian Americans have low utilization of mental health services and delayed treatment when compared to all other racial and ethnic groups (US Public Health Service, 2001). Three major factors contribute to mental health underutilization: extremely low community awareness about mental health, a lack of culturally competent Asian American mental health professionals, and severe stigma associated with mental illness. Community-based primary health care services can support early intervention and limit the stigma of receiving mental health treatment. Primary care providers (PCPs) are in a unique position to provide mental health services because of their role and contact point for the patient within the health care system (Katon, Robinson, VonKoorff, Lin & Bush, 1997.

The Mental Health Bridge Program, an innovative service that bridges the gap between primary care and mental health services, was established in 1998 at the Chinatown Health Clinic (now Charles B. Wang Community Health Center) in New York City. It has three goals: (1) to improve access by providing mental health services in primary care; (2) to improve capacity by enhancing the skills of primary care providers to identify and treat mental disorders commonly seen in primary care; and (3) to raise community awareness by providing health education on mental health and illness. The integrated service includes three main characteristics: co-location of mental health services in the same physical space as primary care; shared responsibilities of diagnosis and management of mental health problems; and communication through the use of a common medical record and informal consultation. Training for primary care providers is provided on detection, treatment, and management of patients with mental disorders through formal lectures and in-service training. Through the implementation of broad based community education and outreach activities, the Bridge Program hopes to increase knowledge and awareness of mental health, reduce stigma associated with mental illness, and to promote mental health services available in the community.

# Methodology

In order to explore the impact of the Bridge Program on community's access to mental health services, we examined (1) a Bridge Program database containing patients of the past ten years and (2) data generated from our electronic medical record system. We also reviewed information from several mental health service projects we conducted. Program users' demographic information such as gender, age, and diagnosis distributions helps us gain an initial insight into the population we served.

# **Findings**

In the past 10 years, more than two thousand community residents have used the program. The program's services covered all age groups, including about 20% of people 18 years of age or under. Fifty percent were adults from age 18 to 54. Thirty-one percent were older community residents from age 55 and above. Ninety-five percent of the program users were Chinese Americans. Cantonese has been the language mostly used by these patients (60%). Only 8% were English speaking. Geographically, the program's users mainly lived in New York City's 5 boroughs. Thirtysix percent of the program users were from Manhattan, where the clinics located, while 39% were from Brooklyn, and 1.5% were from New Jersey and Connecticut. The data seem to provide evidence that the program does provide our community an access to mental health services.

The data also show that the program has had an average of about 15% annual growth. In 2007, the patient encounters generated by the program passed five thousand. The data also show that about 60% of the patients suffered from depression, while less than 10% of patients had severe psychotic disorder. The result may reflect the community's unmet mental health services needs. Compared with the specialty mental health clinics in the community which have been treating a mostly severely ill population, this program seems to address the needs of community residents who suffer from less severe mental health conditions.

PCP's increased comfort level in identifying their patients' mental health needs is reflected in their increased efforts in co-management mental disorders. For example, currently, pediatricians, working with mental health clinicians and social services staff, are treating 70 children with a diagnosis of ADHD. Ongoing Adolescent depression screen in the pediatric clinic was initiated by the Pediatric Clinic. Working closely with the Bridge Program clinicians, pediatricians have been managing adolescents who screened positive for milder depression, while severe cases are treated with mental health clinicians. At this time, about 80% of the adult patients who come in for their annual physical examination receive depression screening. In the last three months of 2007, 40 adults were detected as suffering from depression, while at least 15 of them suffered from severe depressive disorders. Many PCPs feel increasingly comfortable about prescribing antidepressant medications for milder disorders.

# Conclusion

The Bridge Program has grown significantly in its ten years of operation. It has been cited in the Surgeon General's Report for its innovative way of delivery of mental health services through primary care. A number of factors are determinants for the success of the Bridge Program: (1) strong commitment from the organization's Board of Directors and senior management; (2) a plan for sustainability that is developed during the planning process. Since the initial funding ended, the program has been operating through revenues generated from Medicaid, Medicare, and commercial insurance; (3) culturally and linguistically competent staff and a program that is syntonic with patients' needs and beliefs; and (4) relentless community education and buy-in for the community that helped support it.

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# Richmond's East End Partnership with Families' Parent Support Program: An Integration of Mental Health and Coordinated Human Services

#### Presenting: Cynthia Newbille

Major depression is the single largest cause of disability for women worldwide. In the United States, 12.4 million women are affected by depression each year. Depression rates are twice as high among lowincome women and women of color, and most prevalent among women of child-bearing and child-rearing age. Most women of color who suffer with depression turn first to friends and families and then to the primary health care sector. So, although depression is a highly treatable condition, with good results, poor women of color seldom receive treatment and when they do, it is not always of high quality. Richmond's East End Partnership with Families has developed an innovative mental health program targeting low-income women with depression.

Its Parent Support Program (PSP) is designed to reduce depression and empower low-income mothers to support each other and access resources.

PSP integrates mental health and other community based human services through its structural continuum of services ranging from informal neighborhood based support groups ("Kitchen Table") to formal clinical and medical interventions, up to and including hospitalization.

# Session 62 >> 4:00-4:30 pm >> Salon H Characteristics of Children who Deteriorate or Improve in Systems of Care Communities

#### Presenting: Robert Stephens & Sylvia Fisher Contributing: Anna Krivelyova & Kendralin Freeman

#### Introduction

The effectiveness of system of care services for children and adolescents with mental disorders has been discussed and demonstrated over time (Stephens et al., 2005). However, it is also well-known that systems of care work better for some children than others. With few exceptions (Walrath, Ybarra, & Holden, 2006), little research has investigated the relationship of non-treatment factors to outcomes. Definitive determination of predictors of deterioration and improvement remains unclear. This study investigates the likelihood of deterioration or improvement across time for multiple outcomes assessing the well-being of children and their families enrolled in system of care services.

#### Methodology

We analyze predictors of deterioration and improvement relative to remaining stable over the first six months of system of care services by analyzing data provided by 45 systems of care initially funded by the Center for Mental Health Services (CMHS) between 1997 and 2000. Participants are children who had complete data at intake and at a six-month follow up. From this sample, children were selected who had complete data on at least one of the following assessments: the Child Behavior Checklist (CBCL; Achenbach 1991, n = 2,526), the Behavioral and Emotional Rating Scale (BERS; Epstein & Sharma 1998, n = 2,532), or the Caregiver Strain Questionnaire (CGSQ; Brannan, Heflinger, and Bickman 1990, n = 2,515). Clinically significant changes were determined by reliable change indices (RCI) for each measure (Jacobsen et al., 1999). For the multivariate analysis we estimated multinomial logistic regressions to examine factors affecting improvement and deterioration in outcomes.<sup>1</sup>

#### Results

Between 30% and 41% of caregivers report clinically significant improvement in outcomes 6 months after intake into services (Table 1), and between 8% and 21% of caregivers report deterioration in outcomes across the three assessments.

Table 1 Change in BERS, CBCL and CGSQ between intake and 6 months

	BERS $(n = 2,526)$	CBCL $(n = 2,532)$	CGS $(n = 2,515)$
Improved	(n = 2, 320)	( <i>n</i> = 2,332) 35.6%	(n = 2, 313) 30.2%
Remained Stable	37.3%	55.2%	61.7%
Deteriorated	21.6%	9.2%	8.1%

Predictors of improvement over the first six months of services are described in Table 2 while predictors for deterioration are shown in Table 3. The dependent variables for these analyses are the RCIs from intake to six months for each outcome (BERS, CBCL, and CGSQ). To control the effect of prior level of impairment, we include scores at intake for each assessment as well.<sup>2</sup> The predictors for each model include: child demographics (gender, race/ethnicity, age), family characteristics (child lives with at least one biological parent, family income, child living situation in last six months, caregiver education level), and clinical characteristics (presenting problems, previous level of impairment, types of services received in the first six months of treatment, chronic health problems, medication levels).<sup>3</sup> The sample size varied between models as not all children had complete data on all three outcomes.

We find that for each outcome, a slightly different pattern of significant predictors emerges for improvement over time. Regarding improvement, there is little effect for gender and race except in predicting improvement on the CBCL. The significance of age for the likelihood of improvement is conflicting across outcomes; for BERS, older children are less likely to improve while the opposite is true for CBCL. Family characteristics appear to matter the most for improvement in the degree of caregiver strain and demonstrated strengths while improvement on reported behavioral problems (CBCL), is likely to be predicted by child demographics.

Conversely, for deterioration, the patterns of significance are somewhat similar across outcomes. That is for BERS and CBCL, we find that being male and living at home for the last six months decrease the likelihood of deterioration over the first six months of services. Children who live

 <sup>&</sup>quot;Remained stable" group was used as reference category in the multinomial logistic regressions.

<sup>2</sup> Estimates not shown.

<sup>3</sup> Original models were run including referral source, diagnoses, and other health characteristics of the child. These variables showed little or no significance across models and current results remained stable with or without their inclusion.

with at least one biological parent are more likely to deteriorate than those living in a different family structure independent of these other social factors.

Each outcome presented unique results for deterioration as well. White children are less likely to deteriorate in strengths than children of minority descent. On the CBCL, children who present with conduct problems are more likely to deteriorate. Caregivers who experience more strain over the first six months of treatment are less likely to be highly educated and less likely to have children who have not lived at home for the previous six months. Interestingly, age, income, and most clinical characteristics were not direct predictors of deterioration for any of the three assessments.

# Conclusions

The results of this study suggest that predictors of deterioration and improvement differ as a function of outcome measure. These data provide insight into the complexity of identifying children who are "at-risk" for deterioration and specifying those most likely to benefit from services. Interestingly, some demographic characteristics of both children and families have consistent effects across time. Thus, unique processes may operate for children who are remaining stable over time. Continuing to explore and isolate the similarities and differences between these groups of children will help providers and organizations tailor treatment to those children most at-risk.

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Table 2 Predictors of Improvement over Time

	BERS	_	CBCL	<i>P</i> -	CGS	
	(n = 2,526)	p-value	(n = 2,532)	value	(n = 2,515)	p-value
American Indian	.084 (.272)	.759	.543 (.270)	.044	151 (.285)	.596
Black	.207 (.117)	.077	.213 (.109)	.051	.155 (.116)	.183
Hispanic	282 (.284)	.321	248 (.263)	.346	.049 (.28)	.862
Other Race	.079 (.235)	.737	.150 (.216)	.486	.042 (.234)	.858
Male	.202 (.107)	.107	132 (.095)	.165	.058 (.104)	.576
Age	052 (.016)	.001	.031 (.015)	.040	008 (.016)	.627
Lives with at least one	179 (.117)	.126	.133 (.112)	.237	151 (.124)	.223
biological parent						
Income below \$20,000	.203 (.099)	.040	104 (.092)	.260	.097 (.100)	.330
Caregiver education at least some college	226 (.098)	.021	146 (.092)	.111	238 (.100)	.017
Child lived at home last 6 months	230 (.117)	.049	016 (.108)	.879	300 (.116)	.010
Types of services received prior to SOC	027 (017)	.104	092 (.016)	.000	121 (.018)	.000
Presenting Problems						
Suicidal Tendencies	.256 (.117)	.029	.128 (.108)	.237	078 (.117)	.504
Depression	059 (.109)	.588	096 (.102)	.347	.045 (.108)	.677
Hyperactivity	220 (.108)	.041	157 (.102)	.124	.016 (.108)	.884
Conduct Problems	.022 (.114)	.846	.032 (.106)	.761	356 (.118)	.003
Delinquency	.072 (.103)	.481	.126 (.096)	.187	.062 (.106)	.557
Adjustment	.068 (.113)	.547	.090 (.104)	.386	.109 (.113)	.334
Other problems	179 (.117)	.126	053 (.090)	.556	098 (.098)	.318

#### Table 3 Predictors of Deterioration over Time

	BERS ( n = 2,526 )	p-value	CBCL (n = 2,532)	p-value	CGS (n = 2,515)	p-value
American Indian	602 (.374)	.107	087 (.457)	.849	-2.06 (1.05)	.049
Black	.258 (.137)	.060	.208 (.177)	.241	.108 (.183)	.558
Hispanic	347 (.324)	.284	155 (.454)	.733	.051 (.452)	.909
Other Race	.437 (.268)	.103	.388 (.391)	.321	.029 (.378)	.939
Male	215 (.131)	.101	394 (.164)	.016	.046 (.175)	.794
Age	.030 (.020)	.132	.009 (.027)	.731	.034 (.655)	.995
Lives with at least one biological parent	.180 (.150)	.230	.331 (.203)	.103	.022 (.194)	.909
Income below \$20,000	.083 (.120)	.486	.208 (.165)	.207	.133 (.171)	.437
Caregiver education at least some college	201 (.119)	.090	140 (.161)	.385	310 (.169)	.067
Child lived at home last 6 months	370 (.138)	.007	319 (.176)	.069	347 (.188)	.064
Types of services received prior to SOC	.020 (.021)	.334	.006 (.030)	.852	.014 (.030)	.630
Presenting Problems						
Suicidal Tendencies	.073 (.144)	.611	099 (.212)	.639	045 (.201)	.823
Depression	.059 (.131)	.653	.068 (.170)	.691	.045 (.179)	.801
Hyperactivity	.183 (.135)	.175	.190 (.178)	.286	.116 (.176)	.511
Conduct Problems	.166 (.136)	.222	.366 (.186)	.050	.209 (.189)	.271
Delinquency	.052 (.122)	.668	.105 (.162)	.515	.258 (.174)	.139
Adjustment	141 (.136)	.298	.065 (.186)	.726	027 (.188)	.885
Other problems	.107 (.117)	.358	244 (.166)	.140	034 (.159)	.832

# Session 62 >> 4:30-5:00 pm >> Salon H Predictors of Adjustment for Children and Adolescents Served in a Behavioral Health System of Care

Presenting: Joy S. Kaufman

Contributing: Jacob Tebes, Richard Feinn, Susan Bowler & Anne LeBrun Cournoyer

#### Introduction

In the last two decades, the development of comprehensive systems of care for children and adolescents with serious emotional and behavioral disorders has become an important priority at the federal, state, and local levels. The current study examines child and family risk factors associated with individual child outcomes in a statewide system of care over a three-year period. To our knowledge, this is the first study to examine individual-level outcomes three years after children entered a system of care, and is one among only a few studies to track such outcomes beyond 18 months.

# Methodology

Rhode Island was one of the initial 22 sites funded under the Comprehensive Community Mental Health Services for Children and Their Families Program administered by the Child and Family Branch of the Center for Mental Health Services of the Substance Abuse and Mental Health Services Administration (SAMHSA). Administered by the Department of Children, Youth and Families (DCYF) in Rhode Island, this state-wide system of care provides comprehensive services to children and families, including: care coordination, parent support, outpatient counseling and psychiatric services, respite, therapeutic mentoring and recreation, and in-home and in-school services.

Enrollment criteria for the system of care required that the child have a DSM IV diagnosis, be in need of multi-agency services, at risk for or in out of home placement, and be experiencing impairment in functioning at home, at school, or in the community that has lasted longer than 1 year. All families who enrolled in the system of care between October 1996 and January 1999 were invited to participate in the outcome study. Of the 467 families invited into the outcome study, 401 (85.9%) consented to participate. Data presented in this paper include the 362 families for whom 36-month follow-up data were available (90.3%) retention rate). With five time points (baseline, 6, 12, 24, and 36 months) and 362 children there were potentially 1,810 observations. The current study has 1,633 observations, or 90% of the maximum possible number of responses. Data were collected from the parent or primary caregiver of the children enrolled in the system of care by trained evaluation interviewers, half of whom were themselves parents of other children within the system of care.

## Measures

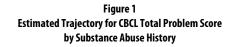
Several measures were included in this study including: child and demographic characteristics; child and family risk factors; and child outcomes. All measures were parent or caregiver report and were required data elements in the ORC Macro evaluation of the Comprehensive Community Mental Health Services for Children and their Families Program funded by SAMHSA.

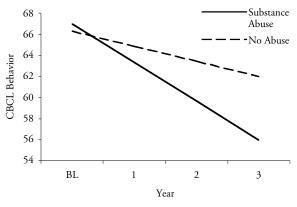
Measures included child demographic characteristics; child and family risk factors; and child outcomes, which were assessed by the Child Behavior Checklist (CBCL) Total Score (Achenbach & Rescorla, 2001); the CBCL Competency Score; and the Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 1990). Demographic characteristics of the 362 youth and families included in these analysis were as follows: 68.5% of the population are male and 31.5% female; the mean age at baseline is 11.96 years (SD = 3.53); parents/caregivers identified 65.2% of the population as Caucasian, 10.2% African American/Black, 9.9% Latino/Hispanic and 14.7% other. Adjusted for 2007 figures, 52% of families had incomes under \$19,000 per year, 31.1% had incomes between \$19,000 and \$43,999 and 16.8%had incomes over \$44,000 per year.

## **Findings**

A sequential regression with five blocks was utilized to determine the significant predictors of child adjustment. Statistical analysis was based on a multilevel regression model using hierarchical linear modeling (HLM).

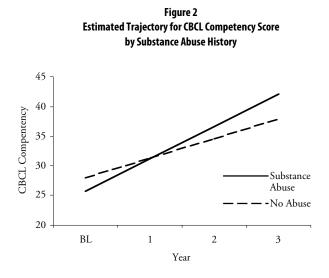
The trajectory of the CBCL problem behavior score significantly decreased by a rate of 3.72 points per year during the duration of the study as indicated by the significant intercept for year ( $\sigma^2 = 41.78$ , so  $\sigma = 6.46$ ). Thus, the estimated rate of change after three years is (3\*3.72) over 11 points. Only child risk factors significantly explained the variability in the slope ( $\chi^2 = 12.30$ , p = .007), and these show that youth with a substance abuse history showed a greater decrease, by 1.9 points per year, following the receipt of services within the system of care as compared to youth without a history of substance abuse (see Figure 1).





The change in CBCL competency scores showed significant improvement, at an average rate of 3.29 points per year (over one-half a standard deviation), during the course of the study as indicated by the significant intercept. The rate of change was significantly modified only by child risk factors; in particular, children with a history of substance abuse showed an additional increase of 2.15 points per year in competency score then children without a history of substance abuse (see Figure 2).

When examining the CAFAS the intercept for year was significant and showed a decrease of 11.74 points per year (nearly two-thirds of a standard deviation). The rate of change was significantly moderated by child ( $\chi^2 = 19.65$ , p < .001) and family risk factors ( $\chi^2 = 9.78$ , p = .044). Youth with a history of substance abuse showed improvement on the CAFAS of more than 7.5 points per year than youth without a history of substance abuse.



#### Conclusions

The goal of this research was to assess outcomes of receiving services in a system of care for children with severe emotional and behavioral difficulties and to identify the predictors of adjustment for these children and youth. The results of the study indicate that, overall, children and youth receiving system of care services showed significant improvements in problem behaviors, competence, and functioning through a 3-year follow-up. Another consistent finding was that, three years after their enrollment in the system of care, children who had a history of substance abuse made the most significant improvements across all outcomes. These findings hold promise for informing how system of care services could be tailored to meet the specific needs of children and families.

#### References

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# Session 63 >> 4:00-5:00 pm >> Salon I

# Symposium

# Technology for Research, Evaluation, and Measure Development with Complex, Multisite Community Initiatives

#### Chair: Hewitt B. "Rusty" Clark Presenting: Michael P. Bates & Mason G. Haber

Implementing effective evaluation of complex multi-site initiatives, such as children's mental health system of care communities, has been a daunting task for many. Researchers and evaluators have faced the numerous challenges of collecting high-quality process and outcome data across a diversity of initiatives, organizations, programs, and populations. These challenges become increasingly difficult as the scope and specificity of data requirements have expanded.

In this symposium, we will share the results from several projects in which we have addressed these challenges. In the first paper, we will share the results from an ongoing eight-year evaluation of First 5 Santa Barbara County—a comprehensive early childhood initiative with 30-40 funded community programs, comprising six collaboratives in the areas of early childhood education, oral health, mental health, newborn home visiting, family support, and school readiness. We will present findings from one of these collaboratives to highlight our approach and technology for managing such a broad and complex initiative. In the second paper, we will present the ongoing development of the Transition to Adulthood Program Information System (TAPIS) Progress Tracker and Goal Achiever. We will focus on how we have integrated the TAPIS into a web-based data management system and discuss plans for facilitating ongoing development and validation of the TAPIS Progress Tracker using this technology.

# Responding to Evolving Evaluation Needs in a Comprehensive Early Childhood Initiative

Presenting: Michael P. Bates Contributing: Prashant Rajvaidya

# Introduction

First 5 is a California early childhood initiative funded by a voter-passed increase in tobacco taxes. Individual counties have flexibility over how these funds are distributed, within certain guidelines, and all are mandated to perform outcomes-based evaluation. In Santa Barbara County, First 5 has funded a variety of community programs-as many as 42 per fiscal year-comprising 6 defined initiatives. While most of these initiatives have been funded for at least four years, their members programs, evaluation plans and measurement tools have evolved over time. They have also faced a need to balance the scope and complexity of the project-such as First 5's requirements of high-quality process and outcome data that can be compared across programs and initiatives-with the limited person-power of the evaluation team and resulting reliance on frontline agency personnel for data collection. Through an ongoing planning and feedback process with partner programs and the implementation of a flexible and powerful data management system, we have been able to address these challenges, respond quickly to evolving needs as they arise, and help community agencies enhance their own evaluation capacity.

# Methodology

The Family Support (FS) Initiative is a collaborative of 10 First 5-funded programs, primarily family resource centers, providing case management, resource and referral, health coverage eligibility assistance, basic needs assistance, and parent education. Initiative programs worked collaboratively with First 5 staff and the evaluation team to develop evaluation plans and identify client- and program-level outcome

Hodges K (1990). The Child and Adolescent Functional Assessment Scale (CAFAS). Ypsilanti, Eastern Michigan University, Department of Psychology.

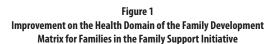
measures. Each program used Mosaic Network's Grant Evaluation and Management Solution (GEMS) to collect and report on common data elements (e.g., client information), as well as program- and initiativespecific outcomes assigned by the evaluation team. All data and periodic reports were submitted electronically and accessible by authorized users among First 5 and the evaluation team.

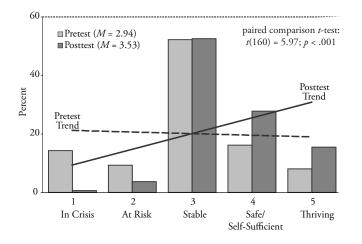
Participants were 161 parents of children ages 0 to 5 receiving case management services for at least 6 months who completed both preand posttests. Participants were assessed using the Family Development Matrix (FDM, Endres, Richardson & Sherman, 1999), for which caseworkers rated families on a 5-point likert scale ( $1 = In \ Crisis, 2 = At-Risk, 3 = Stable, 4 = Safe/Self-Sufficient, 5 = Thriving)$  on 7 key domains of functioning (Health, Social-Emotional Health & Competence, Family Relations-Parenting, Child Education & Development, Adult Education & Development, Employment, and Food & Nutrition). Pretests were completed at intake and posttests were completed at approximately 6 months (average = 171 days).

# **Findings**

Results from 161 families participating in one of five FS Initiative programs showed significant improvement from pretest to posttest (average 171 days) on all 7 domains of the FDM. Average domain scores improved between 0.31-0.59 points. The most dramatic improvements were seen on the Health domain, where the mean score increased from 2.94 to 3.53 (paired comparison t(160) = 5.97, p < .001). The number of participants rated as "In Crisis" decreased from 23 to 1. In total, 37 families (23%) improved 2 or more rating levels from pre- to posttest; 25 families (16%) improved 1 level, 81 families (50%) remained at the same level, 14 families (9%) regressed 1 level, and 4 families (2%) regressed 2 levels. Similar, though less dramatic, effects were found for the other 6 domains.

In previous fiscal years, agency personnel had mixed reviews about the usefulness and fit of their outcome tools during year-end data review and feedback meetings. Following the implementation of the FDM, agency personnel reported that they liked the tool and found it useful for informing the everyday operations of their programs. They also found it easy to use, family-friendly, and helpful in explaining the results of their programs.





# Conclusion

With the onset of the 2006-07 fiscal year, the FS Initiative reassessed their evaluation design and began using several new evaluation tools. In previous years, programs felt their outcome measures weren't capturing the results they were achieving. With our ability to rapidly respond to their changing needs, we were able to demonstrate that the FS Initiative interventions were effective in helping improve families' functioning in multiple domains. The case management and intensive family support programs appear to have had a particularly strong effect in helping families get out of crises and find stability. Additionally, agency personnel responded positively to the tool, thus increasing the likelihood that they would continue to value and pursue internal evaluation activities.

# Reference

Endres, J., Richardson, B. & Sherman, J. (1999). *Testing the reliability/ validity of the California Matrix.* Palo Alto: Packard Foundation, Final Report to the Organizational Effectiveness Program.

# Strategies for Rapid Development of a Transition to Adulthood Program Information System

Presenting: Mason G. Haber Contributing: Hewitt B. "Rusty" Clark

# Introduction

Increasingly, policy makers and funders require information on how mental health services affect youth, represented in typical evaluation practice as the extent to which youth show improvement during or after receipt of services. In addition, considerable research suggests that optimization of service practices for individual youth requires ongoing tracking of their progress and outcomes (Kazdin, 1994). In typical practice, competing resource demands require assessment of youth progress and outcomes related to services in the most efficient possible manner. Emerging service arenas such as transition facilitation programs for youth with serious emotional disturbance (SED, e.g., Clark, 1995, 2004) face the additional challenge of lacking relevant and proven methods for tracking progress and outcomes. In the absence of proven tracking methods to assess program-level effects and individual youth progress, evaluators and providers must quickly develop ways to gather such information and justify their information gathering decisions. The current paper describes an innovative approach to rapidly developing and validating tracking technology in typical field-based settings for youth with SED who are transitioning to adulthood.

# Method

## **Overview of the Initial Development and Components of the TAPIS**

The TAPIS was developed by the National Center on Youth Transition (NCYT) through review of literature to identify indicators predictive of long-term outcomes for transitioning youth with SED, review of existing tools measuring transition of youth with disabilities, consultation with relevant stakeholders through focus groups, consultation with program and measurement experts, and field testing to determine clarity and feasibility of specific items (for further information regarding source materials and development of the TAPIS, see Karpur, Clark, Deschênes, & Knab, 2006). Though initially conceptualized as a four-part system, the present project focuses on the application and refinement of the first two elements, including a tool for measuring progress toward individualized goals (the Goal Achiever), and an instrument for tracking of other indicators of progress and outcomes (the TAPIS Progress Tracker).

#### **The GEMS-TAPIS Automation**

The authors from the NCYT are collaborating with Mosaic Network leadership to produce an automated version of the TAPIS Progress Tracker and Goal Achiever. The web-based GEMS automation of the TAPIS will allow transition facilitation agency personnel to enter data directly into the agency database using any secured networked terminal or to download to the agency database from an off-line computer. Automated features of GEMS-TAPIS include mechanisms to facilitate data entry (e.g., automated skip rules) and quality control mechanisms (e.g., generation of warnings for missing data, a supervisor review protocol). Automated reporting will allow for real time review of individual and program level data by agency staff. The GEMS-TAPIS interface will also tailor access to particular types of users so that each user accesses only the data entry and reporting elements that are necessary to their role. Users with appropriate access privileges (e.g., program administrators) will be able to modify how the instrument is applied on an ongoing basis by modifying which TAPIS data are collected (e.g., by modifying which modules within the Progress Tracker are used by staff), by adding their own survey items, or by modifying reporting mechanisms for data within pre-specified parameters. Finally, using GEMS multimedia capacity, GEMS-TAPIS will provide access to videotaped trainings created to assist personnel in using the tool.

#### **The GEMS-TAPIS Development Project**

In addition to allowing for real-time review of data at the individual and program levels, the flexible web-platform of GEMS-TAPIS can be useful in combining data from multiple agencies, creating possibilities for expediting multi-site field efforts to develop and validate measurement approaches. The GEMS-TAPIS development project is designed to meet the immediate needs of transition sites for assistance in tracking transition-related progress while simultaneously meeting imperatives to refine and validate the instrument. In order to help structure participation of agencies based on their research capacity and interest in assisting with the GEMS-TAPIS development process, a three-level classification system has been developed (see Figure 1, below). Current discussions between NCYT and its client agencies nationally are informed by this classification system to help clarify options for participating in the piloting and development of the instrument.

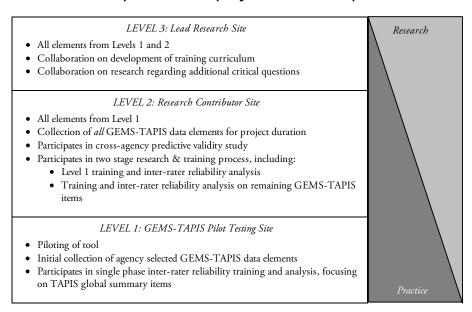
#### Conclusion

The GEMS-TAPIS development project provides an illustration of how measures can be developed and evaluated in typical field settings in order to provide suitable measurement methods where alternatives do not exist. In order for mental health service providers to respond rapidly to emerging needs, such "just in time" strategies will be increasingly critical to informed provision of services.

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#### Figure 1 Classification System for Sites Participating in the GEMS-TAPIS Development Effort



# Session 64 >> 4:00-5:00 pm >> Salon J

# Topical Discussion Leadership: It's Everyone's Business!

#### Presenting: Joan Dodge & Lan Le

## Introduction

The major purpose of this 60 minute topical discussion is to have a dialogue with interested participants about essential knowledge, skills, and attitudes (competencies) for leaders who are engaged in transformative, system building strategies for children with mental health needs and their families. While many efforts to strengthen workforce capacity have focused on issues of recruitment, retention, and training of individuals, it is now clearly recognized that leaders and leadership development is a critical component not only to support a quality workforce but also to sustain and transform systems of care in states and communities (Hoge, et al. 2007). Currently, there is increasing recognition that individuals at multiple levels, including family members, have responsibilities needing leadership skills and that these skills are often not taught in our preservice or in-service education and training structures.

This topical discussion will begin with a short presentation of a recent survey of 34 State Mental Health Children's Directors about the roles, responsibilities, requirements, and structural framework of their positions. More specifically, the survey asked respondents to describe their job titles, where their positions were housed within their state/territory mental health agency, who the position reports to, what level the position is in relation to the agency director/commissioner, their supervisory responsibilities, their primary areas of decision-making authority, and what educational, professional, and program management experience was need for their positions. The information was culled together and analyzed to reveal certain trends, commonalities, and differences in the make-up of children's directors' positions nationally.

Based on the results of the Children's Directors' survey and key questions around leadership issues, this discussion will provide a forum for participants to explore together as a "community of practice" what they see as leadership competencies for system change, what might be the enhanced skills, and new knowledge necessary to lead this change effort, and what might be some new research questions on this area.

## **Issues to be addressed**

## The Mandate

A number of recent policy reports have highlighted both leadership and workforce challenges. The Surgeon General's report on mental health (USDHHS, 1999) described the crisis in the children's mental health workforce in terms of critical shortages of providers and the need for training in new models of care emerging through system reforms and current research on treatment effectiveness. The Institute of Medicine (2001) noted the importance of preparing the workforce required for a "revamped" health care system. The President's New Freedom Commission on Mental Health provided a blueprint for transforming the delivery of mental health services based on changes in values, skills, attitudes, the incorporation of demonstrably effective treatments, and shifting services from traditional inpatient, outpatient and residential treatment to home and community-based services and supports (NFC, 2003). In order to achieve this transformation, the Commission recognized the urgent need to address leadership and workforce issues.

## The Challenge

The Annapolis Coalition, charged by SAMHSA to develop the Action Plan On Behavioral Health Workforce Development, cited a number of factors that were impacting the current leadership within the behavioral health field. A few of these includes individuals nearing retirement, lack of federally funded training stipends and leaderships programs, increased complexity of the healthcare environment itself, and new pressures on leadership to improve services. (Hoge, et al, 2007). Leaders within the children's mental health field confront these as well as additional challenges as they try to: implement a system that is respectful and partners with youth and families; works across agencies and systems to provide culturally and linguistically competent services; uses strengths-based assessments that are linked to individualized service planning; partners with natural supports; collaborates across professions, disciplines; uses developmentally appropriate evidence-based and best practices across the spectrum from promotion, prevention, early intervention and treatment; and works in a collaborative and consultative role to non-specialty mental health providers, agencies, and systems. (Huang, et al. 2004)

#### **A Response**

The Annapolis Coalition set forth in the Action Plan on Behavioral Health Workforce Development a major goal with four objectives for the nation to address leadership issues. Goal #5 of the plan says to "Actively foster leadership development among all segments of the workforce."

#### **Next Steps**

It is vitally important that persons providing leadership in children's services have the opportunity to share their own understandings of the complex nature of their work in collaborative leadership to create and sustain systems of care and to begin to identify for the field what are the necessary skills and knowledge needed to be successful leaders. In addition, the final part of the discussion will articulate additional research questions to be pursued relative to leadership development.

# **Who Should Attend**

Key audiences are persons who are interested and identify themselves as a leader or potential leader around children's services in a system of care.

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# Poster 1 The National Network to Eliminate Disparities (NNED) in Behavioral Health: A New Structure to Address the "Wicked" Problem of Disparities

#### Presenting: Rachele Espiritu, Aurelio "PJ" Rivera & Guileine Kraft Contributing: Mareasa Isaacs

# The Issue

Similar to other segments of health care, widespread behavioral health disparities exist in engagement, access, availability, utilization, quality of care and outcomes for cultural, racial and ethnic populations in the United States. Disparities are "wicked" problems in the sense that resolving these highly complex and intractable social problems often defy precise definition, cut across policy and service areas, and resist solutions offered by a single organization or "silo" approach. Although there are many efforts currently underway to address disparities in health and behavioral health, many of these activities remain fragmented, disconnected, and fail to create the necessary coordinated actions to effectively diminish disparities. Additionally, they often lack the connection to and involvement of the very communities they seek to address. Thus, there are considerable insights, strategies, and knowledge centers that are not being fully developed, disseminated, further adapted and replicated.

# **Proposed Solution**

To address disparities in behavioral health care, reduce the current fragmentation and begin to link "pockets of excellence" in reducing disparities, the National Network to Eliminate Disparities (NNED) in Behavioral Health was formed with support from the Substance Abuse and Mental Health Services Administration in partnership with the National Alliance of Multi-ethnic Behavioral Health Associations (NAMBHA). A network approach allows for the greatest level of flexibility and inclusion, while maintaining the integrity of each participant organization. A network enhances knowledge creation and innovation, and provides timely access to knowledge and resources that are otherwise unavailable to many. A network structure also combines multiple skill sets, innovations and technologies that no one single organization or program could support.

NNED's vision is that *all culturally, racially and diverse families thrive in, participate in, and contribute to healthy communities.* The mission of the NNED is to build, partner with, and sustain a national network of diverse racial, ethnic and cultural communities and organizations to promote policies, practices, standards and research to eliminate behavioral health disparities.

## Structure

The NNED structure consists of three interlocking entities:

**Community and Ethnic-Based Organizations and Networks** (CEBONS) are at the heart of the NNED. These organizations provide a wide spectrum of services, including behavioral health interventions (i.e., promotion, prevention, treatment, recovery supports, aftercare, etc.) as well as tap into leadership structures within diverse communities. The activities of these organizations are community-focused, community-centered, and community-driven.

**Knowledge Discovery Centers** that have expertise in at least one of the priority areas identified for the NNED and also have capacity in a core function such as training, policy development, program evaluation, technical assistance, etc.

*A National Facilitation Center* that has primary responsibility for facilitating dialogue, knowledge exchange, convening, resource identification and development, and network maintenance (NAMBHA).

The NNED is governed by a Steward Group consisting of representatives from the 4 national ethnic associations that comprise NAMBHA, community and ethnic-based organizations and networks, knowledge discovery centers, at-large populations, and consumers and families.

## **Major Priority Areas**

The NNED will initially focus on the following priority areas: (a) identification and documentation of effective community outreach and engagement strategies; (b) development of a diverse workforce and effective training approaches; and (c) documentation and dissemination of effective intervention and treatment strategies that focus on linkages between primary care and behavioral health interventions.

#### **Values and Principles**

The NNED is guided by the following values and principles:

- Excellence in behavioral health
- Collective advocacy and action
- Soft Power
- Inclusion
- Community
- Respect
- Trust and reciprocity
- Strength-based policies, practices and research
- Holistic view of health and wellness
- Focus on the lifespan
- System Intersections
- Flexibility

# **Expected NNED Outcomes**

Priority areas identified critical to disparities elimination

- *Linkages* between community providers and organizations in diverse communities and research/training centers
- *Infrastructure* for collecting, analyzing and disseminating information, data, best practice, research and policy
- *Capacity building* through learning collaboratives, internet training strategies, and community action
- Targeted actions through community collaboratives to impact disparities
- National influence to focus on elimination of disparities
- *Coordinated responses* for recommended policy, practice and research direction to the field
- *Community & system change* through changes in knowledge, attitudes, behaviors of individuals
- *Behavioral health disparity elimination* to ensure access to and availability of culturally appropriate, high quality, results-producing care

# Poster 2 Moving Toward Equity: Addressing Disproportionality at the Local Level through the Local Equity Action Development (LEAD) Process

#### Presenting: Shana Ritter Contributing: Russ Skiba

Acknowledgements: Indiana Department of Education, Center for Evaluation and Education Policy at Indiana University.

# Introduction

National reports indicate that disproportionate minority placement in special education remains a serious and significant problem (Coutinho & Oswald, 2000; Ladner & Hammons, 2001; Losen & Orfield, 2002; National Research Council, 2002).

Local Equity Action Development (LEAD) Projects are a collaborative effort between local school districts, the Indiana State Department of Education, and The Equity Project at Indiana University to systematically address the causes and the effects disproportionality in special education. The purpose of this study is to describe the LEAD process, in a variety of school districts addressing minority disproportionality.

The Local Equity Action Development model evolves differently in each district as it addresses the following five questions:

- 1. What do we know about minority disproportionality in our district?
- 2. What actions can we take to have the greatest impact on minority disproportionality in our schools?
- 3. Who needs to be part of the planning team?
- 4. How do we include all stakeholders in the process?
- 5. How will we know if we are making a difference?

# Methodology

Three planning districts which had participated in a qualitative study (Skiba et al, 2003) volunteered to begin a process to better understand and address issues of minority disproportionality at the school and district levels. The LEAD model utilizes a needs assessment mode and is based on an adapted school wide research paradigm that incorporates an insider/outsider approach (Bartunek & Louis, 1996) and is grounded in cultural competence (Villegas & Lucas, 2002). LEAD expanded to include 10 districts.

A mixed methods approach is used to assess if disproportionality is being addressed successfully; special education identification and placement data collected by the state, referral to eligibility ratio (RER) a short term measure at the school and district levels developed by the Equity Project, and qualitative data. State data is analyzed annually and longitudinally, while the RER follows individual students through the pre-referral and referral process. Qualitative sources include beginning and end of the year focus groups, surveys, and questionnaires to study shifts in attitude, awareness and approaches utilized in teaching.

# **Findings**

## **Quantitative Results**

In order to evaluate the LEAD model statewide data from 1998-2001 was compared with the same statewide data from 2003-2006.

The initiative has shown good effectiveness in the seven districts actively participating in the LEAD projects. For example in Mild Mentally Handicapped (MIMH) when comparing the average risk ratios over two three year periods (1998–2000 and 2003–2006) LEAD districts showed a greater rate of change (-12%) than non-LEAD districts (-2.2%), and the most active LEAD districts had a greater rate of change (-18.9%).

Districts that have worked on LEAD more intensively showed greater change in addressing disproportionality. The three corporations that have worked most closely with the Equity Project through the LEAD process showed greater improvement than the state average in every category, with almost a 20% drop in disproportionality in some categories.

The changes in LEAD districts appear to have been sufficient to create an overall change in the level of disproportionality in the state. Analyses of the state data show that at least some of the improvement in the state's disproportionality is due to improvement in the active LEAD districts.

## **Case Study Results**

The quantitative analysis was supplemented with a case study evaluation (Yin, 1994) in a single district with a highly active LEAD program. We found the following perceptions among school personnel who had been involved in that project:

- In general, the LEAD process is highly regarded and viewed as having good effectiveness.
- In particular, LEAD is seen as improving the referral process, and in particular the General Education Intervention process for the district.
- Challenges remain in moving conversations and action concerning race and equity from the district to the building level, and in the area of time constraints.

# Conclusion

The LEAD projects were implemented for three years in seven school corporations in the state of Indiana (out of 10 original volunteer districts). Statistical analysis of measures of disproportionality reveal that the process (a) appears to be effective in reducing disproportionality in participating districts; (b) was more effective the more involved a district became, and (c) appears to contribute to an overall reduction in the state's rate of disproportionality between 2004 and 2006. A follow-up case study revealed that participants in the LEAD process were very satisfied with the effects of LEAD, and felt that the structure of the process; including use of data and addressing issues of cultural competence and equity contributed to its success. Among the future challenges identified were time constraints, and expanding conversations on race and equity from the district to the building level.

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# Poster 3 Exploring Differences In Rural and Urban Children: CBCL and Risk Factors at Service Delivery Entrance

#### Presenting: Joanna Legerski

Contributing: Alison Pepper, Christine Fiore, & Kristen Waldemayer

#### Introduction

Twenty-five percent of Americans live in rural areas across our nation and face mental health barriers concerning accessibility, availability, affordability, and acceptability of care (Rost, Fortney, Fischer, & Smith, 2002). Estimates of the prevalence and incidence rates of serious emotional disturbances experienced by children living in rural regions may or may not differ from those found in urban areas (Farmer, Stangl, Burns, Costello, & Angold, 1999). However, approximately 60% of rural Americans have been underserved by mental health professions in the past decade (New Freedom Commission on Mental Health, 2004). If rural youth experience mental illness and behavioral difficulties at the same rate as urban youth, they should be allowed the same medical and mental health resources that are available in urban communities. Further examination of subgroups of rural and urban children may improve service delivery by addressing those needs specific to rural children within the system-of-care model.

In addition, research examining adverse childhood events such as childhood sexual abuse, physical abuse, family mental illness, and an incarcerated family member may lead to future negative outcomes. Research by Felitti and colleagues (1998) indicate a strong graded relationship between the number of childhood exposures and negative health outcomes in adolescence and in adulthood. Such negative outcomes include depressive disorders, substance abuse, and suicide attempts (Dong et al., 2004). Furthermore, there appears to be coping differences between males and females, which is associated with gender differences in negative health outcomes. For example, theorists postulate extreme externalizing behaviors in girls (i.e. delinquency and conduct disorder) as associated with more serious psychopathology then compared to boys (Eme, 1992). We propose to examine behavioral differences between rural and urban children who have entered nationally funded Comprehensive Community Health Services Programs (CMHS). This study seeks to examine child behaviors and risk factors in rural and urban settings from a gender perspective, using behavioral impairment scores as the outcome of interest.

#### Method

**Participants.** The sample consisted of children 6 to 18 years old (N = 13,327) residing in rural and urban regions and receiving mental health services within CMHS-funded systems-of-care. Fifty percent of the children were male, 55% were White, non-Hispanic, and 48% came from households with family incomes of less than \$15,000 per year. The mean age for the total sample was 12.69 years (*SD* = 3.19).

*Instruments and procedures.* Upon entry into the systems of care National Evaluation, the Child Behavior Checklist (CBCL; Achenbach, 1991) and Description Information Questionnaire (DIQ), were administered to caregivers of children and youth. Follow-up data were collected as per protocol every six months up to three years. The DIQ provides the child and family's demographic information; youth

Villegas, A.M., & Lucas, T. (2002). Preparing culturally responsive teachers: rethinking the curriculum. *Journal of Teacher Education*, 53 (1), 20-32.

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and family risk factors; family income; custody status; referral source; presenting problem(s); and history of service use (see Tables 1 & 2). The CBCL is a standardized caregiver report that measures problem behaviors among children aged 4 through 18 years. Higher scores on the problem behavior scales indicate higher level of problems. Scores above 63 are considered clinically significant. This study examines the internalizing, externalizing, and total problems scores within the CBCL.

#### Table 1 Children Characteristics

Characteristics         (n)         (n)         (n)         (n)         (n)           Race/Ethnicity         51.5         21.1         30.2         21.5         30.2           Caucasian         51.5         (1863)         (2670)         (965)         (1359)           African American         24.4         19.3         6.5         16.6         5.3	1111	All Children	Ma	ales	Fem	ales
Race/Ethnicity         Caucasian         51.5         21.1         30.2         21.5         30.2           (6857)         (1863)         (2670)         (965)         (135)           African American         24.4         19.3         6.5         16.6         5.3		%	Urban %	Rural %	Urban %	Rural %
Caucasian         51.5         21.1         30.2         21.5         30.3           (6857)         (1863)         (2670)         (965)         (1359)           African American         24.4         19.3         6.5         16.6         5.3	teristics	(n)	(n)	(n)	(n)	(n)
(6857)         (1863)         (2670)         (965)         (1352)           African American         24.4         19.3         6.5         16.6         5.3	nicity					
African American 24.4 19.3 6.5 16.6 5.3	ian	51.5	21.1	30.2	21.5	30.3
		(6857)	(1863)	(2670)	(965)	(1359)
(3258) $(1705)$ $(572)$ $(744)$ $(237)$	American	24.4	19.3	6.5	16.6	5.3
(3230) $(1/03)$ $(3/2)$ $(/44)$ $(23)$		(3258)	(1705)	(572)	(744)	(237)
Hispanic 11.5 9.8 2.1 8.9 1.9	ic	11.5	9.8	2.1	8.9	1.9
(1532) (865) (183) (398) (86		(1532)	(865)	(183)	(398)	(86)
Asian .90 1.0 .20 .70 .10		.90	1.0	.20	.70	.10
(120) (61) (20) (33) (6)		(120)	(61)	(20)	(33)	(6)
Native American 9.1 1.4 6.4 1.5 10.2	American	9.1	1.4	6.4	1.5	10.2
(1209) (120) (564) (67) (458		(1209)	(120)	(564)	(67)	(458)
Pacific Islander .50 .40 .10 .40 .00	Islander	.50	.40	.10	.40	.00
(63) (34) (11) (16) (2)		(63)	(34)	(11)	(16)	(2)
Other 1.6 1.3 .50 .90 .40		1.6	1.3	.50	.90	.40
(210) (113) (40) (39) (18)		(210)	(113)	(40)	(39)	(18)
Referral Source	ource					
Mental Health 60.4 27.8 31.6 29.8 32.8	Health	60.4	27.8	31.6	29.8	32.8
(8054) (2456) (2795) (1335) (146		(8054)	(2456)	(2795)	(1335)	(1468)
	ion	,		( ,	,	.60
		(302)	(173)		(39	(26)
	ctions	(	( ) )	• •		.10
(84) (52) (14) (15) (4)		(84)	(52)	(14)	(15)	(4)
Child Welfare 2.9 2.0 .00 2.7 .70	Welfare	2.9	2.0	.00	2.7	.70
(390) (178) (0) (119) (32)		(390)	(178)	(0)	(119)	(32)
Medical Health .1 .00 .10 .10 .10	ıl Health	.1	.00	.10	.10	.10
(17) (2) (5) (4) (6)		(17)	(2)	(5)	(4)	(6)
Substance Abuse .0 .00 .00 .00 .00	nce Abuse	.0	.00	.00	.00	.00
(3) (2) (0) (1) (0)		(3)	(2)	(0)	(1)	(0)
Court 2.3 1.8 .60 1.5 .50		2.3	1.8	.60	1.5	.50
(300) (159) (52) (68) (21)		(300)	(159)	(52)	(68)	(21)
Other 11.9 12.7 .70 7.8 1.3		11.9	12.7	.70	7.8	1.3
(1592) (1120) (65) (350) (57)		(1592)	(1120)	(65)	(350)	(57)

Table 2 Child and Family Risk Factors

	All Children	Mi	ales	Fem	ales
Characteristics	%	Urban %	Rural %	Urban %	Rural %
	(n)	(n)	(n)	(n)	(n)
Child					
History of Physical	21.6	20	21.2	26	21.6
Abuse	(2882)	(912)	(908)	(561)	(501)
History of Sexual	17.1	11.3	12.5	28.9	25.9
Abuse	(2278)	(514)	(538)	(624)	(602)
Previous Runaway	25.9	27.4	18.2	37.8	26.1
	(3454)	(1251)	(782)	(815)	(606)
Previous Suicide	11.7	11	6.9	19.8	14.3
Attempt	(1555)	(500)	(295)	(428)	(332)
History of Drug or	19.7	23.8	13.5 (580)	24.8	18.6
Alcohol Use	(2632)	(1081)		(536)	(433)
History of Sexually	6.5	8.2	6.8	5.8	3.6
Abusive Behavior	(871)	(372)	(290)	(126)	(83)
Family					
Family History of	38.1	35.3	39.8	36.1	42.2
Domestic Violence	(5073)	(1610)	(1705)	(778)	(980)
Family History of	40.8	40.0	40.5	41.3	42.2
Mental Illness	(5433)	(1824)	(1738)	(891)	(980)
Family History of	52.1	52.3	49.5	54.3	54.3
Substance Abuse	(6941)	(2384)	(2124)	(1172)	(1261)
Family History of	34.5	35.1	33.2	35.4	34.7
Criminal Activity	(4593)	(1599)	(1424)	(765)	(805)
Family History of Psychiatric Hospitalization	15.2 (2021)	16.1 (733)	13.4 (576)	16.4 (353)	15.5 (359)

**Analysis.** Independent sample *t*-tests examined significant differences in age and income between the urban and rural regions. To control for the effect of these demographics, one MANCOVA assessed the interaction between gender and region on the three CBCL outcome measures. Another MANCOVA assessed the interaction between region and gender on child risk factors, family risk factors, and total risk factors. One-way ANCOVA's probed statistically significant interactions.

#### Results

Participants from urban regions were significantly older (x = 13.17, SD = 3.08) and reported a significantly higher income (x = 2.42, SD = 1.35) than rural participants (x = 12.20, SD = 3.23; x = 2.32, SD =1.24). The first MANCOVA revealed that beyond age and income, there are no statistically significant interactions between gender and region on any of the three CBCL outcome measures. Thus, probing for statistically significant differences between urban and rural boys or girls on any of the three CBCL outcome measures was not warranted. The second MANCOVA revealed that beyond age and income, there was a significant interaction between region and gender on Child Risk Factors. Post hoc ANCOVAs revealed that urban boys (x = 1.48, sd = 1.35) reported significantly more child risk factors than and rural boys (x = 1.09, sd = 1.28; F(1, 6, 235) = 82.26, p < .0001). As for females, urban girls (x = 2.04, sd = 1.63) reported significantly more child risk factors than and rural girls (x = 1.44, sd = 1.45; F(1, 3, 106) = 73.58, p < .0001). The MANCOVA also revealed that beyond age and income, there was a significant interaction between region and gender on Total Risk Factors. Again, a post hoc ANCOVA specified that urban boys (x = 3.95, sd = 2.54) reported significantly more total risk factors than and rural boys (x = 3.52, sd = 2.46; F(1, 6, 249) = 42.92, p < .0001). In addition, urban girls (x = 4.75, sd = 2.66) reported significantly more total risk factors than and rural girls (x = 4.03, sd = 2.55; F(1, 3, 115) =45.17, *p* < .0001).

#### Discussion

Findings support previous literature indicating similar behavioral and emotional distress between rural and urban children. However, cautious interpretation is warranted given that these preliminary findings are based on one measure of psychological functioning. These findings suggest a need for examination of contextual issues impacting rural and urban children's lives, which may influence service utilization. The high numbers of risk factors and behavioral problems affecting rural and urban children is concerning. Future analyses within this dataset will explore outcome trajectories for both urban and rural, boys and girls served within the CMHS systems-of-care. Caregiver strain, family resources, and service satisfaction will also be explored.

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# Poster 4 Building on Community Strengths: Mapping Housing and Transport Assets for Youths in Transition

#### Presenting: Beverly G. Ward Contributing: Mason G. Haber

## Introduction

This poster draws on the research and practical experience used to develop an asset mapping training session for the 11<sup>th</sup> Biennial Conference of the Society for Community Research and Action (SCRA). The authors combined GIS, asset mapping tools, and techniques, and vignettes from local mental health providers to develop a workshop on identifying community resources to aid youths and their families in transition programs. The purpose of this presentation is to develop a framework to aid other communities and users in identifying local resources.

# Methodology

Using selected demographic characteristics from the 2000 census and vignettes provided by a local behavioral health programs provider, the authors use geographic information systems, the Internet, directories, and other archival data to create a case example of asset mapping as developed by John P. Kretzmann and John L. McKnight related to resources for youths in transition. The process includes:

- Defining the community
- Identifying what will be done with the information collected, e.g., resource guide, database, etc.
- Selecting assets to identify
- Identifying previous asset mapping or related activities
- Developing a plan to collect the information
- Mapping the assets
- Evaluating the process and results

The results may be used a planning tool, information, marketing, or resource guide, or as an evaluation of existing services and programs. This workshop provided baseline data from the case study on housing and transport assets in Los Angeles County, California.

# Findings

Many of the community supports for youths in transition programs and their families may be lacking or poorly understood. The workshop provided tools and techniques to help attendees identify local resources and include these in their program planning. The participants, particularly the local provider, found the workshop to be very beneficial. The materials used in the workshop were given to this provider to conduct an in-house training session. The presentation will detail how other communities can develop general or targeted asset maps to address program needs.

# Conclusion

Asset mapping focuses on the identification of resources rather than the "…needs and deficiencies of neighborhoods" (Kretzmann and McKnight, 2007). The identification of existing resources and the opportunity for new partnerships and collaborations in a period of decreased spending and growing service demands is critical. Asset mapping has been extensively applied in the last 15 years to help develop the capacity of many different types of historically stigmatized individuals and their communities.

# Reference

Kretzmann, J. P. & McKnight, J. L. (2007). About ABCD. Retrieved 31 October 2007 from http://www.sesp.northwestern.edu/abcd/about/.

# Poster 5 Unmet Need and Juvenile Justice: Cost and Consequences

Presenting: Kenneth M. Rogers & Olabode Akintan

# Introduction

The differences between youth receiving mental health services and those detained in juvenile detention facilities have been the source of much debate. Many of these studies have identified sociodemographic factors such as race (Lewis, et al., 1980; Kaplan & Busner, 1992; Cohen et al., 1990), gender (Barnum, 1989; Dembo et al., 1993), and poverty as being associated with being placed in one system versus another. However, studies have found that clinical factors may not always be the best predictor of placement (Westendorp et al., 1986; Shanok and Lewis, 1977).

Most studies examining the placement of youth in juvenile detention settings have focused on youth prior to detention and/or adjudication. However, little information exists on youth that are detained in secure juvenile detention facilities. Over 100 facilities in 16 states have been investigated by the United States Department of Justice under the Civil Rights of Institutionalized Persons Act (CRIPA) which is authorized to investigate the conditions of detained youth. Many of these investigations focus on the lack of mental health treatment services for detained youth. These deficits in services are present despite the significant levels of unmet need. This study addresses a number of important questions underlying the incarceration of mentally ill youth. These include: (1) What is the prevalence of major DSM diagnoses amongst incarcerated youth not identified as mentally ill versus mentally ill incarcerated youth?, and (2) What is the level of unmet need for mental health services in detained populations?

# Methods

## Participants

The study included two groups of youth ages 13 to 17 from throughout the state of South Carolina. The two groups were comprised of (1) A randomly selected group of detained youth were recruited from the South Carolina Department of Juvenile Justice (SCDJJ) central detention facility (N = 120); and (2) Youth who had been adjudicated in family court and given a disposition at a SCDJJ locked facility who were found to be seriously mentally ill. These youth had been transferred to the South Carolina Department of Mental Health (SCDMH) for treatment as part of a consent decree (N = 120). Mental health and juvenile justice charts for all youth referred as part of the lawsuit were reviewed. Demographic, family history, juvenile justices, and mental health history data, including diagnoses, were abstracted from these charts. Additionally youth were administered the Diagnostic Interview Schedule for Children, version 2.3 (DISC 2.3; Shaffer, et al. 1996) and the Child Behavior Checklist and Youth Self-Report (CBCL and YSR, Achenbach, 1991).

#### **Findings**

The level of need in this population is striking. Ninety-five percent of mentally ill youth and 69% of incarcerated youth met DSM-IV criteria for a psychiatric disorder. Most youth in both the mentally ill and incarcerated groups had behavioral symptoms in the clinical range on the CBCL. Affective disorders constituted almost half of all psychiatric diagnoses (48%). Disruptive disorders were prevalent, but were the only diagnostic category present in only 5% of youth.

Demographic differences included African-American (p < .001) and older (p < .001) youth being less likely to be referred to the mentally ill population. African American and Caucasian youth did not differ significantly on offense type, CBCL scores or prior mental health service use. Mentally ill inclusion rates did not differ by gender, however female mentally ill youth were more likely to be victims of physical abuse than males (74% vs. 50%) and were more likely to be victims of sexual abuse than males (72% vs. 32%).

A large number of youth were from underprivileged backgrounds. Sixty eight percent of youth had incomes below the poverty standard of \$15,000 for a family of four. Only 49 youth (12%) had annual family incomes above \$25,000. The mean family income for the state of South Carolina is \$32,000 per year. Therefore practically all of the youth in the mentally ill were from relatively deprived backgrounds. Furthermore most youth (52%) were in out of home placements including foster care and group homes. The number of youth included in the mentally ill population has increased approximately 10% per year. The mean age of mentally ill youth increased yearly from approximately age 14 in 1996 to greater than 16 years in 1999. The number of placements utilized for placement of youth also increased over time from 24 in 1996 to 42 in 1999. The use of more restrictive residential placements increased over the four study years. The total number of youth included in the mentally ill increased yearly from 95 in 1996 to 202 in 1999. Non-violent and younger youth are more likely to be placed at home and receive outpatient services or be placed in group homes than older and more violent youth who are more likely to be placed in residential treatment or hospital settings. The increasing reliance on more restrictive placement settings and the increased number of youth being served has increased the total cost of treating from approximately \$5million per year in 1996 to \$12.5 million in 1999.

#### Conclusion

The levels of psychopathology and symptomatology found in our sample of incarcerated youth are comparable to those at the higher end of previous studies (Otto, et al., 1992). The rates of psychopathology of the mentally ill youth suggest that there is a high degree of emotional/ behavioral problems in this group. These results strongly support observed trends towards the incarceration of mentally ill and emotionally disturbed youth. The lack of community-based and preventive mental health services for youth, particularly in rural areas, allows many youth with emotional mental disorders to go undetected and untreated. This is especially true for the mentally ill youth, many of which had not received mental health treatment despite having a high degree of need. While the cost effectiveness of prevention strategies cannot estimated from this study, the fact that millions of dollars are being spent on these services indicates that additional studies examining cost and appropriateness of services are warranted.

# Poster 6 Cross Systems System of CARE/Child and Family Teams in North Carolina

Presenting: Kelly Crowley, Elizabeth Dobyns, Elizabeth Meadows & Michael Lancaster

#### Introduction

The poster presentation will demonstrate the process designed by North Carolina to engage families and child-serving agencies across systems to create a System of Care curriculum, and then adopt the curriculum and philosophy into each division's mission. The poster will outline the product, process, challenges, solutions and outcomes. The poster session will present the challenges faced during this cross system development and the solutions to those challenges. Also highlighted on the poster is the method the team has put in place to provide technical assistance to trainees and maintain sustainability.

Research indicates that the more a child and family perceived services to be consistent with the system of care philosophy, the greater their level of satisfaction with services and the fewer internalizing and externalizing behaviors they reported one year after receiving services (Graves, 2005). These findings help to bridge the gap between science, prevention, and intervention by providing evidence for the expanded use of the system of care philosophy when delivering mental health services to children and families. With evidence that the extent of functional change and extent of consumer satisfaction depends upon the extent of perceived adherence to the system of care philosophy, every effort should be made to be sure that children and families are at the center for treatment planning through the regular mechanism of a child and family team, this includes all systems involved with that family.

## **Curriculum Design**

At the state level, the North Carolina Division of Mental Health Child and Family Mental Health Services recognized the importance of streamlining services for families, and developed a cross system System of Care Collaborative (SOC Collaborative). The SOC Collaborative identified as a high priority a need to design a cross-system Child and Family Team Training designed from the family perspective. This curriculum taught family partners and agency professionals in child serving fields how a Child and Family Team should operate, the values and principles of such a team and how to facilitate a Child and Family Team. This curriculum was designed for the identified population in order to reduce duplication of services and increase the effectiveness of improved health and well being of a child and the child's family as a whole.

The result of this work group was two curricula that support the ongoing effort to combine similar child and family team processes into one process applicable across systems for children and their families regardless of where they may have first been introduced to the public system. The North Carolina Division of Mental Health Child and Family Mental Health Services have funded development of this curriculum, training of this curriculum and personnel dedicated to the milestone project. The curriculum series has been divided into three parts, each is two days, eight hours each day training. Part 1 is called *Introduction* to Child and Family Teams: A Cross System Training From the Family's Perspective (CFT1). CFT1 is the introductory curriculum designed to teach what is a cross system Child and Family Team. The second is called Child and Family Teams From the Family's Perspective: Part Two - A Cross Systems Approach to Facilitating Family Driven Meetings (CFT2). CFT 2 is the second step to go beyond the basic mechanics of what makes a good Child and Family Team but how to facilitate a CFT. Part 3 Training of the Trainer (TOT) is the advanced training adapted for both of part 1 and part 2 of the series to be taught after each series is completed. Part 3 is designed to sustain the CFT model and strengthen personnel preparedness on the values of cross system CFT.

# **Implementation Status**

Today 85 agency and family experts who work with children, youth and families have completed part 1 of the training (see Table 1). Of these 85 individuals 35 have also completed the training of the trainer portion of that series. These thirty five trainers are now on their own to train the part 1 series whenever deemed needed by their county or Local Management Entity (LME). At present the CFT1 training series has had over 220 individuals complete the curriculum. Twenty-seven of the original 85 have gone on to take the advanced facilitator course CFT2. All 27 have completed the TOT course associated with this piece. Thirty additional individuals have completed the CFT2 course trained by the initial graduates of CFT2.

# Poster 7 A Longitudinal Analysis of the Effects of Adult Mentoring on Children's Mental Health

Presenting: Ellen L. Lipman

Contributing: Kathryn Graham, Jeff Bisanz, Jose da Costa, Simon LaRose, Debra Pepler, Karen Shaver, David J. De Wit, Maria C. Manzano-Munguia & Annalise Jensen

# Introduction

Adult one-to-one mentoring programs represent an important source of prevention programming for high-risk children and youth, and are associated with improvements in social and academic outcomes. Less is known about the mechanisms through which benefits are achieved. A Canadian study of the Big Brothers Big Sisters community match program is currently underway to determine: (1) specific match relationship components associated with improved child outcomes, (2) mechanisms through which exposure improves child health, (3) influence of demographic and other risk variables on outcomes, and (4) agency, mentor and parent characteristics associated with improved child outcomes.

# Methodology

This is a prospective, cohort study of 950 families (parents and children) from 18 Big Brothers Big Sisters agencies from across Canada to examine children's involvement in structured match relationships with adult mentors as a determinant of positive change in their health and behavioural functioning. Over one year, 950 new intake families eligible to participate in the BBBS community match programs will be invited to participate. Eligible mentors will be invited to participate once they have been match to study families. Child health and social functioning data will be collected from children and their parents at baseline, and at 6, 12, 18, 24 and 30-month follow-up time points. Face-to-face interviews will be conducted with children. Parents complete a self-administered questionnaire. At each follow-up, process data (e.g., child, mentor, parent satisfaction with match)

#### Table 1

Training Series	Initial individuals graduating from Training	Number of individuals trained by initial graduates of TOT	Total number of individuals graduating from series
CFT 1	85	135	220
CFT 2	27	30	57

## Discussion

The SOC Collaborative found that incorporating a train the trainer (TOT) curriculum piece into the series increased the chances of long-term sustainability and true system change due to the legacy plan for the series. It is estimated that by the end of 2008, 150 additional individuals will be trained. Because of the TOT, every county will be empowered to train new staff and families on true collaboration and family center-family focused Child and Family Teams in a systematic consistent manner that is sanction by the SOC Collaborative.

The CFT 1 and CFT 2 training curriculum gives individual skills to incorporate all needs of the families and all needs of child serving systems into one meeting resulting in a more family friendly, child centered, cost effective meeting. The CFT process streamlines a meeting and reduces duplication of services and all individuals' time at meetings.

# Reference

Graves, K.N.(2005). The links among perceived adherence to system of care philosophy, consumer satisfaction, and improvements in child functioning. *Journal of Child and Families Studies*, *14*, 404-415.

will be collected from matched pairs. Child/mentor matches will form and terminate at different times over the 30-month period so length of time enrolled in match relationships will vary.

Measures of child outcomes (mental health, behaviour) and of the developmental tasks hypothesized to act as mediators (e.g., academic, social competencies) were chosen based on appropriateness for culturally diverse populations, high internal consistency and validity, and high sensitivity to change as demonstrated in our pilot work.

# **Results to Date**

As of late October 2007, 271 families have been recruited from new intakes to BBBS across Canada (28.5% of total sample). Preliminary baseline findings on the first 200 families recruited revealed that most families are separated/divorced/widowed (46.2%), parents had completed at least some college or university education (61.4%) and many reported a parental long-tem illness (39.6%). About half the families reported gross family income under \$30,000 (47.3%) and one-third required social assistance support (31.5%). Recruited children included equal numbers of boys and girls (48.7% male) and most live with their mother only (66.0%). The first follow-up data collections (6 months after recruitment) begin in November 2007.

# Conclusion

The BBBS adult mentoring program is a selective preventive intervention program for at-risk children and families. This project will enhance understanding of an effective, widely available, low cost intervention that is in high demand, by examining which characteristics of children, parents, mentors and agencies involved in the adult mentor match relationship, or combination of characteristics, are associated with most positive changes in child social and health functioning.

# Poster 8

# What are the Demographic and Psychiatric Characteristics of Children with Severe Emotional Disturbances (SED) Referred for Home and Community Based Medicaid Waiver Services (HCBS-W) in New York City?

Presenting: Robert Andrews, Sergio Gomez, Olga Teploukhova, Sonyarles Then & Michelle Acosta

# Introduction

Children with SED referred and determined eligible for HCBS-W services are considered at a higher risk for psychiatric hospitalization. HCBS Waiver services are designed to maintain these higher risk children in the community. Although children may be determined eligible for HCBS-W, at any given time, there may not be an adequate number of available vacancies for them. In this case, New York City Citywide Children's Single Point of Access (CSPOA) will assign children to an interim lower level of care (case management) while children are awaiting a HCBS-W vacancy.

# Purpose

We will determine the demographic and psychiatric characteristics of a sample of children with SED who were referred to the New York City Citywide Children's Single Point of Access (CSPOA) requesting HBCS-W level of care services. We hypothesize that those "high risk" children for whom HCBS-W is requested would be predominantly of male gender; preside in the older range of age (5-17.9) and have psychiatric diagnoses in the more difficult to manage categories: Disruptive Behaviour Disorder, Psychosis and Bipolar Disorder.

We will determine the demographic and psychiatric characteristics of children who were determined eligible for HCBS-W and compare them to those children for whom CSPOA determined eligible for a lower level of care (ICM & SCM). We hypothesize that there should be significant demographic and psychiatric differences between children who were determined eligible for HCBS-W when compared to children who were determined by CSPOA to be eligible for lower levels of care (ICM & SCM).

We will examine each CSPOA assigned level of care (HCBS-W: ICM: SCM) relative to the hospitalization rates in each level of care over a one year period. This includes determining the hospitalization rates of children for whom HCBS-W were requested; children determined eligible for HCBS-W; and children assigned to HCBS-W over a one year period. We will also determine the hospitalization rates of children for whom HCBS-W was requested but who were determined *ineligible* for HCBS-W and assigned to lower level of care (ICM and SCM) over a one-year period. We will determine the hospitalization rates of children for whom HCBS-W was requested and who were determined *eligible* for HCBS-W was requested and who were determined *eligible* for HCBS-W who were assigned to a lower level of care (ICM & SCM) over a one-year period due to HBCS-W lack of vacancies. We will review the demographic and psychiatric characteristics of children hospitalized to determine what factors may be associated with either hospitalization rates or ability to remain within the assigned community based level of care.

We hypothesize that children determined eligible for and assigned to HCBS-W have higher risk but will have lower rates of psychiatric hospitalization than children eligible for and assigned lower levels of care (ICM & SCM).

We also hypothesize that those children who requested HCBS-W, determined eligible for and assigned to HCBS-W will have lower rates of hospitalization than those determined eligible for HCBS-W but assigned to a lower level of care due to lack of HCBS-W vacancies.

## **Benefits to the Field**

- 1. Understanding which, of the chosen, demographics may have a role in determining the level of care assigned to two different in-home mental health services for SED children.
- 2. Examine if the referral source request of appropriate level of care is validated by the CSPOA determined level of care process.
- 3. Understand which of the chosen demographics may lead to hospitalization even when children are assigned to an appropriate level of care as determined by the CSPOA process.

## Methodology

*Sample size* consists of 407 children of predominantly Latino and African descent with an age range of 5-17.9 years.

*Referral sources* were hospitals, community mental health providers, families, schools, NYC Juvenile Justice Agencies and NYC Child Protection Services.

**Referral mechanism** was the New York City Citywide Children's Single Point of Access (CSPOA) which utilizes a universal referral form with current physical examination, psychiatric, and psychosocial evaluations accompanied with a request for an in-home or out-of-home community based mental health services. CSPOA utilizes the Child and Adolescent Needs and Strengths-Mental Health Scale (CANS-MH) to assist in the determination of the appropriate level of care.

## **Data Collection**

Secondary data analysis was conducted and data was analyzed using SPSS. Data was acquired from a Microsoft Access-based database that collects data for CSPOA. All cases were referrals for intensive mental health services, in particular HCBS-W for children ages 5-17.9, who met the criteria for severely emotionally disturbed. The database captures demographic information, psychiatric diagnoses, referral source identification, assignment to an intensive mental health service and hospitalization history. The Microsoft Access-based database was exported to Microsoft Excel, which was then exported to SPSS for analysis. Referrals for HCBS-Waiver during the time period, July 1, 2006-June 30, 2007, were used. New variables were created based on the existing dataset for analysis.

#### **Review of the CSPOA Process**

- 1. Referral received with request for HCBS-W N = 407.
- 2. CSPOA reviews referral (universal referral form; psychiatric and psychosocial eval; summary of presenting symptoms. CSPOA Specialist consults with referral source. CSPOA Specialist or Family Advocate conducts caregiver interview.
- CSPOA Specialist completes Child and Adolescent Needs and Strengths-Mental Health Scale (CANS-MH) utilizing an algorithm for determining level of care resulting in the following categories:

   (a) CSPOA determined level of care *is in agreement* with requested level of care i.e. CSPOA determined HCBS-W; and (b) CSPOA determined level of care is *in disagreement* with requested level of care and CSPOA determined a lower level of care as most appropriate, i.e. Case Management.

### **Age Categories**

Ages will be divided into groupings of elementary age; middle school age and high school age: groups = 5-10; 11-13; 14-17.9.

### **Diagnostic Categories**

Diagnoses will be grouped according to 5 diagnostically collapsed groups; ADHD; Bipolar Disorders; Disruptive Behaviour Disorders; Psychotic Disorders and Affective Disorders.

### Findings

Preliminary data show relationships in the following areas: (1) Diagnosis versus determined LOC; (2) Determination of LOC by borough; and (3) Hospitalization rates related to LOC assigned.

### Conclusion

Limitations of the study include the focus on secondary data analysis. Also, there may be not significant demographic differences between those children seeking the two levels of in-home mental health services of Case Management and HCBS-W, however we have not established any variables for acuity or severity (to be done at a later date).

# Poster 9 Evaluation of Florida's Child Welfare Prepaid Mental Health Plan: Rationale, Implementation, and Initial Findings

Presenting: Amy C. Vargo, Patty Sharrock & Roger A. Boothroyd Contributing: Pat Robinson, Frank Reyes, Sharon Lardieri, Rhonda Ort & Mary I. Armstrong

### Introduction

Children in the child welfare system have a significant need for mental health services. For example, an analysis of the National Survey of Child and Adolescent Well-being data found 48% fell in the clinical range on the Child Behavior Checklist (CBCL). Not surprisingly, mental health problems were dramatically higher among adolescents (66%) compared to pre-schoolers (32%) (Burns, Phillips, Wagner, Barth, Kolko, Campbell, & Landsverk, 2004). Given the high rate of need among foster children, access to mental health services is critical. In Florida, however, children's access to and the quality of care is questionable. A recent Commonwealth Fund Report (Cantor, Schoen, & Belloff, 2007), ranked Florida 43<sup>rd</sup> regarding the percentage of children with emotional, behavioral problems who received services in the past year (54.7%).

### Florida's Child Welfare Prepaid Mental Health Plan

Historically, Florida's children in the child welfare system have been exempt from Medicaid managed care. In 2004, Florida passed legislation requiring children in child welfare to receive mental health services under a managed care arrangement. The bill allowed Community-Based Care Lead Agencies to provide mental health services to these children through managed care organizations. In 2006, The Florida Coalition for Children (FCC) formed a Behavioral Health Network Board with Magellan Behavioral Health of Florida, Inc. and was awarded the contract. The program, called the Child Welfare Prepaid Mental Health Plan (CW-PMHP), is a comprehensive mental health plan for Medicaid-eligible youth with open child welfare cases. Implementation began in February 2007 and operates under a prepaid, capitated financial arrangement.

# **Evaluation Methodology**

The CW-PMHP evaluation consists of three components. The *Implementation Analysis* was designed to detail the financial and structural aspects of the managed care arrangements. Data collection included semi-structured interviews with key stakeholders.

The *Mail Survey* component monitored the service needs, access, and well-being of foster care children. A systematic approach to survey design was used and survey content was determined through a review of the literature and a foster parent focus group. All foster parents in the two participating counties were surveyed and a 55% response rate was obtained.

The Quality of Care sub-study was added in year two of the evaluation to examine the experiences of families and providers involved with courtordered in-home CW-PMHP children. Data were collected through the use of semi-structured interviews and focus groups.

### Findings

Given the *Quality of Care* study is on-going, only findings from the *Implementation Analysis* and the *Mail Survey* stub-studies are presented in this summary.

*Implementation Analysis:* Findings suggest that key partners worked closely to establish provider networks and to resolve eligibility issues. The majority of stakeholders felt the transition to CW-PMHP occurred more smoothly than anticipated. Although some providers were initially hesitant to join the network due to lack of information and other uncertainties, efforts were made to alleviate these concerns.

Communication mechanisms were in place to support frequent and ongoing dialogue between key stakeholders. Additionally, a number of staff positions were filled to help coordinate efforts and to help respond to problems and provide technical assistance. Trainings were held with locallevel agencies and helped to further facilitate consistent communication about how the plan would operate.

Stakeholders reported better accountability for the mental health services provided. Child welfare staff were involved in treatment planning and were aware of the services youth received. As one respondent remarked, "We know more about what kind of services our children are getting..." Providers indicated the provision of mental health services had not changed since pre-CW-PMHP implementation.

An implementation challenge identified involved accurate and timely eligibility files. Significant discrepancies were documented between the numbers of children in the child welfare and Medicaid data systems. These inaccuracies reportedly created delays in obtaining prior authorizations for services and receipt of treatment and also consumed inordinate amounts of time and staff resources.

In terms of cost savings, most stakeholders believed the initial reductions realized by the state when the capitation rate was established and the increased accountability for services provided would results in initial cost savings. Some reservations were expressed regarding the longterm savings given the high level of need among this population.

*Mail Survey:* Most foster parents reported being unaware of the CW-PMHP or that the funding for mental health services for foster children had changed.

Forty-one percent of the foster parents' indicated 20% or less of their foster children over the past five years needed mental health services. However, 26% of the foster parents estimated between 81% and 100% of

their foster children needed mental health services. Foster parents noted gaps between foster children's mental health service needs and the services received. Among families using mental health services, satisfaction was only "somewhat to moderately satisfied."

Foster parents' assessments regarding the adequacy of aspects of their children's care were less than positive. None of the seven domains (access to care, information needs, case managers/mental health providers, quality of care, coordination of care, cultural competency, and financing) received positive ratings. Specific areas of concern included choice of mental health service providers, adequacy and timeliness of screenings, adequacy of mental health funding, service coordination, and access to information across systems. "It seems to me as if case workers are overloaded," suggested one foster parent. "As a result, it is difficult for foster parents to get assistance until the foster child is in 'crisis'. Usually by then, it is too late to save the placement. The child then gets moved into another home that is unprepared for the behaviors and needs for the child." Another stressed, "[We] need information on services availability and how to determine when a child needs those services. We [foster parents] currently know nothing about mental health services."

# **Conclusions/Recommendations**

Some of the policy recommendations from this study include:

- Efforts should be made to maintain current levels of communication linkages among stakeholders.
- Continued efforts need to be made to keep families informed about the CW-PMHP and to provide opportunities for them to have a voice in its operation.

- Increased efforts should be made to insure stakeholders at a local level are informed about how the CW-PMHP is impacting providers and services available to children. One respondent explained, "I would like to see the community stakeholders have a better understanding of the different system and how it functions..."
- Given access to child care and transportation were noted as barriers to
  accessing care for foster children and providers are not contractually
  responsible for providing these services, efforts should be made to
  explore how the system can minimize these barriers.
- Given foster parents' concerns with the adequacy and timeliness of mental health screenings, efforts are needed to ensure timely mental health screenings are completed and that foster parents are informed of their results.
- Improved efforts to communicate with foster parents concerning the health and mental health needs of their foster children, including greater access to the health records.

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# Poster 10 The Trauma Recovery for Youth Center (TRY): Helping Youth in Foster Care

Presenting: Keren S. Vergon, Allison F. Metcalf, & Cynthia Blacklaw

## Introduction

The Trauma Recovery for Youth Center (TRY) project is a 4-year Department of Health and Human Services funded grant that features a partnership between the Western Division of the Children's Home Society of Florida (CHS), the Department of Child and Family Studies at the University of South Florida, and the National Child Traumatic Stress Network (NCTSN) to provide trauma-informed services to children and youth experiencing complex trauma and are in foster care or other out-of-home family care. This poster presentation will introduce the TRY Center, explain how the TRY Center has modified Trauma-Focused Cognitive Behavioral Therapy (TF-CBT) for a middle school-aged foster care population, and report on efforts to implement communitywide trauma screening for all youth through collaboration with the dependency system, while increasing the availability of trauma-focused services for children and youth in northwest Florida.

# Methodology

The goals of the TRY Center are to promote, implement, evaluate, and improve trauma-focused services to meet the needs of youth in out-of-home family care in northwest Florida; to establish a local traumainformed system of care; and to collaboratively link this system with the National Child Traumatic Stress Network. The TRY Center is in its first year of existence, and is currently engaging in building community awareness and collaboration activities; hiring and training staff to provide TF-CBT; establishing a training program for community providers, treatment foster parents, dependency case managers, CBC staff who complete Comprehensive Behavioral Assessments, and other interested stakeholders; and engaging in sustainability planning.

CHS will provide TF-CBT for 60 youth and their foster families (and biological parents if available) per year. Youth will be age 10 to 14 at enrollment, in out-of-home family care in northwest Florida, and receive 15-20 weeks of services.

To meet the needs of the target population, the TRY Center has modified the TF-CBT model (Cohen, 2006). These changes include: (1) extending the length of treatment; (2) foster parent trauma screening and treatment involvement; (3) promoting case management and judiciary support for treatment; and (4) therapist selection and supervision for the intervention to be home-based.

Beginning in the fall of 2008, all Florida DCF Circuit1 youth, ages 10-14, removed from their homes for placement in out-of-home care, will receive a trauma screening, incorporating the CANS-TR into the required Comprehensive Behavioral Assessment. For those youth who screen negative or are not eligible for TF-CBT, case managers will continue with permanency case planning and appropriate placement and services. For youth who screen positive and are eligible for TF-CBT, the pilot project will randomly assign to the TF-CBT intervention or to standard care. For both the intervention group and control group, dependency case managers from the lead agency will continue with permanency case planning and appropriate placement and services. If random assigned to TF-CBT, youth will be evaluated to rule out contraindications for immediate TF-CBT, and, if indicated, will instead be referred for other treatment, with prescreening for TF-CBT in 6 months. If there are no "rule outs" for TF-CBT, youth in the intervention group will receive TF-CBT, with involvement of parents

and caregivers (surrogate and biological as appropriate to the case plan). Parents and caregivers will receive trauma screening as part of initiating TF-CBT, with referral, if positive, for trauma-focused assessment and treatment in addition to participating in the youth-focused TF-CBT intervention. After the pilot test for TF-CBT, adaptations to the model will be made if needed, and this same pathway for trauma-focused assessment and treatment will be embedded in the system for all youth entering outof-home family care. The TF-CBT intervention will become integrated as standard treatment in the child welfare system and will be provided by trained therapists at CHS and other provider agencies in the four counties.

The evaluation has 3 components, a process evaluation to assess implementation, a fidelity study, and an outcome evaluation. Key informant interviews, meeting participation and observation, and document reviews will inform the process evaluation. The fidelity study will assess the degree to which TF-CBT is implemented with conformity. Outcomes for youth and families randomly assigned either to TF-CBT or standard care will be examined using the NCTSN Core Data Set (CDS), as well as locally identified measures.

In the outcome study, data will be collected at enrollment to TF-CBT or standard care, 3 months post-enrollment, and at discharge. Youth and families will also be interviewed at 6 and 12 months post-discharge. Data collected for youth and families in standard care will adhere to the same time frames. During the pilot phase, the 3 TF-CBT therapists will have a caseload of 10 youth and families initially while fidelity is being established. In Year 2, the refinement phase, caseloads will increase to 12 youth and families while local model adaptations are made. In Year 3, the sustainability phase, caseloads will increase to 14 youth and families. The Supervisor/Fidelity Coach will carry a caseload of 3 youth and families during each phase. 105 youth and families. In addition to the CDS measures, additional assessment and outcome tools will be used in the evaluation. These include the CANS for Trauma, the TSC-40 for foster parents and

biological parents, the Trauma-Informed Program Self-Assessment Scale, several TF-CBT fidelity tools, and a Parent-Child Relationship tool.

# **Findings**

This section of the poster will focus on process evaluation activities, including observation of community stakeholder meetings and evaluating the process of integration of universal trauma assessment efforts with the local child welfare program as part of comprehensive behavioral assessments. In addition, the materials to be used for program and community-wide trauma-informed trainings will be identified. CHS's internal preparation and training to provide trauma-specific services, specifically Trauma-Focused Cognitive Behavioral Therapy (TF-CBT), will be explained. The provision of trauma-specific services within the context of community trauma-informed trainings and awareness efforts, coupled with the partnership with the local Community Based Care (CBC) organization mirrors national efforts to help communities become more trauma informed and to provide appropriate evidence-based trauma services to children and youth in child welfare who need them.

# Conclusion

The TRY Center is an innovative project using a modification of TF-CBT for youth with complex trauma in out-of-home foster care, as well as collaborating with Florida's child welfare system to implement universal trauma screening for abused and neglected youth entering out-of-home care. One of the TRY Center's goals is the creation of a trauma-informed system of care for children and youth in northwest Florida. Successful demonstration of this goal will provide impetus for expansion to other areas in Florida.

# Reference

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# Poster 11 Development of a Trauma-Informed System of Care Assessment Tool and Methodology

# Presenting: James T. Yoe & Carol Tiernan Contributing: Helaine Hornby, Sarah Goan & Arabella Perez

# Introduction

The Maine THRIVE System is the first system of care for children, youth and families with a specific focus on creating a care system for children, youth and families that is trauma-informed at every level. This integration of trauma-informed principles and practices within a system of care context makes the THRIVE system unique among system of care communities. The core components of trauma-informed systems include:

- enhancing knowledge and awareness of trauma at all levels of service delivery;
- ensuring the physical and emotional safety;
- minimizing victimization/re-victimization;
- maximizing choice and facilitating trusting and collaborative relationships; and
- promoting system and service delivery practices that are strengthbased and promote and support growth, resilience, healing, empowerment and hope.

The trauma-informed approach is based on a shift from a focus on correcting deficits and problem behaviors where the core question is, "What is wrong with this child and family?," to a focus that views challenging behaviors as adaptive coping strategies adopted to deal with difficult and overwhelming circumstances, and starts by asking the question: "What has happened to this child and family?" This simple yet transformational shift in perspective forms the foundation for the trauma-informed approach.

The development of trauma-informed service approaches is supported by a growing body of research that documents the pervasiveness of trauma among children and youth and has linked trauma to a number of mental, emotional, physical health and social consequences. Trauma exposure has been associated with increases in health risk behaviors, higher rates of re-victimization, higher use of restrictive and costly service alternatives, and poorer outcomes for children and youth. The current knowledge base presents a compelling case for the need for developing, testing, and implementing trauma-informed service delivery approaches within systems of care for children, youth and families.

This presentation outlines a framework for trauma-informed service delivery adapted from the work of Harris & Fallot (2001) and explores the development and testing of a system of care assessment tool and data collection methods designed to assess the level of implementation of trauma-informed services and practices within a system of care.

# Methodology

# **Trauma-Informed System Assessment Tools**

Using a participatory process that included representation from a broad array of SOC partners, including: youth and families a series of key informant interviews were developed to assess the extent to which system and service delivery practices are trauma-informed. The tool content was derived from a combination of sources including: Trauma-Informed Systems Theory (Harris & Fallot, 2001) and System of Care principles (Stroul & Friedman, 1986) and were further refined based on consultation from nationally recognized trauma experts. Key informant interviews were specifically designed to gather information and perspectives from multiple system participants, including:

- Youth,
- Family Members,
- Care Managers/Clinicians, and
- Agency Administrators.

The Trauma-Informed System Assessment uses a two-part framework. The first part measures five core areas of trauma-informed service, including:

**Physical and Emotional Safety:** factors that assure the physical and emotional safety, including secure reception or waiting areas, non-judgmental – unconditional treatment, and flexible scheduling.

*Trustworthiness:* factors that foster trust between an agency staff, youth and families, such as consistency, staff accessibility, maintaining interpersonal boundaries, and clear communication of expectations.

**Youth and Family Collaboration:** policies and practices that encourage empowerment, partnership and participation, as well as strength-based and community-based approaches.

*Trauma Competence:* extent to which policies, procedures, staff, services and treatment are aware of, and sensitive to the unique experiences and needs of trauma survivors.

**Cultural Competence:** extent to which policies, procedures, staff, services and treatment are sensitive to the cultures, traditions and beliefs of the families and youth who are involved with the agency.

The second part relates to the various contexts in which the system and service delivery areas are assessed, including:

- Formal Policies and Administrative Supports
- Service Delivery & Practice
- Accountability Processes
- Interagency Practices

# **Data Collection Procedures**

While the key informant interviews and data collection procedures are still in development, it is anticipated that data will be collected via site visits with identified THRIVE system of care partner organizations. Key informant interviews encompassing youth, family members, clinicians, and administrators will be conducted on-site, and performed by two interviewers to allow for assessment of inter-rater reliability. Interviewers will include both professional evaluators and family members/youth who receive training on the use of the trauma-informed assessment tools and procedures. In order to assess change in trauma-informed practices overtime, initial site visits will be conducted in year three of the THRIVE initiative and then on an annual basis through year six.

### **Data Analysis and Scoring**

Data from the key informant interviews will be scored on each of the five trauma-informed domains. A total trauma-informed score will also be derived for each system of care partner organization. A scoring methodology is currently being developed and will be presented at this session.

# **Findings**

Pilot testing of the key informant interviews and data collection procedures are planned. The results of the pilot will be presented, including preliminary inter-rater and internal consistency reliability checks. The utility and effectiveness of the scoring methods will be examined as well as differences in scores between informant groups. Strategies for graphically summarizing the assessment results to inform system of care decisionmaking and planning efforts will be reviewed and discussed.

# **Discussion/Conclusions**

In conclusion, the key findings from the pilot testing will be summarized, next steps in the development and testing process discussed, and practical implications of the tool for measuring progress toward more trauma-informed systems and service delivery practices within systems of care for children and youth will be highlighted.

# Reference

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# Poster 12 State Agency Role in Transforming Children's Mental Health Services in a Non-Transformation State – Implementing Systems Change with Legislative and Agency Leadership, a System of Care Project and Use of a System Review Evaluation

Presenting: Allen W. Parks, Pam Alger & Gary Lippe

# Introduction

The presentation is designed to inform the participant on the recent activities of the newly formed Division of Mental Health and Disability Services in the State of Iowa in the development and implementation of children's mental health services. These activities include public agency and legislative initiatives, the implementation of a children's system of care demonstration grant project in ten counties within the state, and the development and use of a system review to identify system strengths and opportunities for development. Key legislative activities will be discussed, lessons learned from the initial stages of the system of care grant development, and the preliminary findings of the system review.

The presentation is designed to provide participants with information on the early stages of development of children's mental health services in a state where there were previously no clearly identified, funded or evaluated children's mental health services. Major strategies for implementation will be described that support systems transformation as well incorporates system of care principles.

# Methodology

In addition to descriptions of the steps taken over the last couple of years to develop a new Division of Mental Health and Disability Services, a System of Care grant, the System Review methodology will be described that supported the legislative and organization changes in progress in the State.

### Analysis

Key tools will be an analysis on qualitative methods used in the System Review as well as steps taken to facilitate utilization of SAMHSA System of Care program evaluation and other state management tools in use by the Division of Mental Health and Disability Services.

## Instruments

The State has gone through a three month process with a number of stakeholder workgroups to identify key systems improvements needs and have prepared recommendations for the state legislature through the newly developed Division of Mental Health and Disability Services developed an RFP for the implementation of an outcomes systems, has gone through a participatory process to identify functional assessment tools, uses system of care grant evaluation tools and has employed a System Review approach to identifying systems gaps and strengths

# Poster 13 The Massachusetts Family Networks Implementation Study

### Presenting: Joanne Nicholson & Susan Maciolek Contributing: Nicole Dube, Jodi Adams & Bernice Gershenson

### Introduction

While numerous systems of care programs have been implemented across the country, they have mainly focused on mental health rather than child welfare, and they primarily involve reform at the program or county level rather than state-wide, systematic initiatives (e.g. Hodges et al., 2006; Children's Bureau, 2003). The Family Networks Implementation Study, a partnership between Massachusetts Department of Social Services (MA/DSS) and the University of Massachusetts Medical School (UMMS), is a two-year study of the process of implementing a statewide system transformation initiative to redesign and integrate traditional categorical services purchased by the MA child welfare agency using systems of care principles. The research question underlying the study is: "What structures, processes, and conditions influence the implementation of Family Networks?" MA/DSS colleagues have three pragmatic questions regarding the implementation of Family Networks that translate into three specific aims: (1) "What needs to happen over the next 6 to 12 months?" (i.e., to identify relevant change domains); (2) "What has worked so far, i.e., in the past 6 to 12 months?" (i.e., to identify criteria for successful change); and (3) "How do we keep our eye on what's happening?" (i.e., to elaborate the key ingredients of change and effective implementation strategies).

## Methods

The partnership between MA/DSS and UMMS is the foundation of the Family Networks Implementation Study. The benefits of active stakeholder involvement are numerous, including increased buy-in to the study process, assistance in identifying key outcomes, and the proliferation of study results (Kaufman et al., 2006). The study is comanaged by MA/DSS and UMMS project leads. The Study Design Team determines the study framework, sampling, research methods, measures, and analyses. The Study Advisory Team, including representatives from MA/DSS, family advocates, providers, and UMMS, assists in framing throughout various representative communities in the State. Systems Review tools developed by the University of South Florida, Florida Mental Health Institute staff will be described in the presentation.

# Findings

Key findings from the mental health systems improvement workgroups included the need for children's mental health services, school mental health services, and emergency mental health crisis services throughout the state as a safety net program. System of care grant project is in the initial year of implementation and is uniquely embedded in the state's Child Specialty Health Clinics; the Systems Reviews are in progress—by the time of the conference there will be preliminary findings to report.

# Conclusions

Use of a focused, multi-dimensional systems improvement strategy has generated considerable interest, consumer and family involvement, and legislative support for a wide range of mental health initiatives including children and school mental health. Formation of coalitions and collaborations of stakeholders has enhanced the participatory process and built consensus to address service needs, organizational structure and funding dimensions to transforming services.

research questions, provides input into data collection strategies, interprets findings, designs feedback loops, and reviews products for dissemination to the field.

The *first specific aim*, to identify what needs to happen in the next 6 to 12 months, i.e., the change domains, was addressed in focus groups using concept mapping techniques (Kane & Trochim, 2007). Four focus groups were conducted by the research staff with a purposeful sample of (1) MA/DSS managers, (2) social workers and supervisors, (3) family advocates, and (4) provider agency staff, selected to represent levels of the organization, components of the initiative, and geographic diversity. Participants brainstormed statements in response to the prompt, "Generate a list of actions to be taken in the next 6 to 12 months to continue to develop and sustain Family Networks successfully throughout Massachusetts." Each focus group had from 8 to 10 members (n = 33), and informed consent was obtained. Participants sorted a total of 124 statements into conceptual groups, and rated each one on importance and feasibility (from 1 = *relatively unimportant/feasible* to 5 = *extremely* important/feasible). The Study Advisory Team met in two sessions to review data, label clusters, and interpret findings.

The *second specific aim*, to identify what has worked so far (i.e., criteria for successful change) is being addressed using the Most Significant Change Technique, a form of participatory monitoring that can be used to assess the process of program implementation (Dart & Davies, 2005). Stories of significant change in the past 6 to 12 months related to the implementation of Family Networks, and reflecting the change domains identified via concept mapping, are being systematically solicited from MA/DSS staff. Change stories are being reviewed by stakeholder groups to determine shared criteria for success, and to identify the most significant stories in each change domain. The results will be fed back to stakeholders in iterative feedback loops, and used to select the sample for the third specific aim.

The *third specific aim*, to elaborate key ingredients of change and effective implementation strategies, will be addressed using change stories to suggest the sample. In-depth interviews will be conducted with

relevant stakeholders regarding a subset of change stories to validate the stories and to obtain detailed information about factors contributing to change from multiple perspectives. Case studies will be developed that elaborate the key ingredients of change and highlight effective implementation strategies.

Parallel to this longitudinal set of mixed methods approaches to collecting data on change, a point-in-time survey of Family Networks implementation was conducted in mid-October 2007 with DSS Area Offices and their Lead Agency partners, to provide a "snap shot" of "what's happening" related to Family Networks. Survey items reflect domains identified in the concept mapping process, and focus on the status of the implementation of specific Family Networks structures, mechanisms, and procedures within those domains.

# **Findings**

Data related to the first specific aim have been analyzed. A six cluster solution was chosen by Study Advisory Team members and included: (1) Community Resources: Development and Relationships; (2) Education and Training; (3) Family-Centered Practice; (4) DSS Organizational Culture and Capacity; (5) Roles and Responsibilities; and (6) Operational Policy and Procedures. Average cluster ratings of importance and feasibility varied somewhat by affinity groups, though the Family-Centered Practice cluster was felt by all to represent the most important and feasible set of activities for the next 6 to 12 months. Preliminary review of Most Significant Change stories provides examples of change reflecting these themes.

# Conclusion

Findings from the Family Networks Implementation Study will inform MA/DSS strategic planning, system refinements, and the Family Networks outcomes evaluation. Continuous quality improvement strategies, drawn from study findings, will be relevant and useful to other Massachusetts EOHHS agencies with similar service delivery systems and agendas. Project activities and products will promote the Commonwealth's participation in the national dialogue regarding systems transformation in child welfare, mental health, and juvenile justice.

# References

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# Poster 14 Implications of Cross-System Findings from Cuyahoga County System of Care Research

Presenting: David L. Hussey, Chris Stromann, Beth Dague & Karen Ols

# Introduction

One of the foremost reasons for encouraging collaboration among child serving systems is the recognition that a substantial portion of service funding is ineffectively directed into fragmented responses to address the needs of complex, cross-system involved youth. Yet, locally collected data documenting cross-system and comorbidity findings is typically lacking, even though it provides one of the most powerful and compelling rationales for communities to pursue a system of care approach. This presentation highlights one community's efforts to document and utilize cross-system information to shape planning and funding efforts to integrate and sustain system of care infrastructure.

# Methodology

Since 1999, Cuyahoga County has had two SAMHSA funded system of care initiatives. The two system of care initiatives are a Strengthening Communities-Youth (SCY, 2002-2007) project through the Center for Substance Abuse Treatment (CSAT), funded to provide treatment services to juvenile offenders with substance abuse problems, and the Tapestry project, through the Center for Mental Health Services (CMHS, 2003-2009), funded to provide treatment to youth with severe emotional disturbances. Through these federally-funded cooperative agreements, investigators common to these projects have been able to examine and document lifetime levels of cross-system involvement between the mental health, juvenile justice, child welfare, and education systems, and identify comorbidity rates across mental health and substance abuse domains. For the SCY youth, selfreport data was collected using the Global Appraisal of Individual Needs (GAIN; Dennis, 2003). The GAIN is a standardized assessment measure that has eight sections: background, substance use, physical health, risk behaviors, mental health, environment, legal, and vocational. The GAIN includes over 100 scales and indices (Chestnut Health Systems, 2004). For Tapestry youth, parent and youth self-report data (i.e., youth 11 or older) from the Phase IV instrumentation protocol was collected and analyzed. The protocol includes approximately 20 information and assessment instruments. System of Care partners, including the Department of Children and Family Services (DCFS), provided archival data to document current and past child protective services involvement.

# **Findings**

SCY assessment data revealed that many juvenile justice youth had cooccurring substance use and mental health treatment needs that were not being met by existing services. Specifically, SCY data revealed that 62% (n =117) of youth enrolled in the SCY program are comorbid for both mental health and substance abuse diagnoses, and 87% were above the clinical cut-off score on at least one of the Global Appraisal of Individual Needs (GAIN; Dennis, 2003) mental distress measures, not including the conduct disorder scale. At program intake, 56% of SCY youth had been involved in four or more child serving systems across their lifetime. Sixty-five percent of SCY youth had at least one past officially reported allegation of child abuse or neglect, almost a quarter (24%) of SCY youth had at least one previous out-of-home placement through child protective services, and 29% had received special education services. For the Tapestry youth, considerably younger at the time of program admission (11.6 years of age versus 15.7 years of age), 100% had at least one DSM-IV diagnosis, 36% were already using or experimenting with a cigarettes, alcohol, or drugs, and 22.8% had an arrest or probation history. Fifty-six percent of Tapestry youth had at least one past officially reported allegation of child abuse or neglect, 18% of youth had at least one previous out-of-home placement through child protective services, and 47.7% had received special education services and/or had an active Individualized Education Plan (IEP). At program intake, 37.5% of Tapestry youth were involved in three or more child-serving systems at some point in their lifetime. Table 1 below summarizes key cross-system findings.

# Conclusion

On the systems level, both SCY and Tapestry findings, in conjunction with archival child protective services data, helped to document the scope and nature of cross-system involvement (i.e., mental health, substance abuse, child welfare, juvenile justice, special education) for a subset of youth with serious emotional disturbances. On an individual client level, such data highlight the importance of systematic screening and assessment, the identification of high-risk subgroups, and the need for a menu of traumainformed services. Cross-sectional data commonly collected in system of care research doesn't adequately capture the lifetime nature of cross system involvement, yet such findings, using locally gathered data, are particularly compelling to funders and child-serving system administrators. In response to these and other research findings, Cuyahoga County is: (1) sustaining its SCY initiative, (2) piloting Integrated Co-occurring Treatment (ICT; Cleminshaw, Shepler, & Newman, 2005) to address the needs of youth with both mental health and substance abuse problems, (3) funding familybased wraparound services for juvenile court youth with domestic violence charges, and (4) implementing a cross-system information collection platform (i.e., Synthesis) as part of a new and expanded administrative services organization (ASO).

## References

Cleminshaw, H.K., Shepler, R., Newman, I. (2005). The Integrated Co-Occurring Treatment (ICT) model: A promising practice for youth with mental health and substance abuse disorders. *Journal of Dual Diagnosis*, 1(3), 85-94.

Indicator	Tapestry (N= 167 enrolled)	SCY (N=188 completed 12-month follow-up)
Age	Average age at intake: =11.6 years; Range 4-18	Average age at intake =15.7 years; ( <i>SD</i> =1.3); Range=12-18
Gender	70% male	82% Male
Race	19.6% Caucasian, 77% African- American, 7.1% Hispanic, 6% multi- racial, 2% Other	30% Caucasian, 54% African-American, 5% Hispanic, 12% Other
Juvenile Justice	22.8% involved with juvenile justice via arrest, probation, or conviction. For youth 11 or older, 34.5% have been arrested, 28.6% have a history of probation, 9.5% had been sentenced to a secure facility.	100% of youth involved arrested; 46% of youth had domestic violence charges
Substance Abuse	36% of youth report using at least one harmful substance prior to intake, primarily alcohol, cigarettes and cannabis/hashish.	99% of you ( <i>n</i> =187) have at least one DSM-IV substance use disorder, primarily cannabis dependence (73%).
Mental Health	100% of youth have at least one DSM-IV mental disorder, primarily ADHD (49.1%), mood disorders (40.2%), and oppositional defiant disorder (25.9%).	117 youth (62%) have at least one DSM- IV mental disorder, primarily mood (48%), anxiety (22%), and disruptive behavior disorders (86%).
Education	47.7% of caretakers reported that youth had received special education classes	29% of youth reported receiving special education classes
Child and Family Services	Year one data $(n=167)$ 56.3% (77) of Tapestry youth have at least one allegation of maltreatment; physical abuse (34.1%), sexual abuse (19.2%), neglect (46.1%) or emotional abuse (4.2%). 38.9% (65/94) had officially indicated or substantiated maltreatment; 18% of Tapestry youth had a history of one or more out of home placements.	With available DCFS data ( <i>N</i> =123), 65% of youth had a documented history of at least one allegation of physical abuse (59%), sexual abuse (15%), neglect (63%), or emotional abuse (12%); 47% had officially indicated or substantiated maltreatment; 24% had a history of one or more out-of-home placements.

Table 1
Tapestry and SCY Youth Cross-System Involvement Using Multiple Self-Report and Official Data Sources

Dennis, M.L. 2003. Global Appraisal of Individual Needs (GAIN): Administration guide for the GAIN and related measures (Version 5). Retrieved from http://www.chestnut.org/li/gain/index.html.

# Poster 15 Evidence-Based Approaches to Treatment Evaluation: Lessons from Vermont

### Presenting: Laurel Omland Contributing: Melissa Bailey, Danielle Grisé, Deidra Jarvis, Dana Robson, James Seivwright & Masha Ivanova

# Introduction

Evidence-based practices are reaching medical center- and universitybased clinics, but their implementation in community mental health settings is still lagging (Drake et al., 2001). As a pilot project, the Child, Adolescent and Family Unit of the Vermont Department of Mental Health implemented systematic empirically-based procedures in its Intensive Services Program in 2004. The Intensive Services Program (ISP) serves children with acute psychological problems through a network of community mental health centers. The goals of the pilot project were two-fold:

First, the project was designed as a resource for front-line clinicians working with children in acute psychological distress to regularly provide them with standardized data about the children's emotional, behavioral, and social functioning.

Second, the project aimed to test the feasibility of a system-wide implementation of data-based approaches to program evaluation in community settings.

# Methodology

# Sample

Participants were 290 5- to 19-year-old children served through the ISP from December 2003 to December 2006. They included 114 girls and 176 boys, who were primarily of European-descent (90%). At the time of initial assessment, 213 children (73%) were in therapeutic foster care, 231 children (79%) did not live at home, and 148 children (51%) were in the state's custody

# Measures

*The Child Behavior Checklist* (CBCL; Achenbach & Rescorla, 2001) was administered to the children's primary caregivers at the time of the children's admission to the ISP and at 6- and 12-month follow-ups.

*The Family Information Form* was completed by case managers at the time of the children's admission and at the 6- and 12-month follow-ups. This assessment instrument was developed for the project to obtain demographic information about the child and family, and information about the child's treatment.

# Results

Repeated Measures Analyses of Variance (ANOVAs) were conducted for the CBCL scores for the children whose data were available at all three assessment periods (36 boys and 14 girls). For the total sample, the increase in the CBCL Total Competence score was statistically significant (F (2,46) = 3.60, p < .05) and the decrease in the CBCL Total Problems score approached statistical significance (F (2,100) = 3.01, p < .10). None of the observed changes over time were statistically significant for girls. For boys, the increase in the CBCL Total Competence score approached statistical significance (F (2,38) = 2.88, p < .10, and the decrease in the CBCL Total Problems score was statistically significant (F (2,72) = 3.2, p < .05). Detailed results of the Repeated Measures ANOVAs are available from the authors upon request.

CBCL Scale	Intake (N = 290)	6-Month Follow-up (N = 131)	12-Month Follow-up (N = 109)
Internalizing	67.57*	65.69*	64.65*
Externalizing	70.57*	68.51*	67.88*
Total Problems	71.29*	69.53*	68.82*
Anxious/Depressed	$69.01^{+}$	$67.24^{\dagger}$	$65.87^{\dagger}$
Withdrawn/Depressed	67.53 <sup>†</sup>	64.91	63.99
Somatic Complaints	60.92	59.58	58.70
Social Problems	$69.47^{\dagger}$	$68.17^{+}$	$67.66^{\dagger}$
Thought Problems	$68.56^{\dagger}$	$67.20^{\dagger}$	$65.16^{\dagger}$
Attention Problems	70.23*	$67.34^{\dagger}$	$68.05^{\dagger}$
Rule-Breaking Behavior	$68.23^{\dagger}$	$66.76^{+}$	$66.04^{\dagger}$
Aggressive Behavior	73.14*	70.42*	70.14*
Activities Competence	40.73	44.43	43.02

28.26\*

33.46

28.83\*

31.07<sup>†</sup>

33.52<sup>†</sup>

31.77\*

31.77

33.77\*

31.45\*

Table 1

**CBCL** Profiles of Children

at Intake, 6-Month and 12-Month Follow-ups

\* T-scores in the clinical range;

Social Competence

School Competence

Total Competence

<sup>†</sup> *t*-scores in the borderline-clinical range

## Conclusions

At intake, reports by primary caregivers indicated clinical levels of emotional, behavioral, and social problems for the children. This confirmed that the ISP is being utilized for children and families who are in acute psychological distress.

For the sample as a whole, a trend towards a reduction of emotional, behavioral, and social problems (as measured by the CBCL Total Problems score) was seen over time. The results also indicated a significant increase in the children's strengths and competencies over the same period, as indicated by the CBCL Total Competence score.

When the data were analyzed separately for boys and girls, a significant reduction in emotional, behavioral, and social problems (as measured by the CBCL Total Problems scores) was seen for boys. Also for boys, a trend toward an increase in strengths and competencies (as measured by the CBCL Total Competence scale) was found. None of the changes were found to be statistically significant for girls.

In addition to yielding important information about the children's psychological functioning, the project proved to be useful for the treating clinicians. Many clinicians reported that it was helpful to receive regular updates about the children's functioning because it continuously informed their work with the families. Though it takes only a few minutes to score the CBCL, several clinicians also commented that they were more open to this project because they were not asked to handle the data. The project's acceptance in community mental health settings was thus facilitated by the fact that project personnel took responsibility for entering and scoring the questionnaires.

The findings of this project should be interpreted in the context of its limitations, including a relatively small sample size, and use of a single informant and a single assessment method for assessment of children's emotional and behavioral functioning. In the future, we will incorporate reports from other informants and explore how family and treatment characteristics are related to treatment response. Despite these limitations, the results of this project are encouraging because they strongly support the feasibility of evidence-based procedures for treatment evaluation in community mental health settings.

# References

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# Poster 16

# Evidence-Base Practices: Outcome Measures, Cultural Considerations and Youth and Family Input

# Presenting: Cynthia Zubritsky

Contributing: Outcomes Roundtable for Children and Families Evidence-Based Practices Workgroup: Susanna Kramer, Derek Mazique, Carol Obrochta, Jeanne Rivard, J. Randy Koch, Ken Martinez, Robert Lieberman, Pat Baker, Terry Kramer & Karen Fortuna

# Introduction

The Evidence Based Practice Section of the Outcomes Roundtable for Children and Families reviewed outcome measures identified in the NRI *Children's Mental Health Implementation Resource Kit.* The outcome measures review was designed to: (1) identify common outcomes across programs; (2) identify outcomes that specifically addressed cultural issues; and (3) determine if youth or family input was pursued in the development and/or application of the outcome measures.

# **Methods**

The Resource Kit contains descriptions of sixteen interventions for the treatment of disruptive behavioral disorders in children. The interventions were compared across four categories: Levels of Evidence, Target Population, Racial/Ethnic Groups Studied, and Settings. Each program in the Levels of Evidence Category was scored according to NREPP, Blueprints, OJJDP and APA standards. Scores ranged from "Probably Efficacious" to "Model." Each of the programs targeted Preschool & Elementary-aged children, Middle School-aged children, and/or High School-aged children.

The programs were reviewed to identify the instruments that were used to measure outcomes. Twenty-five instruments were identified, some of which were only used in one program; most of which were used in multiple programs to measure outcomes. We then identified the instrument's top four outcome measures. The program descriptions were also reviewed to identify the assessment instruments that were used to measure outcomes. Twenty-five instruments were reviewed and four top outcome measures were identified.

Programs were also reviewed through a review of the literature to determine if the study populations were racially/ethically diverse by identifying if: (1) the treatment programs targeted issues of cultural diversity, specifically race and/or ethnicity, for outcome measurement; and (2) family members or youth had input into the design or application of the intervention or the identification of outcomes. Key references from this review are available from the Center for Mental Health Policy and Services Research's website: www.med.upenn.edu/cmhpsr/.

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# Findings

## **Common Outcomes**

Nineteen common outcomes were found across the sixteen programs; the four outcomes identified the most frequently were reduced disruptive behavior (identified the most often), improved family functioning, increased social competence, and improved academic performance.

**Reduced disruptive behavior:** 84% Targeted reducing disruptive behavior as an outcome.

*Improved family functioning:* 42% Targeted improved family function as an outcome.

*Increased social competence:* 32% Targeted increased social competence as an outcome.

*Improved academic performance:* 26% Targeted improved academic performance as an outcome.

Reduction in disruptive behavior is the most common outcome for interventions that target Disruptive Behavioral Disorders; however, surprisingly, there were three interventions that did not identify this as an outcome. Thirteen of the 19 interventions (68%) were delivered in a home-based setting, yet only 8 of the 19 interventions (42%) had "improved family functioning" as a specific outcome. Similarly, 12 of the 19 interventions (63%) had a school-based component, and yet only 6 of the 19 (32%) listed had "increased social competence" and 5 of the 19 (26%) had "improved academic performance" listed as outcomes.

Individual outcomes identified that were specific to only one program were as follows.

- Increased Emotional Awareness was specific to the Promoting Alternative Thinking Strategies (PATHS) program, which specifically addressed PATHS' "emotional literacy" concept.
- *Reduced Association with Antisocial Peers* was an outcome specific to the Brief Strategic Family Therapy program.
- *Reduced Sibling Modeling of Bad Behavior* was an outcome specific to Functional Family Therapy.
- *Improved Treatment by Teachers* was an outcome specific to The Incredible Years program.
- Maintained Long-term Outcomes was an outcome for the Helping the Non-Compliant Child, which could be used as a goal, rather than an outcome measure, of the program.

- *Decreased Psychiatric Symptoms* were listed an outcome specific to the Multi-systemic Therapy program, although specific psychiatric symptoms are not identified.
- Increased Compliance with Program was listed as an outcome specifically for the Multi-dimensional Treatment Foster Care program, although as with "Maintained Long-term Outcomes," it would seem that this might be a program goal, instead of an outcome measure.
- *Quicker Community Placement* was an outcome also specific to the Multi-dimensional Treatment Foster Care program which is consistent with a juvenile justice population.

### Inclusion of Race or Ethnicity in the Development of Outcomes

Most of the programs included both male and female children, although three of the programs targeted mostly or completely male populations. The majority of the interventions targeted at least two or more racial or ethnic backgrounds for the study population. Racial/ Ethnic groups included Caucasian, African American, Hispanic, Native American, Asian American and Other. Only one of the programs, Promoting Alternative Thinking Strategies, included all racial/ethnic groups in their study, and one program, Family Effectiveness Training, studied only Hispanic children. Programs also were in Clinic-based, School-based, Home-based settings, or a combination of the three.

# Conclusions

The rise of empirically based practices allow for greater implementation of intervention programs aimed at co-morbid conditions in a range of populations and ethnic groups. To date, many EBP's have not compared the efficacy of intervention programs in populations comprising different and mixed racial and ethnic groups. Many of these studies, however, have sample populations that do comprise ethnically mixed cohorts. These investigators imply that the positive outcomes reported apply to the entire sample, regardless of race. However, differences in program recruitment, retention and outcomes are not systematically analyzed across different cultural or racial groups. This lack of comparative data should drive further analysis to examine if differences exist between racial and ethnic populations within the intervention outcomes.

The nearly uniform lack of documentation of parent or child input in the formulation of treatment practices is troubling. Although such involvement may have occurred, there is no description provided as to how that input may have been obtained or feedback utilized in modifying the interventions to individualize the interventions. A few of the reviewed programs distribute satisfaction surveys at the culmination of the intervention, but otherwise, there seems to be little indication that that principal investigators are collaborating with treatment beneficiaries. There is also no evidence that the data from the satisfaction surveys are used to improve program outcomes. Further implementation of programs such as these should consider how treatment efficacy and community relations could be improved through increased youth and family input.

# Poster 17 Highlights of TEAMMATES': Wraparound Population, Outcomes, and Quality Initiatives

### Presenting: Karyn L. Dresser, Ontson Placide & Michael J. Rauso

TEAMMATES is operated by Star View Community Services (SVCS) which is an affiliate of Stars Behavioral Health Group (SBGH), President Mary Jane Gross, RN, MN. The SVCS Administrator is Kathy Millet, MA.

# Introduction

Los Angeles County Department of Children and Family Services (DCFS) combined with Stars Behavioral Health Group sponsor an assertive program of quality assurance and outcomes tracking for ongoing oversight of TEAMMATES (TMs) wraparound program. As the largest wraparound provider in Los Angeles, TEAMMATES has been intimately involved in the evolution of the county outcomes program and a major contributor to the county and SBHG databanks. TEAMMATES is distinguished by the scope and depth of the data available and applied to performance review and quality improvement (QI). Graduation from TEAMMATES is associated with a number of positive outcomes, a selection of which is summarized in this presentation. Recently, QI included increases in the reactivation rates of temporarily suspended clients, with improved odds of successfully graduating among those continuously served as well as among reactivated youth and families.

# Methodology

**Reporting Requirements.** LA DCFS and SBHG require reporting on TMs service population, utilization, and outcomes annually, as well as on a subset of select indicators quarterly. Data are presented and reviewed for quality improvement in Continuous Quality Improvement Councils (CQI) with stakeholder participation. The annual evaluation synthesizes information on: a) program features (i.e., vis a vis national wraparound model standards); b) children, youth and families (e.g., demographics, public agency involvements, permanency profiles, academic, mental health and community profiles), c) utilization activity (e.g., enrollments, suspensions, reactivations, and discharges, mental health services, flexible funding, length of services); and, d) outcomes (e.g., graduations vs disenrollments, safe at home/family like setting, attending and progressing in school/vocation; improving in health/mental health, out of trouble with the law, youth/family satisfaction, success stories, and cost savings).

*Measurements.* In the measurement toolkit are: SBHG Client Outcomes Report (COR), Child and Adolescent Functional Assessment Scale (CAFAS), Youth Satisfaction Survey (YSS), Youth Satisfaction Survey-Family (YSS-F), Wraparound Fidelity Index (WFI), and SBHG Total Quality Management (TQM) Probes (checklists) and Key Indicators (actuarial counts). Outcome measurements occur for every youth/family at enrollment, every six months through discharge; and, for QA on a quarterly (probes) or monthly (key indicators) basis.

**Analyses.** In the quality management program, generally, proportions of positively endorsed to non-compliant items on probes are tallied into bar graphs while actuarial counts of key indicators, controlled for census, are presented as line graphs with overtime comparisons. Descriptive statistics are used to tabulate demographics, diagnoses, and utilization. An alpha of p < .05 is used for all statistical tests including paired samples T-tests and Chi Square tests. ANOVA and Regression are used to understand what may be accounting for underlying variance or to predict contributors to change scores in relation to program participation. DCFS methodology is applied to cost savings analyses and involves estimating residential and institutional placement costs of graduating youth through their 18<sup>th</sup> birthday (were they to be in placement versus living in the community as signified by a successful graduation).

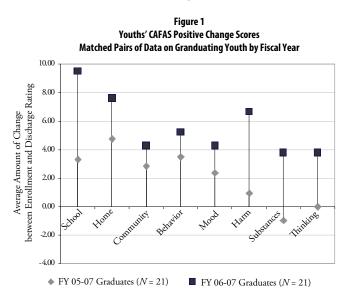
# Results

### **Those Served and Services Received**

During FY 06-07, TMs provided highly individualized and intensive community-based services, support and advocacy to 333 Los Angeles county youth and their families involved with multiple public agencies. The youth were ages 1 to 19 (average is 13.7 yrs) at enrollment, and 57% male. They were primarily African American (51%), Latino/Hispanic (39%), and Anglo American (6%). The youth have serious mental health problems including diagnosable conditions, impaired functioning, and very high-risk behaviors including aggression, alcohol and substance abuse, sexual misconduct, and self-harm behaviors. Wraparound teams delivered varied services (facilitation, resource development, behavioral coaching, mental health treatment, parenting education, family advocacy) and applied flexible funding (total of \$243,212.32; average of \$730/ per family over the year) in different combinations and intensity based upon the unique needs, strengths and existing resources of the youths and families. Roughly 78% of TMs youth/families participated in mental health services as part of their Plan of Care. On average they had 177 hrs of mental health services; primarily therapy and rehabilitation. Discharged youth were enrolled in the program for 469 days on average. There are variations to the above central tendencies, based on the LA Special Planning Areas (SPAs) of TMs which operates in three SPAs.

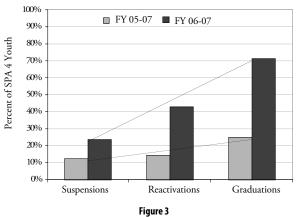
### **Selection of Outcomes**

There are three categories of case closure among the 131 discharges that occurred during FY 06-07: 50% graduations (successful completion); 21% disenrollments (unsuccessful) and 30% other closures (unrelated to success or lack of success such as client or family moved). Over the past three years, TMs increased the proportion of graduates to all case closures from roughly 30% to 40% to 50%. Considering only graduates and disenrollments, the percentages are 71% to 29%, respectively, which is a 2.4 to 1.0 ratio of graduations to disenrollments. This compares very well to the 2.0 to 1.0 "graduation to permanency" rate reported in a national study (Clark, Prange & Lee et al 1998). Importantly, the percentage of graduating youth who are able to maintain or step-down to a family living situation (parents, relatives, legal guardians or long term foster care) is 88% and compares very well to the 82% step-down rates found in national wraparound studies (Bruns, Wrast, et al, 2006). Graduating youth also experience significant functional improvements across multiple life domains as measured by the CAFAS, and the program saw an increase in average CAFAS change scores among FY 06-07 graduates compared to FY 05-06. Shown below are the change scores for the CAFAS domains.

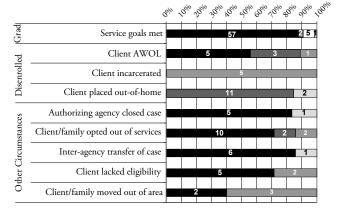


There is an estimated \$9,139,103 in cost savings among graduated youth whom would otherwise have continued in high-end services and out-of-home placements. The majority of youth and families were satisfied with TEAMMATES services (from 80% to 98%, depending on topic) and perceived positive results from the services (from 68% to 87%, depending on topic).

### Figure 2 Successful QI Effort to Reactivate and Graduate Prior Suspended Youth (Example in SPA 4)



Relationship between Reasons for Case Closure and Living Situations at the End of TEAMMATES Services N = 133 (100%) of FY 06-07 Closed Cases



■ Family Setting ■ Group Home □ Ind. Living ■ Juv. Facility □ Other Setting

## **Example of Quality Improvement**

In the FY 05-06 Annual Report, an important finding for quality improvement was the issue of temporary suspensions as these often culminate in premature termination before service goals are met. During FY 06-07, TMs was not able to impact suspension rates (which are determined by the county interagency placement committee), but with assertive interventions, they were able to increase the percentage of youth reactivated after a suspension to 40%, up from 32% the year prior. Overall, TMs also increased the odds of graduation among clients continuously served (never suspended) as well as among those reactivated after a suspension. The SPA 4 team was a leader in this regard and shown below are their successful year-to-year trends.

This year we are looking closely at the reasons for suspension and the relationship of the type of case closure (graduate, disenrolled, other) to the placement situation of the youth at the time of discharge. These data are under careful scrutiny for further quality improvement related to decreasing suspensions and increasing the eventual numbers of successful graduates.

## Conclusion

With DCFS and SBHG guidelines, TEAMMATES wraparound program has successfully implemented an ambitious program of quality management and outcomes tracking for continuous quality improvement which is beginning to pay off in terms the capacity to identify and systematically tackle challenges related to the success of clients and families in need of intensive wraparound services. In doing so, TMs offers the field with a good model of how promote the ongoing quality of human services and produce outcomes that meet contractual requirements that would be of great interest to providers, advocates, researchers, and quality assurance professionals alike.

# References

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- Bruns, Rast, Walker, Bosworth, & Peterson. (2006). Spreadsheets, service providers, and the statehouse: Using data and the wraparound process to reform systems for children and families. *American Journal of Community Psychology. 38*, 201-212.

# Poster 18 Multiple Approaches to Analyzing and Reporting CANS Data within Systems of Care

# Presenting: Vicki S. Effland & Ann E. Klein

### Introduction

Choices, Inc. is a private, nonprofit organization that manages systems of care for youth with serious emotional and behavioral challenges in Indianapolis, Indiana, Cincinnati, Ohio and Maryland. Choices blends system of care principles with managed care technology and is very much a data driven organization. Critical to the mission is an information system, The Clinical Manager (TCM), which allows for the integration of clinical, financial and outcomes data in a way that is meaningful for decision making and quality management across sites.

The Child and Adolescent Needs and Strengths (CANS) assessment (Lyons, 1999) has been embraced as a valuable assessment tool within systems of care. It easily translates into treatment plans, helps make level of care decisions and assists in the development of crisis plans. The CANS also has utility as an outcomes tool and is a critical part of a larger quality improvement framework referred to as Total Clinical Outcomes Management that helps organizations use clinical data to make operational decisions, drive system change and communicate outcomes in ways that are clear and meaningful to all stakeholders (Lyons, 2004).

This presentation will look at several different methods for analyzing and communicating outcomes data using the CANS. The advantages and limitations of each method when used alone or in combination will be discussed. Some preliminary results from systems of care in Indiana, Ohio and Maryland will also be presented to highlight how the CANS can be used to make decisions throughout an organization.

#### Methods

Youth who had a CANS completed at both enrollment and disenrollment and who had participated in Choices' services for at least six months were included in the analyses (n = 84 at Maryland Choices; n = 105 at the Dawn Project; n = 114 at Hamilton Choices). The majority of youth at each site were male, African American or Caucasian. The average age of the youth included in the analyses was 14.7 at Maryland Choices, 12.3 at the Dawn Project, and 13.8 at Hamilton Choices.

CANS items are rated using a four-point scale, with a 0 indicating *no* evidence of a need and a 3 indicating a severe need requiring intensive action. For strength items, a 0 indicates a cornerstone strength that can be used in treatment planning and a 3 identifies an area in which no strength has been identified. CANS data were analyzed to identify common strengths (e.g. adaptability and relationship permanence) and needs (e.g., social development, anger control and school behavior) across the three sites. Several strengths and needs unique to one or two of the sites were also identified.

Three primary methods of analysis were used to examine CANS data at the dimension level. First, a paired sample *t*-test was used to test for statistically significant changes in mean CANS dimension scores from enrollment to disenrollment. Second, change in the percent of items within each dimension identified as actionable needs (i.e., items rated as a 2 or a 3) were assessed. A complimentary analysis identified the percentage of actionable needs identified at enrollment that were met (i.e., rated as a 0 or 1) by the time of disenrollment. Finally, reliable change indices were computed to determine the percent of youth who had changes between enrollment and disenrollment in CANS dimension scores that were clinically meaningful (i.e., changes in functioning large enough to be observed by the people around the youth).

Similar methods of analysis were used to examine change in CANS scores at the item level. Specifically, change in mean item scores and the percent of youth with actionable needs were compared between enrollment and disenrollment. The percent of youth whose scores on each item reflected an improvement, no change, or decline in functioning were also calculated.

### Findings

The results revealed advantages and disadvantages to each method. For example, testing for statistically significant changes in mean dimension scores from enrollment to disenrollment is useful for academic and research audiences, but reveals little information that is meaningful to youth, families and clinicians. Comparing the percent of actionable needs at enrollment and disenrollment indicated that youth had considerably fewer needs after participation in the three systems, however, it was difficult to determine how many of the needs identified at enrollment had been met by disenrollment. The needs met analysis effectively addressed this challenge and resulted in information that is meaningful to youth, families and others familiar with the CANS. Unfortunately, comparison data from other communities using the CANS is not available using this analysis method, making interpretation of the results difficult. Finally, the reliable change indices provided information that was clinically meaningful and that could be compared to benchmarks established in other communities using the CANS.

# Conclusion

Used alone, the results of each method highlighted not only advantages and disadvantages of each method, but strengths and weaknesses of the three sites as well. When considered together, however, the methods of analysis used in this project revealed even more useful and meaningful information that can be used to improve services across Choices, Inc.'s projects. For example, differences in acculturation needs in the more demographically diverse Maryland sites has implications for training needs, issues around language barriers, and human resource questions. Other differences can be used to highlight areas of particular competency at a site or to make decisions around additional training needs. This type of analysis and the results allow for a richness of data that is invaluable in driving decisions that organizations need to make every day. The analyses described above are first steps in expanding the use of the CANS as an outcomes tool, but the applications are certainly much broader. The CANS has a great deal of flexibility for use within systems of care as both a clinical and an outcomes tool and as a framework for quality improvement.

# Poster 19 Organizational Culture in Systems of Care

Presenting: Jessica Mazza & Kathleen Ferreira Contributing: Sharon Hodges, Nathaniel Israel & Sharon Kukla-Acevedo

# Introduction

Organizational culture has been linked to positive outcomes in child-serving agencies (Glisson & Green, 2006; Hemmelgarn, Glisson, & James, 2006). Although isolated studies of organizational culture have been conducted in individual agencies (e.g., child welfare, juvenile justice), no study has examined the organizational culture of successful, holistic systems of care that involve multiple agencies such as child welfare, juvenile justice, mental health and education. This poster presentation presents findings of an ethnographic analysis of organizational culture in five long-standing systems of care as part of *Case Studies of System Implementation*.

# **Organizational Culture**

Learning about an organization's culture involves examining multiple representations of organizational life. According to Schein (2004), elements of organizational culture can be found in organizational *artifacts* such as language, logos, narratives, products, and style of dress. In addition, organizational culture can be evidenced in values related to shared stakeholder beliefs about what the organization does and does not stand for. Lastly, there are stakeholder *assumptions*, which guide the behavior and responses of the organization, on an intrinsic level. Organizational culture provides a guide used by a collective group of people (in this case, stakeholders in an organization) to respond to internal and external challenges (Schein, 2004).

Edgar Schein conceptualized organizational culture and its components into a frequently cited model of this complex phenomenon (Schein, 1985). Schein incorporated the constructs of artifacts, values, and assumptions into a simple model that demonstrates the layered nature of organizational culture. Artifacts lie on the surface and are the visible components of culture. Values, which produce artifacts, are in the middle and serve as a link between assumptions and artifacts. Values are created by the basic assumptions of the organization (Schein, 2004).

Imptions of the organization (Schein, 2004). An example of the model's application to a child-

serving agency might look like this: the language "family driven care" is an artifact of the value that families served by the agency should be in control of their own service treatment. This value is an assumption held by the organization—that treatment is most effective when driven by the family.

# Method

Interview and observation data collected from the first five system of care sites selected for participation in *Case Studies of System Implementation* were analyzed for themes related to organizational culture using the Atlas.ti qualitative software package (Scientific Software Development, 1997). The

# References

Lyons, J.S. (1999). The Child and Adolescent Needs and Strengths for children with mental health challenges. Winnetka, IL: Buddin Praed Foundation. Available online: www.buddinpraed.org.

analysis was conducted through the framework of Schein's model, with an emphasis on constructs of organizational culture. For each site, examples of artifacts, values, and assumptions were identified.



	1
Artifacts	Visible structures and processes
	<i>Examples:</i> Shared language Narratives
	Logos Artwork Physical structure Publications
Values	Shared values articulated through documentation, interview, and observation
Assumptions	Rules that guide behavior and decision making.

# **Results and Discussion**

Figure 1

Schein's Model

Artifacts

Values

Assumptions

Evidence of all three constructs was present in the data analyzed. Further, examples of artifacts, values, and assumptions were often similar across sites. Artifacts, the visible structures and processes of organizational culture, were the most prevalent examples of organizational culture and served as visible evidence of shared values and assumptions of the system. Several common themes emerged across sites, and are briefly mentioned below.

Language that reflected shared values was easily identified through interview transcripts. The language of blended funding can be used as an example to highlight the relationship of the three levels of organizational culture. This language was evident during several interviews at multiple sites. Stakeholders used the phrase "put your money on the table and your hands behind your backs" to describe blended or braided funding. This language reflected a shared value of trust in system partners. The assumption underlying this language is that trust is necessary to successfully engage stakeholders in blended funding.

Across all sites, the importance of co-location of staff was evident. Many interview respondents felt that the co-location of staff was a reflection of commitment to collaboration but was also a facilitator of collaboration. As one stakeholder noted, "co-location makes a huge difference. It is hard to be mad at somebody you know." The co-location of staff is evidence of a culture that values collaboration, as it helps to dismantle the physical barriers that agency partners are often faced within a system of care. The assumption underlying the value of collaboration is that bringing agency partners together in a physical location helps the system provide coordinated services and supports to children and families. Data also indicate that co-location operates under the assumption that physical proximity facilitates informal

Lyons, J.S. (2004). Redressing the Emperor: Improving Our Children's Public Mental health System. Westport, CT: Praeger Publishers.

communication among agency partners. One stakeholder stated, "I just think it's nice, actually, my office is right across from the [other agency] workers, and I can just yell out there, "What's going on?" This quote reflects the type of collaboration that co-location facilitates.

# Conclusion

The results of this secondary analysis suggest that systems of care, like other organizations, use cultural artifacts to both display and reinforce the values of the system. Similarities of artifacts across system of care sites may be linked to the fact that systems of care operate under shared values and principles, originally outlined by Stroul and Friedman (1986).

The model of organizational culture outlined by Schein can be applied to systems of care, but may not explain the more in-depth processes that occur between the different levels of culture. Future research could focus on expanded models that allow for an examination of the dynamic relationship between artifacts and values within complex systems, such as the organizational culture model offered by Hatch (see Hatch, 1993 for a detailed description of this model).

Organizational culture in systems of care deserves a focused examination, because of the collaboration of multiple agency partners. These system partners, often with different mandates and philosophies, come together to form a system with its own set of values and principles. Understanding how these can be communicated through the use of organizational artifacts may help affirm these values and principles.

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# Poster 20 Technological Solutions for Integrating and Managing Evaluation and Program Performance Data

Presenting: Ranilo Laygo, Susan Moss & Charmaine Higa-McMillan Contributing: Susan Nillias & Robert Lau

### Introduction

When embarking on a federally funded initiative, information on numerous metrics must be gathered for a variety of reasons. At the federal level the Guide for Applicants enumerates specific information that must be gathered and reported on at regular intervals. At the system level, metrics are necessary to measure program performance, continuous quality improvement efforts, and adherence to standards of practice. Finally, at the academic level, evaluation data are needed for basic research and the dissemination of findings.

Often times there is no theoretical basis integrating these various measures which makes data tracking and consolidation difficult. Even when such a basis exists, providers, administrators, and evaluators may be challenged with managing these data if they are in different electronic formats or physical locations.

Project Ho`omohala, a Center for Mental Health Services' funded system of care, faced many of these data collection challenges. The purpose of this poster is to provide the audience with information on innovative, technology-based solutions employed to integrate and streamline the various data collection tasks. Three solutions will be presented: creating a shared server space, adapting a state-wide MIS for project use, and developing proprietary software.

# Methodology

#### **Centralizing the Collection of Evaluation and Program Performance Data**

As noted above, Project Ho`omohala faced many data collections challenges. First, the administrative and evaluation staff, service providers,

youth support organization, and family support organization are all housed in separate locations throughout O`ahu. In addition, being family friendly, youth centered, and community based means that staff are working in the community, during unconventional hours. Compounding these issues is the fact that various personnel from each agency are responsible for providing data related to evaluation and program performance.

To increase interagency communication and streamline data collection efforts, the project needed secured space on a shared server that could be accessed remotely and provide information in real time. The solution employed was *iFolder*, a secured server space maintained by the University of Hawaii, Manoa, College of Education.

A "Project Status Workbook" resides within the project's *iFolder*. This Excel workbook contains several linked, hyperlinked, and formatted worksheets that were developed to ease cross-agency data collection. Key personnel at each partner agency are granted access to the *iFolder* and required to input certain fields within the workbook. For example, the Clinical Director enters the date a new participant enrolled in the program. The appearance of this data triggers the evaluation team to contact the youth and caregiver for interviews. When completed, the dates of the interviews are entered into the workbook, signaling the Transition Specialist that the youth is ready to begin their transition work.

This process ensures that staff are always informed as to any individual's status in the project. Furthermore, the built in formulas eases routine reporting tasks, while allowing for examinations of program performance, quality, and adherence to standards of practice.

### Using State-Level Information Systems for Evaluation and Sustainability

The State of Hawaii, Department of Health, Child and Adolescent Mental Health Division (CAMHD) maintains a very sophisticated information system (CAMHMIS). In addition to warehousing patient registration data, it has numerous modules that serve functions within the CAMHD system such as service procurement and authorization, Medicaid eligibility and claims, and quarterly outcomes measurement. It also allows contracted provider agencies to upload information through a HIPAA-compliant Health Transactions Server for billing and monthly therapeutic progress and practice data. Finally, CAMHMIS is capable of producing over 200 pre-defined reports which are used by CAMHD personnel for administrative and clinical decisions.

CAMHD is not only a portal of entry for Project Ho`omohala, it is also the funding agency. In the interest of sustainability, CAMHMIS will be adapted to track the service experience of Project Ho`omohala youth and the associated costs. Data from CAMHMIS will be combined with the information from the extensive national and local evaluations to make fiscal and system-wide decisions with regard to the delivery of transition services. The combined data will also allow for more precise outcome analyses.

### **Creating Tools for Conducting Local Evaluations**

As a regular part of practice, an assessment instrument called the *Progress Tracker* is completed by Transition Specialists on all youth they serve every 90 days. In an effort to integrate practice and evaluation, data from the Progress Tracker are analyzed as part of the local evaluation plan.

Although there was a paper and pencil version of the instrument, there was no way to collect Progress Tracker data *en masse*. A data entry tool was developed specifically for this purpose. The user interface was developed with Visual Studio and VB.NET programming languages and facilitates data entry into an Access database. The program is customized to include survey skip logic, complex validation rules, record retrieval/ editing, and data viewing/export. The extensive programming speeds data entry, ensures data integrity, and minimizes the amount of data cleaning required prior to analysis. Once entered, data may be exported as an Access, Excel, or comma-delimited file and imported into any statistical software for analysis.

# Findings

The implementation of *iFolder* and the Project Status Workbook has netted several positive outcomes. They have increased communication between agencies and the accuracy of the interagency data being collected. Also, the information gathered has been integrated into a quality assurance process aimed at increasing the number and quality of services received by the youth and families being served.

The CAMHMIS modifications needed to accommodate the current and post-co-operative agreement needs of Project Ho'omohala have been mapped out. A timetable for completing these modifications is currently underway.

Although there was an initial stage of debugging and a steep learning curve for end users, the interface has proven quite valuable. The initial dataset revealed very few logic errors resulting from data entry. Also, the export feature facilitated the import into and analysis of the data in SPSS.

### Conclusion

Organizations conducting community-based research and program evaluation will no doubt encounter data-collection challenges. An efficient use of currently available technology, however, can be used to ameliorate these situations.

# Poster 21 A Systematic Approach to Revising California's State-wide System for Performance Measurement

Presenting: Ryan Quist

# Introduction

An emphasis and value on client outcomes has a central role in Children's Systems of Care (U.S. Public Health Service, 2000). This emphasis on outcomes has been saturated throughout all levels of service delivery. The effectiveness of treatment is evaluated with individual clients' symptoms, functional abilities, life skills, resources, and supports. At the system level, outcomes inform regarding the bigger picture of how services impact functioning across a range of contexts and with various financial consequences to contexts such as schools, the legal system, social services, etc. Our growing understanding of mental health service outcomes have proven important in discussions with legislators and policy makers. Outcomes have also proven helpful in helping health professionals from other disciplines understand the roles and importance of mental health services.

In California, the Children's System of Care is experiencing an evolutionary leap forward, and outcomes have played an important role in advocating for new funds, resource allocation, program design, and selection of treatment strategies. In November, 2004, a community initiated proposal was approved by California's voters referred to as the Mental Health Services Act (MHSA), which allocated over \$250 million for community mental health services during its first year. In California, mental health services have a decentralized, county-based administration. Consistent with this administrative structure, counties were required to submit plans for the state to review and approve before funds were disbursed. In addition to generating funds, the proposition has explicit requirements for monitoring client outcomes. While evaluation has become a more standard component of policy, the actual framework for measuring outcomes was influenced by Governor Schwarzenegger and other high-level policy maker's preferences for a particular outcome framework.

#### Presentation Focus

This presentation describes the process used to develop a new data collection protocol for collecting state-wide outcomes data. The outcomes framework that resulted from this process represents a new perspective and methodology for data collection.

The legislation was most specific regarding outcomes for "Full-Service Partnership" (FSP) programs. At least 50% of the new funds must go to FSPs, which are defined with conceptual and programmatic characteristics very similar to wraparound programs and include specific requirements for maximum caseload ratios. The data collection protocol presented applies to clients served within these FSPs throughout the state.

# Methodology

### **Data Framework**

Based on the MHSA legislation, the starting point for designing the data protocol was a framework designed and implemented within a state-wide initiative focusing on serving mentally ill homeless adults. The framework had previously resulted in outcomes that Governor Schwarzenegger cited as having persuaded him to support funding for the homeless program. In essence, the data collection methodology is based on what is referred to as Key Event Tracking. At the time of program enrollment, the clinician collects baseline data regarding the client's current living circumstances and data regarding specific events that occurred over the prior 12 months. In the homeless program, examples of the types of data that would be collected were the number of days homeless, the number of days employed, the number of days in jail, etc. While in treatment, the clinician records anytime the client's circumstances change.

### Adaptation and Development of a New Data Collection Protocol

The California State Department of Mental Health assembled a Performance Measurement Advisory Committee (PMAC) to select data elements for FSP program data requirements (the author was among the selected membership). The PMAC's responsibilities were not limited to just children. There were four client populations for which each had separate data collection elements develop specific to each population's treatment needs. The four population groups were children (<16 years), transition age youth (16-25 years), adults (26-59 years), and older adults (60+ years). Overall, PMAC included representatives from county administrators, private providers, universities, consumers, family members, and parents. PMAC members were also selected to represent services provided to each of the four age groups and members were chosen to advocate and advise regarding issues relevant to culturally diverse populations. The full committee worked to make general decisions regarding all four age groups, then subcommittees were formed to draft the key data elements for each age group, and finally, the full committee reconvened to discuss, standardize, and finalize the data elements.

# **Findings**

The PMAC's finalized data collection protocol and data elements will be presented. Data elements were organized into 3 sets. First, baseline data were collected by the primary clinician regarding the client's circumstances at the time of program enrollment and the client's circumstances / life events over the past 12 months. Second, there was a set of data elements scheduled for the primary clinician to regularly monitor and update as they change. For example, if a child was suspended, the date of the suspension would be recorded as well as when the child began attending school again. Third, a final set of data elements were scheduled for the clinician to record every three months. For example, instead of recording data at every service contact, academic performance was scheduled to be checked on every three months.

Out of California's 58 counties, over 90% have begun implementing their FSP programs, and all FSP programs serving children are required to collect these data. Programs have only been providing services for a limited time, so besides baseline data collected at program enrollment, the availability of follow-up data is very limited. The presentation will present the most up-to-date data available.

# Conclusion

The data collection protocol for measuring children's mental health services throughout California were developed through a rather extensive process including feedback from a range of stakeholders. This is consistent with Children's System of Care values emphasizing family involvement and interagency collaboration (U.S. Public Health Service, 2000). While still requiring additional validation going forward, the data collection protocol resulting from the PMAC has face validity resulting from the extensive range of experts who contributed to the development and refinement of the included data elements.

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# Poster 22 Strength in Numbers: Using Concurrent Measurement to Guide Quality

### Presenting: Katherine E. Grimes, Kay Hodges & Brian Mullin

## Introduction

Too often, clinical work with children is never measured; treatment takes place behind closed doors, where even family members rarely know what happens, and ends with little or no "look back" to why it began and, at most, a vague sense of residual positive or negative relationship between the child and the treating adult. If programs make an effort to do an "evaluation" or investigate "outcomes," these activities mostly take place retrospectively, in a way that may inform overall program direction but is no longer useful for the individual children or families who were treated. As described in the Institute of Medicine's challenge: "Crossing the Quality Chasm" (IOM, 2001), there is now recognition of the urgent need to bring results monitoring and clinical decision-making closer together. In order to make sure that the services delivered to youth and families within organized systems-of-care are effective as possible, and that the individualized care planning teams are achieving their intended goals, measurement should ideally take place in "real time," with results made available to families and other team members, in order to actively guide treatment decisions (Pires & Grimes, 2006).

This presentation will review the performance measurement strategies of two different system-of-care settings, one in Boston and one in Michigan, each of which incorporates CAFAS scores (Hodges, Xue & Wotring, 2004) and other clinical information, in providing feedback which drives system quality management and offers the opportunity to directly impact individual care delivery.

## Methodology

The Mental Health Services Program for Youth (MHSPY), serves youth between the ages of 3-19 years who live in five communities surrounding Boston, N = 305 (Grimes & Mullin, 2006). Over half of the study sample are children of color: 46 % are white, 30% are African-American, 21% Latino, 2% Asian, 1% Other. MHSPY relies on the following measurement grid for ongoing quality management (see Table 1).

### Instruments

- CAFAS: Child and Adolescent Functional Assessment Scale (Hodges, 1998).
- 2. CBCL: Child Behavior Check List (Achenbach, 1991).
- 3. YSR: Youth Self-Report (Achenbach, 1991).

Table 1 Massachusetts Mental Health Services Program for Youth Evaluation Methodology

Outcome	Parameter	Source	Measure	Frequency
I. Level of	Home	Caregiver	CAFAS <sup>1</sup>	Baseline; Every 6 Months; Disenrollment
Functioning		Caregiver	CBCL <sup>2</sup>	Baseline; Every 6 Months; Disenrollment
		Child	YSR <sup>3</sup>	Baseline; Every 6 Months; Disenrollment
		Caregiver	FCBS <sup>4</sup>	Baseline; Every 6 Months; Disenrollment
	School	Teacher or Counselor	CAFAS	Baseline; Every 6 Months; Disenrollment
		Teacher or Counselor	TRF <sup>5</sup>	Baseline; Every 6 Months; Disenrollment
		Office of Special Education	IEP <sup>6</sup> (if applicable)	Baseline; Upon Revision
	Community	Caregiver	CAFAS	Baseline; Every 6 Months; Disenrollment
	Mental Health	Care Manager	PAT <sup>7</sup> ,CGAS <sup>8</sup>	Baseline; Every 6 Months; Disenrollment
		Care Manager	CAFAS	Baseline; Every 6 Months; Disenrollment
	Physical Health	Pediatrician	Medical Record	Baseline
II. Service Utilization	Referring Agency	Special Education via 5 participating school districts, Child Welfare (Dept. of Social Services), Mental Health (Dept. of Mental Health), Juvenile Justice (Dept. of Youth Services)	IEP, Service Plan, Treatment Plan, Court Records	Baseline
	Mental Health	Neighborhood Health Plan, MHSPY Clinical Records	Utilization Reports	Baseline; Monthly; Disenrollment
	Wraparound	MHSPY Clinical Records	Authorization Data; Chart Notes	Baseline; Monthly; Disenrollment
	Physical Health	Neighborhood Health Plan, Primary Care Physician	Medical Records; Claims; Authorizations	Baseline; Monthly; Disenrollment
III. Cost	Capitated Claims	Neighborhood Health Plan	Financial Reports	Baseline; Monthly; Disenrollment
	Fee For Service Claims	Neighborhood Health Plan	Claims	Monthly
	Non-MHSPY Services	Referring Agencies	Agency Data	Baseline
IV. Satisfaction	Home	Youth, Caregiver	Questionnaire	Disenrollment
	Stakeholder	Referring Agency	Questionnaire	Disenrollment

1. CAFAS: Child and Adolescent Functional Assessment Scale (Hodges, 1998).

2. CBCL: Child Behavior Check List (Achenbach, 1991).

3. YSR: Youth Self-Report (Achenbach, 1991).

4. FCBS Family Centered Behavior Scale (Allen, Petr, & Brown, 1995).

4. FCBS: Family Centered Behavior Scale (Allen, Petr, & Brown, 1995).

- 5. TRF: Teacher Rating Form (Achenbach, 1991).
- 6. IEP: Individualized Education Program
- 7. PAT: Mental Health Patient Assessment Tool (Grimes, 1990).
- 8. CGAS: Children's Global Assessment Scale (Shaffer, Gould, Brasic, Ambrosini, Fisher, Bird, Aluwahlia, 1983).

The state of Michigan's child behavioral health system uses a variety of specialized analyses based on CAFAS change scores, as well as level of care indicators, to foster quality improvement across multiple sites within the state.

# **Findings**

Standardized measurement within the MHSPY program show improvement on CAFAS consistent with clinical change (27%), with Self-Harm scores improving by 48%. All three Achenbach instruments (CBCL, YSR, TRF) all show improvement, as does the CGAS. Clinical improvement appears to go hand in hand with measures of fidelity to system of care principles (FCBS) and family satisfaction (86%). MHSPY trends will be compared to those found within the state of Michigan and linked to similarities and differences in performance management approach.

## Conclusion

Overall effectiveness of systems-of-care can be enhanced through organized performance management efforts that employ quality improvement feedback loops and the sharing of "real-time" data with 5. TRF: Teacher Rating Form (Achenbach, 1991).

6. IEP: Individualized Education Program

7. PAT: Mental Health Patient Assessment Tool (Grimes, 1990).

8. CGAS: Children's Global Assessment Scale (Shaffer, Gould, Brasic, Ambrosini, Fisher, Bird, Aluwahlia, 1983).

participants on the child's care planning team. While strategies will vary by setting, some information sharing techniques appear to be consistent valuable in improving quality of care.

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# Poster 23 Building a "Neighborhood" System of Care in the South Bronx

Presenting: Neil Pessin & Jessica Fear Contributing: David Lindy

# Introduction

The concept of a system of care has been talked about since the early 1980s. Yet true implementation of such a system has been a struggle for most organizations, and there have been many attempts to organize and integrate services in various regions of the United States. In 2004 the Visiting Nurse Service of New York's Community Mental Health Services division (VNS CMHS) was invited by the New York State Office of Mental Health (OMH) to take control of the operations of one such project, a Federal SAMSHA grant implemented in a neighborhood called Mott Haven in the Bronx. This poster will illustrate how VNS CMHS has, over the last 4 years, pieced together the necessary elements to provide integrated care for the poor, chronically underserved South Bronx families. Additionally, we will highlight that, in the absence of a formal integration of providing a "neighborhood" system of care as a partial substitute for an organized system of care.

# Methodology

The families in the Mott Haven and the other surrounding neighborhoods of the Bronx face a multitude of social and economic challenges. In 2003, the New York City Department of Health & Mental Hygiene issued a series of Community Health Profiles; including one covering Mott Haven and Hunts Point, Bronx. Approximately 50% of families with children live below the poverty level, and its population of 122,875 includes more people younger than the city's average age (35% vs. 24%), more Latino residents (73% vs. 27%), and general health as rated in the bottom 10 of 41 rated neighborhoods. Out of 42 neighborhoods rated on their access to medical care, Mott Haven ranks nearly at the bottom. Compared to city averages, there are higher rates of drug/alcohol abuse, mental illness, and HIV/AIDS in resident adults, 10% of whom report "serious emotional disturbance." The Citizen's Committee for Children of New York has additionally evaluated all of New York City's community districts, and has established that the children and adolescents in Mott Haven and the surrounding community districts are comparatively at the highest risk in categories such as poor school attendance and school performance, and rates of juvenile delinquency, child abuse and crime.

While the need for a coordinated system of care for this population was irrefutable, the delivery of such a system proved to be more challenging than first anticipated. The original incorporated organization that received the Mott Haven SAMSHA grant in 1996 was a community service called Families Reaching in New Directions (FRIENDS). They initially subcontracted with VNS CMHS to provide a Mobile Community Support team to the families in the community. This team offered in-home treatment, working with emotionally disturbed and psychiatrically at risk children and their families. Over time, OMH evaluated that the FRIENDS program had evolved into more of a drop in community center, lacking an organized assessment and treatment planning function and was without the ability to provide the children and families of the community a truly integrated mental health service that the system of care concept envisioned. In 2004, the state took control of the funding, and transferred the full operation of the programming to VNS CMHS, with the goal of establishing a more compelling mental health service system for Mott Haven families.

# Findings

Through a detailed series of planning and implementation processes over the course of several months, we redesigned and integrated care to strengthen the delivery of clinical services to families. We initially evaluated the complex needs of the families at FRIENDS to determine the appropriate method of service delivery. From that, we established a three-pronged approach to care, creating a formal assessment phase, a treatment phase, and a step-down supportive phase to the program. During assessment, families receive a full psychiatric assessment, medication management, and the initiation of linkages to additional familial supports as needed. The treatment phase offers concrete skills building for parents and children, along with case management, advocacy and linkage, consultation to community providers and schools, and crisis intervention as needed. The step-down Family Support component of the program offers an extended length of stay to reinforce the change established during the treatment phase, and secure transitional linkage to longer-term care and other supports. With those enhancements established to the primary service, we added two school-based clinical triage and treatment programs for elementary and intermediate schools, which provide multidisciplinary clinical expertise in the management of psychiatrically disturbed youth in the school setting. We then folded a fatherhood program into the array of services, designed to engage young, historically absent fathers in their child's care. The latest component of this neighborhood system of care will be the child and adolescent mental health clinic that has just been built on the premises. Embedded into the existing programming, and offering the unique ability to provide home visits as part of treatment, this clinic will fill an existing gap of available, affordable mental health clinic services in the neighborhood. It will additionally round out the care for the families we serve, allowing FRIENDS to offer a full array of services to meet the needs of the families within the community. Families enrolled at FRIENDS can receive any number of integrated, coordinated services without having to be referred to another organization or system for their care.

# Conclusion

Since taking control of the FRIENDS operation in 2004, we have learned many lessons about what works and what doesn't when trying to establish an integrated mental health system in a grossly underserved community. We have attempted to build a neighborhood-based clinical service and coordinate thorough care in a city where cooperation from different governmental organizations is often difficult to come by. With a careful eye toward thoroughly assessing the needs of the families we serve, we have developed a neighborhood system of care that offers a wide array of services aimed at meeting the complicated mental health and psychosocial needs of the children and families in the South Bronx.

# Poster 24 Examining the Role of a Statewide Family-Run Organization Utilizing a Case Study Approach and Network Analyses

Katherine J. Lazear, Lisa Conlan, Cathy Ciano, Jason Beckstead & Mary Evans

# Introduction

While a growing body of literature supports family participation and the positive impact that family involvement has had on child outcomes at the service delivery level (Koroloff, et. al, 1996; Stroul & Friedman, 1986;), there are few studies that have systematically examined how family voice is created within systems of care—not just at the service delivery level, but at the management and policy levels as well,—and, how a strong family organization can ensure a strong family voice at all of these levels to contribute to effective and integrated systems of care (Armstrong, et. al, 2000; Pires & Wood, 2007). The study is designed to examine these issues utilizing a case study design (Yin, 1989; Patton, 1990; Koroloff & Briggs, 2006) and network analysis (Beckstead, et.al., 1998; Borgatti, et. al, 1993).

The Parent Support Network (PSN) of Rhode Island was nominated to participate in the study by a committee from the National Advisory Group for the Research and Training Center's Study 6: Examining the Role of Family Organizations in Developing Family Voice in Systems of Care. The nomination was based on certain organizational characteristics (i.e., length of time as a family organization, an organization with a statewide focus, budget, membership/numbers of families served). PSN began as a family organization within the Mental Health Association in the early '80s, created as a resource for parents and their children who face serious emotional, behavioral and mental health challenges. They obtained their 501(c3) in 1986, after applying for and receiving a grant from the Center for Mental Health Services Statewide Family Network. PSN is a currently a chapter of the National Federation of Families for Children's Mental Health. PSN has a budget of just under \$700,000, over twice as much as was funded in 2000. Eighty-nine percent of PSN's budget comes from the Rhode Island Department of Children, Youth and Families. Other sources of funding include a Statewide Family Network Grant (\$70,000), Rhode Island Department of Education/IDEA (\$35,000).

# Method

Data were collected about the Parent Support Network (PSN) of Rhode Island in three phases. Phase one consisted of PSN's participation in the National Survey of Family-Run Organizations. Phase two included a site visit by two study team members. During the site visit, interviews were conducted with individuals in organizations that were identified by family organization staff as system of care partners. These organizations included family service centers, Department of Children, Youth and Families, and other provider agencies serving children and families. In addition, a focus group was conducted with family members, family organization staff, and board members. For Phase three, following the visit, the identified partners in the system of care were asked to complete a brief survey as part of a network analysis. The network analysis focuses on organizational links and relationships useful for improving our understanding of how family organizations and systems of care interact with and impact each other. Documents provided by PSN were also reviewed and used to triangulate the data.

# Results

Network analysis data is currently being analyzed utilizing UCINET VI software. It is anticipated that the results of this study will provide information regarding:

- the factors that contribute to the development and sustainability of an effective family organization;
- how strong family organizations are linked to effective and integrated systems of care;
- the structures, process, and relationships of family organizations in systems of care;
- methods that family organizations can use to help bring about system transformation;
- information on the roles of family organizations in developing and implementing effective and integrated systems of care for children and adolescents with serious emotional disorders and their families; and,
- a description of the actions taken by systems of care, and by family organizations as they contribute to a strong family voice.

The study will also test the premises and factors enumerated earlier. The study may inform policy makers and administrators how to "do business differently" to enhance the assistance to communities at all stages of development of their systems of care and to better understand what is needed for the family organization to be effective and sustained in their role. An important aspect of the study is to provide meaningful feedback to the participating communities and organizations, and provide training to the individuals and organizations that are providing technical assistance and consultation so that they can, in partnership with the communities, examine ways to promote connectivity and improve the effectiveness of the group.

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# Poster 25 Utilizing an Accountability Database to Assess the Impact of Interagency Collaboration

Presenting: Katherine J. Lazear, Jeana Matos & Judy Everett

# Introduction

The needs of students with severe emotional disturbance are complex, often requiring the services and supports of a number of child-serving agencies. However, services for children with severe emotional disturbance have traditionally been delivered categorically, often resulting in costly and ineffective interventions. For example, Wagner, et. al (2006) found that a relatively low percentage of students with emotional disturbance receive mental health or behavioral health services despite the availability of an infrastructure in school to support these services. Building an effective system of care requires collaboration among various child serving entities, community supports, and families (Stroul & Friedman, 1986).

While collaboration is the foundation for building systems of care for children and their families who depend on multiple agencies, formal services, community supports, and various funding sources, collaboration does not simply happen (Pires, 2002). Building and maintaining trust, agreeing on core values and common goals, developing common language, and shared accountability are important principles to guide collaboration (Stark, 1999). Armstrong & Evans (2006) have suggested that successful structures for promoting collaboration may include tiered coordinating entities, a single agency inclusive of several child-serving systems, or a Children's Cabinet, all with strong sustained leadership. Hodges, et. al. (1998) suggest that structural elements, such as crossagency governance, formal collaborative groups, interagency agreements, and commitment to group decision-making are needed to facilitate interagency collaboration. The Multiagency Service Network for Students with Severe Emotional Disturbance (SEDNET) incorporates all these strategic approaches to collaboration.

The Florida Department of Education funds 18 SEDNET regions covering Florida's 67 school districts. As regional networks of the major child serving and community-based service providers, the major objective of SEDNET is to develop and enhance interagency collaboration, This paper reflects the impact of SEDNET's interagency collaborations and linkages on the development of policy and interagency agreements, grants and funding, training, direct services, and student outcomes (Lazear & Matos, 2007).

# Methodology

In an effort to demonstrate and monitor the efficacy of SEDNET, each district gathers and reports information concerning student outcomes and collaboration in an accountability database. This database was designed and is maintained by the University of South Florida, Louis de la Parte Florida Mental Health Institute (FMHI). FMHI collects this data from the SEDNET districts on a quarterly basis to perform data analysis and reports for the Florida Department of Education.

The database includes information concerning five major categories: Direct Services, Grants and Funding, Interagency Collaborations and Linkages, Policies and Agreements, and Training Services. Each SEDNET district in Florida sends a database file to FMHI quarterly with aggregate totals for each of the major categories listed above. These files are merged to create a comprehensive statewide view of SEDNET activities. Data are reviewed for errors and anomalies and updated as needed. A comprehensive data analysis is performed to determine the number and type of activities performed, and trends are analyzed. The time period included in this report is July 1, 2006 through June 30, 2007. The purpose of the database and resulting report is to provide a summary of activities for the SEDNET districts for accountability and to provide recommendations based on the analysis of these activities.

# **Findings and Conclusions**

The major findings illustrate the vital role that an entity charged with facilitating interagency collaboration and agreements can play in providing services and supports to Florida's students with special education needs or who are at-risk of serious behavioral and/or emotional disorders.

The data reflect an increase in the quality and number of services for students provided through a growing number of SEDNET involved collaboratives. A total of 846 interagency groups and projects were reported. This is an increase of 611 collaboratives from SY 05-06.1 Twenty-one percent of the collaborations were new project collaboration initiatives and 79% were continuing collaborations. Ninety-seven percent include participation from education, which is to be expected; 79% from mental health; 63% from child welfare; and, 58% from juvenile justice. Other significant system involvement comes from substance abuse (47%) and from family advocacy groups (43%). Represented to a lesser extent are local government (32%), health (28%), employment /vocational (26%), and developmental disabilities (22%). There is minimal interagency collaboration and linkage from children's services councils (11%), and private foundations and charities (10%). It is important to note, however, that only some regions have formal children's services councils or similar entities.<sup>2</sup> Child Welfare, Developmental Disabilities, Family Advocacy Groups, and Health had an increase of 5% or more from SY 05-06 to SY 06-07 in their involvement in SEDNET interagency collaboration and linkages.

The types of outcomes reported for interagency collaborations and linkages varied. Improved outcomes for children and youth (99%), increase in service options (66%), and improved service access (65%) were the top three outcomes reported for SY 06-07. Outcomes related to improved consumer satisfaction; improved cultural competence; policy creation; increase in service options; improved stakeholder satisfaction; improved academics; improved service access; effective allocation of limited service resources; and, seamless integration of services increased by 5% or more. There was no decrease in any type of outcome reported.

# Other findings include:

- Health and family advocacy groups had the greatest increase in involvement in policy and interagency agreements.
- Approximately 107,601 students (one-fifth of the total Exceptional Student Education (ESE) student population in Florida)<sup>3</sup> were served by SEDNET related services. Approximately 78,604 students received education services (72% percent received Positive Behavioral Support services); 21,332 received mental health services; 3,336 received transition services; 3,711 received community services; and 618 received substance abuse services.

1 The dramatic increase in the total of collaboratives may be explained by the under-reporting of existing collaboratives last year, but are included in this year's report.

- 2 Children's services councils are created by separate taxing authorities and exist in only some Florida counties.
- 3 Source: Bureau of Exceptional Education and Student Service which identifies 5,547 SED population and 508,043 ESE population

- Seventy-one percent of student outcomes indicated an improvement overall (In-School Suspension, Out-of-School Suspension, Attendance, Drop-Out Rate, Retention, Graduation Rate, FCAT Score, and FCAT Gain Score), which represents an increase of 9% from SY 05-06.
- SEDNET provided support, facilitation, review, and implementation assistance in policy and agreements.

These findings represent a state-wide perspective of the work of SEDNET and their regional partners. Further analysis finds that state-wide and individual SEDNET regional data highlight the link between number of interagency collaborations and linkages, range of system involvement, and range and number of direct services provided. While the system partners that are most heavily involved in interagency agreements are the major child-serving agencies, the systems with the greatest increase in involvement were Health and family advocacy groups. Through family-run organizations, such as school-based parent groups and the Federation of Families for Children's Mental Health, SEDNET should continue to enhance partnership with families and youth. SEDNET can continue to provide opportunities to those agencies to work collaboratively to provide a multidisciplinary and multi-agency approach to intervention that is focused on students and their families.

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# Poster 26 Medication Use Among Children Entering the Albany County, NY System of Care

## Presenting: LuAnn L. McCormick & Kenneth B. Robin

# Introduction

The use of medication to treat children's mental health disorders has increased over the past several decades (Jensen, Hoagwood, and Petti, 1996; Olfson et al., 2002). There is debate in the field whether this reflects a true increase in the prevalence of childhood conditions requiring medication or is an increase in the number of prescriptions written for children. Concerns also abound regarding over-medicating children and prescribing medications without sufficient research trials on children.

Our preliminary analysis presents the prevalence of medication use by children enrolled in the Albany County, NY system of care, and determines relationships between medication use and age, gender, ethnicity, and diagnosis. We are also interested in determining whether medications are used as part of an overall coordinated service plan. Relationships between types of medications and service use are explored. Finally, rates of medication use at follow up intervals are presented as a comparison to suggest initial system impacts.

The purpose of this poster presentation is to engage fellow researchers in an in-depth discussion of our preliminary analyses.

## Methodology

Funded in 2004, the Albany County system of care is in its third year of data collection as part of the SAMHSA System of Care national descriptive and longitudinal evaluation. Descriptive information is collected on every youth who presents for an intake into the system of care. Parents or other caregivers of youth enrolled in the system of care are eligible for the longitudinal outcome study. Youth age 11-21 are also eligible to participate with caregiver permission. In-person, computer-assisted individual interviews are conducted with adult caregivers and youth every six months up to 36 months.

Data for this analysis are derived from intake forms and baseline and follow-up caregiver interviews. The Enrollment and Demographic Information Form (EDIF; Macro International, April 2007) is completed during intake and provides demographic information as well as presenting problems and diagnoses. The Caregiver Information Questionnaire (CIQ; Macro International, August 2007) is administered to adult caregivers during baseline and all follow-up interviews. Caregivers are asked whether their child has taken medications for his/her emotional and behavioral problems during the preceding 6 months, and if so, to specify the name of the medication(s). The Multi-Sector Services Contacts (MSSC; Macro International, August 2007) is administered starting at the 6-month follow-up interview and collects detailed information on services received.

The current dataset contains 161 baselines, 87 6-month follow-ups, and 51 12-month follow-ups.<sup>1</sup> Table 1 presents a demographic profile of youth enrolled in the longitudinal evaluation.

<sup>1</sup> Enrollment is continuing. By the time of presentation, we anticipate 200 baselines, 125 6-month follow-ups, and 80 12-month follow-ups. These *Ns* will support significance testing.

# **Findings**

Overall, nearly twothirds (N=100, 64.1%) of youth enrolled in the longitudinal evaluation are taking medications at baseline. This significantly exceeds the rate of 47.2% medication use found in the national evaluation (Holden & Santiago, 2001). In our sample, medication use is slightly higher (71%) among children who have an Axis I or II DSM-IV diagnosis. While 75% of boys receive medication, the rate for girls is considerably lower (55%). No child under age 5 is taking medication. Elementary age children (5-12) receive medication as frequently as youth age 13-21 (69% and

Demographics		
Population	%	
Gender (N=161)		
Male	57.1%	
Female	42.9%	
Average Age (N=161)	11.3	
Age Group (N=161)		
Birth to 3 years	0.6%	
4 to 6 years	13.0%	
7 to 11 years	34.2%	
12 to 14 years	28.6%	
15 to 18 years	23.6%	
19 to 21 years	0.0%	
Race*(N=161)		
Black or African American	31.7%	
White	64.0%	
Other	3.7%	
Of Hispanic Origin	8.1%	

Tahla 1

\* Because individuals can claim more than one racial background, percentages for race may sum to more than 100%. Hispanic origin is a separate variable from race.

67%, respectively). The most frequently prescribed medication types are: antipsychotics: Risperdol (17%), Abilify (13%), and Seroquel (13%); and antihyperactivity/stimulants: Catapres (12%) and Concerta (11%). Almost no child is taking more than one medication within a single type.

We will be analyzing follow-up data and will present trends. In consultation with our medications advisory group, we will also be establishing meaningful categories of medications and correlating them with diagnoses, gender, race, and age. Using the MSSC, we will analyze the service constellation of children taking medications and determine initial system impacts on child functioning.

# Conclusion

Our analyses are preliminary; conclusive statements are premature. We are proposing this poster presentation in order to engage fellow researchers in an in-depth discussion of our initial findings. Future analyses will examine caregiver and child understanding of and attitudes towards medication use.

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# Poster 27 Service Utilization of Children with Mood Disorders: Effects of a Multi-Family Psychoeducation Program

Presenting: Amy N. Mendenhall Contributing: Theresa J. Early & Mary A. Fristad

# Introduction

Mood disorders in children can cause severe impairment in development, home life, school work, and social relationships, but with treatment, these disorders can be successfully managed to diminish the impact on functioning. However, many children in the United States do not receive appropriate services to meet their needs. To increase and improve utilization of services in children's mental health, research must be done on interventions that seek to impact mental health outcomes through service utilization.

Psychoeducation is an intervention that seeks to empower children and their families by educating them about mental illness and treatment and by teaching them symptom management, communication, and problem-solving skills (Lofthouse & Fristad, 2004). Studies of psychoeducation with children with mood disorders have shown improvement in symptoms (Fristad, Gavazzi, & Mackinaw-Koons, 2003; Goldberg-Arnold & Fristad, 2003; Miklowitz et al, 2004; Pavuluri et al, 2004), but the impact on service utilization has been minimally studied (Fristad, Goldberg-Arnold, & Gavazzi, 2004; Fristad, 2006).

This study sought to investigate the impact psychoeducation has on service utilization and ultimately mood symptom severity in children diagnosed with mood disorders. In particular, the author hypothesized parents' knowledge about mood disorders, parents' knowledge about treatment, and parents' perception of their children's need for treatment would mediate the relationship between participation in psychoeducation and service utilization. For these explorations, service utilization was operationalized as number of services utilized, parents' perception of effectiveness of services, and clinician-rated quality of services.

# Methodology

The study conducted secondary data analyses of data from the Multi-Family Psychoeducation Group study (MFPG). The MFPG study was a controlled, randomized study of efficacy of multi-family psychoeducation groups in reducing mood severity in 165 children aged 8 to 12 with mood disorders. The children and their families were randomly assigned to either immediate participation in the psychoeducational intervention or to a one-year waitlist control group. A majority of the sample were male (73%) and Caucasian (91%). Approximately 70% of the children had a bipolar disorder spectrum diagnosis, and approximately 30% had a depressive disorder. All of the children had comorbid mental health diagnoses including comorbid behavior disorder (97%) and comorbid anxiety disorder (68%). Data were collected from participants at a baseline interview, a 6 month follow-up, and a 12 month follow-up.

For the current study, linear mixed effects modeling was used to investigate the mediating impact of parent knowledge and perceived need on the relationship between psychoeducation, service utilization, and mood symptom severity. The model was tested in four steps: (1) relationship between MFPG group membership and service utilization over time; (2) relationship between MFPG group membership and the mediator variables (knowledge about mood disorders, knowledge about treatment, and perceived need for treatment) over time; (3) relationship between the significant mediator variables and service utilization; and (4) relationship between service utilization and mood disorder severity. When a step was found to not be significant, analyses of that model stopped and did not continue to later steps.

# Findings

This model was significant for the variable quality of services but not for number of services or perceived effectiveness of services. Results from the steps testing the quality model were: (1) Participation in MFPG did significantly increase quality of services utilized (F = 21.837, p < .001). (2) Further analyses revealed this relationship was mediated by knowledge about mood disorders and treatment, but not perceived need for care. Participation in MFPG was significantly related to changes in parent knowledge and beliefs about mental illness (F = 5.862, p = .016) and treatment for mental illness (F = 4.171, p = .042), but was not significantly related to perceived need (F = .275, p = .600). (3) High levels of knowledge about mood disorders (F = 5.177, p = .023) and treatment (F = 51.907, p < .001) were related to high levels of quality service. Consequently, higher quality of services utilized was found to relate to lower mood symptom severity (F = 16.71, p < .001).

# Conclusion

Based on these analyses, MFPG does appear to impact quality of services used through the mediator variables of knowledge of mood disorder and treatment, and then consequently, quality of services impacted children's severity of mood symptoms. MFPG appears to be an educational intervention that helps parents become better consumers of the mental health system, leading them to access higher quality services, which leads to improvement in children's symptom severity.

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# Poster 28 Predictors of Youth and Family Satisfaction with Outcomes of Mental Health Services

Presenting: Sudha Mehta, Kristina Mycek, Eric Frimpong & Marleen Radigan

# Introduction

During the past two decades, the roles of family and youth consumers in shaping the mental health service system have expanded. Recent research demonstrated potentially positive impact of incorporating family perspectives and support strategies into service delivery (Hoagwood, 2005). Consumer satisfaction surveys have been used nationally to gain feedback on the quality of public mental health services. In New York State (NYS), youth and families perceptions of mental health services is essential to improvement of public mental services.

NYS satisfaction surveys Family Assessment of Care (FACS) and the Youth Assessment of Care (YACS) were based on the Center for Mental Health Services (CMHS) satisfaction surveys (Brunk, Koch, & McCall, 2000). However, NYS surveys were developed and piloted with significant family, youth, advocate and provider input. OMH surveys include: global satisfaction and seven content areas: appropriateness, outcome, cultural sensitivity, access, participation, medication, and social connectedness (family only).

Initial analysis of OMH survey results revealed that family and youth perspectives on satisfaction with outcomes differed: families tended to be less satisfied compared to youth. Although the Cronbachs alpha for both the youth (.77) and family outcome (.88) domain were high, in the subsequent analyses we chose to examine each item in the outcome domain as an independent indicator of satisfaction. These items tap important aspects of youth social and emotional functioning. We hypothesized that youth age would be predictive of lower satisfaction with outcomes and that having a child at home would be predictive of greater family satisfaction with outcomes.

## Method

The YACS and FACS were implemented statewide cross-sectionally in March of 2007. Participants included families of children of all ages and youth ages 12 and older who were receiving services in any of five OMH program types: Family Based Therapy (FBT), Home and Community Based Services Waiver (Waiver), Residential Treatment Facilities (RTFs), Teaching Family Homes (TFH), and Community Residences (CR). Implementation of the surveys was through non-direct service agency staff with youth and families. Surveys were collected anonymously and returned to OMH for processing. Response rates were 70% (n = 385) for the YACS and 38% (n = 509) for the FACS.

Responses on survey items were tallied as frequencies on a fourpoint Likert scale, *Agree* (1), *Somewhat agree* (2), *Somewhat Disagree* (3), *Disagree* (4). The mean of the 4-point Likert scale was used to calculate level of satisfaction by domain and by item. Dichotomous indicators of satisfaction were constructed by collapsing the mean of the four point scale into positive (agree and somewhat agree) and negative (disagree and somewhat disagree). Chi-square analyses were used for bivariate comparisons. Separate multivariable logistic regression models were constructed for youth and family to predict the probability of being satisfied or not with 5 outcome indicators (behaving better in school; being happier with life; being better able to cope with challenges; being able to make friends; getting along better with family) while controlling for demographic and service related covariates.

# Results

Youth respondents were: Caucasian (41%), male (68%), 15 years old or older (58%) and had been receiving services for over 6 months (78%). Families who responded indicated their child was Caucasian

(55%), 15 years old or older (43%), and had been receiving services for over 6 months (72%). Families tended to be less satisfied with outcomes (70%, M = 1.8) compared to youth (81%, M = 1.6). Chi-square analyses of youth and family results related to the outcome 'behaving better in school' are presented below. Youth who were behaving better in school tended to be aware of treatment options (Pr < .0363), have access to peer support (Pr < .0876), and spend more time in school (Pr < .0001). Families of youth who were behaving better in school tended to have been given a diagnosis (Pr < .0038), to be aware of treatment options (Pr < .0005), have a child who is not on PINS (Pr < .0666), spend more time in school (Pr < .0001), and to live at home (Pr < .0082).

The results of multivariable logistic regression models predicting youth satisfaction with mental health services outcomes from the perspectives of youth follow. Youth who attended more school were nearly 30% more likely to report satisfaction with their improvement in behavior in school (OR = .275, CI = .078-.974) or in being better able to cope (OR = .118, CI = .019-.724). Youth who were aware of treatment options were more likely to report being happy with life (OR = .087, CI = .015-.508) or being able to make friends (OR = .022, CI = .002-.313). Youth being under the age of 14 increased the odds of get along better with family by about 80% (OR = .202, CI = .042-.978).

The results of multivariable logistic regression models predicting parents' satisfaction youth mental health services outcomes follow. Having social support made it more likely that parents were satisfied with youth happiness (OR = .297, CI = .096-.914), that parents reported their youth was better able to cope (OR = .167, CI = .050-.557), that parents reported their youth was getting along better with family (OR = .086, CI = .02-.38), and that

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the youth was behaving better in school (OR = 0.072, CI = 0.023-0.223). School factors were important to having a positive perception of youth outcomes: having a youth that attended more school was predictive of family perception that their child was behaving better in school (OR = .072, CI = .023-.223), better able to cope (OR = .176, CI = .048-.649), and better able to make friends (OR = .144, CI = .040-.514).
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# Conclusions

Both youth and family satisfaction with mental health services outcomes related to the number of day's youth attended school. Satisfaction with outcomes was greater from either perspective if the youth attended more school. Having social support was associated with parental positive perceptions of satisfaction with their child's outcomes. Youth that were aware of treatment options were more likely to report being happy with life and making friends. Younger youth reported getting along better with family while families with youth on medication were getting along better.

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# Poster 29 Mental Health Assessment of Infants and Toddlers in Early Intervention Services

Presenting: Martha Morrison Dore & Susan C. Ayers

## Introduction

With the passage of the Education of the Handicapped Act Amendments in 1986 (PL 99-457), elements of which became Part C of the amendments to IDEA, Congress looked to the states to build comprehensive systems of supports for infants and toddlers with and at risk for disabilities and their families. Under Part C, states must provide early intervention (EI) services to any child under age 3 who is experiencing a developmental delay or has a diagnosed physical or mental condition that has high probability of resulting in delay. In addition, states may choose to provide services for infants and toddlers who are biologically or environmentally at risk for serious developmental disabilities. Under this legislation, states are charged with developing a system that provides screening, assessment and diagnosis, service coordination, individualized family service plans, and services in natural environments such as the home and community.

As implemented in Massachusetts, EI programs have traditionally assessed children in multiple developmental domains, including adaptive behaviors, personal-social functioning, communication, motor functioning, and cognitive functioning. Less consistent attention has been paid to the social/emotional domain. The Guidance Center, Inc. (GCI), which serves the Cambridge and Somerville communities in the Greater Boston area, houses an EI program as part of its Early Childhood Services division. Two years ago, the GCI EI program adopted use of a standardized assessment instrument, the Ages and Stages Questionnaire: Social Emotional (ASQ:SE) as part of its assessment repertoire, to identify children at high risk for developing serious emotional and behavioral difficulties and to facilitate treatment planning. At around the same time, the agency received a grant from the BlueCross/BlueShield Foundation to increase attention given to the mental health of very young children. This grant supported the purchase of SPSS as well as staff time to manage and analyze the ASQ:SE data.

This poster presentation examines the use of a standardized instrument to:

- 1. assess the social/emotional functioning of infants and toddlers in an early intervention program;
- 2. enhance care coordination for children under age 3 with difficulties in social/emotional functioning and their families; and
- impact the practice of EI staff with diverse professional training by heightening awareness of early social and emotional development and its implications for future psychosocial and behavioral functioning.

# Methodology

The ASQ:SE was administered at program intake for all children, ages 0 to 3 years, referred to GCl's EI services between September 2005 and June 2007. The total sample size for this project was 553, including 321 boys and 232 girls. Only those data for which parents gave signed consent were used in this analysis.

The infants and toddlers referred to GCI's Early Intervention program reflect the wide variation in the Cambridge and Somerville communities with regard to socioeconomic status and racial and cultural factors. About 2,000 babies are born in these two communities each year according to census data, and more than a third are born to families whose primary language is other than English. Currently, Spanish, Haitian Creole and Portuguese are important languages in the delivery of Early Intervention services by GCI. Cambridge, which has a median income of nearly \$60,000, has a poverty rate of 12.5%, while Somerville, which has a very low rate of owner-occupied housing at 30%, has a poverty rate of 12.9%. These rates are considerably higher when special populations are considered. Single parent-headed households, for example, have an overall poverty rate of over 22% in these two communities.

The ASQ:SE is a parent report instrument that contains a series of 25-30 questions anchored to eight age intervals from six through 60 months, measuring child functioning on the following domains: self-regulation, compliance, communication, adaptive functioning, autonomy, and coping (Squires, Bricker & Twombly, 2002)<sup>-</sup> The instrument was normed on a stratified sample of over 3,000 children whose socio-demographic characteristics reflect national U.S. Census data. Cut-off scores discriminating between those whose social/emotional functioning was within the expected range and those who required further observation and intervention were determined and tested in a variety of ways (Squires et al, 2002). Reliability and validity of the instrument are well established and it is recommended for use as part of developing a system of care in infant mental health by the National Center for Infant and Early Childhood Health Policy (Zeanal, Stafford, Nagle & Rice, 2005).

# **Findings**

Overall, 24% of the 553 children ages six months to 36 months in our study scored above the cut off point indicating concerns about their social/ emotional functioning relative to their age. One of our hypotheses was that children who were referred to EI because of potential developmental delays would have the highest percentage of scores above clinical cut off on the ASQ:SE. However, our findings indicated that, while 23.7% of these children did show potential social/emotional difficulties on the ASQ:SE, children who were referred to EI services because of potential developmental risks due to child and/or family factors show much higher rates of problematic social/emotional functioning at 35.7% above cut off. We also analyzed problematic functioning by age and found that as the age at ASQ:SE assessment increased, so too did the rate of impaired social/ emotional functioning in our sample. Up to 24 months, scores averaged below our overall sample percentage of 24%; however, at 30 months there was a significant increase in the percentage of children in that age group scoring above the ASQ:SE cut off, 39.4%.

Additional findings will be presented in our paper on the ASQ:SE domain subscales by demographic and referral factors. Qualitative findings will also be presented regarding the experiences of EI clinicians from a variety of professional backgrounds in using ASQ:SE results with parents in care planning.

# Conclusion

Using a standardized assessment instrument to identify infants and toddlers at high risk of social/emotional and behavioral difficulties in early intervention programs can greatly increase the ability of EI clinicians to design interventions to address these problems early in a child's life before they seriously impair the child's further development in other life domains. This poster presents results of the application of one highly regarded mental health screening instrument, the ASQ:SE, in an early intervention program, findings from analyses of data gathered using this instrument, and the impact of its use on care planning with families of infants and toddlers at developmental risk.

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# Poster 30 Social and Emotional Skills in Prediction of School Readiness

Presenting: Matthew Underwood & Paul Thomlinson Contributing: Clay Gemmill & Sandra D'Angelo

# Introduction

Much attention has been paid to the role of academic and/or intellectual readiness in early school success (Anthony, Assel, & Williams, 2007), while relatively little attention has focused on the role of social/emotional skills as predictors of school success. As such, the purpose of this study was to determine if school readiness among kindergartners is better predicted by social/emotional skills or academic skills. This was accomplished by comparing scores for Head Start students on the Developmental Indicators for the Assessment of Learning – Third Edition (DIAL-3) and the Devereux Early Childhood Assessment (DECA) to the evaluations of school readiness made by the teachers of the sampled students. This can help teachers and administrators to choose the most efficient way of assessing students to decrease cost and improve school outcomes.

# Methodology

Data were gathered from parents and teachers for 121 students from 7 Head Start classrooms in the rural Ozarks in Southwest Missouri. Information from parents was collected for all students and for 111 students from teachers. Teachers were given instructions on how to complete the questionnaires on all of the children in their classroom and on how to pass out and collect the forms from the caregivers. Both respondent groups completed the DECA and forms capturing demographic information at one data point near the end of the summer semester.

The DECA is 36-item questionnaire that measures the social and emotional realms of children by way of separate subscales that measure attachment, self-control, initiative, and behavioral concerns (Mardell-Czundnowski & Goldenberg, 1990). The first three subscales come together to create the Total Protective Factors scale (TPF). The DIAL-3 consists of 5 subscales that include Motor, Concept, Language, Self-Help, and Social. The first three subscales, that are traditionally considered academic skills important for school readiness, are used to create a composite score (LeBuffe & Naglieri, 1999). The demographic information collected was different between parents and teachers; with the teachers focusing on school performance and attendance and the parents focusing more on health and behavior.

Of the student sample, 47.1% (n = 57) were male and 43.8% (n = 53) were female. The sample was 75.2% Caucasian (n = 91), 3.3% African American (n = 4), 4.9% Hispanic (n = 6), 0.8% Asian (n = 1), 0.8% Native American (n = 1), and 13.2% Biracial (n = 16). Three year olds comprised 25.6% (n = 31), four year olds comprise 50.4% (n = 61), and five year olds make 7.4% (n = 9).

Stepwise multiple regression analyses were conducted to evaluate the relative predictive power of social/emotional skills and academic skills with respect to school readiness.

# **Findings**

Initial bivariate correlations found that the DIAL-3 percentiles and both the teacher administered Total Protective Factors and Behavioral Concerns (BC) scores along with the parent administered BC scores of the DECA are all correlated with the predicted rating of school readiness by teachers. The DIAL-3 had the strongest correlation (r = .700, n = 32), with the parent's evaluations of school readiness (r = .457, n = 71), teacher administered TPF (r = .422, n = 90), teacher administered BC (r = -.373), and parent administered BC (r = .249, n = 89) trailing behind. The DIAL-3 composite scores (r = .409, n = 29) and the teacher administered TPF scores (r = .239, n = 79) are also correlated with the parent ratings of school readiness along with the parent administered TPF scores (r = .285, n = 83) and the teacher's evaluations of school readiness (r = .457, n = 71).

A stepwise multiple regression analysis was completed with teacher's evaluations of school readiness as the dependent variable, indicating that teacher's TPF scores explained the most variance (.49 adjusted R-square), followed by the DIAL-3 composite score (.65, indicating 16% incremental variance explained). The R-square for this two-variable model (.65) indicates that significant variance in school readiness was explained (F[1, 15]= 8.45, p = .011).

## Conclusion

The results indicate that the social and emotional skills, as measured by the DECA TPF scale, are stronger predictors of school readiness than academic skills as measured by the DIAL-3 composite score. However, this is not to say that academic skills are not important. While the teacher administered DECA TPF was a stronger predictor, the DIAL-3 composite score increased incremental prediction significantly. Children are multidimensional and therefore, when assessing or predicting youth's abilities, many dimensions must be taken into account.

It is no surprise that when trying to measure and predict school readiness that trying to learn more about the youth than just how well the child may complete or understand the workload is necessary. Measuring the social and emotional abilities of the child is just as important, or even more so, than academic abilities alone. The school setting is a social setting and the skills of the youth in the social realm must be considered to determine success.

# References

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# Poster 31 Teacher Self-Efficacy and Attributions of Student Behavior

Kathy Dowell & Jacqueline Onchwari

### Introduction

The biological, psychological, and social effects of stress on child development are far reaching, while the manifestations of stress among young children vary widely from depressive emotional displays (crying, withdrawal), to anxiety (separation fears, shyness), to disruptive behaviors (noncompliance, aggression). Resiliency research has found that a supportive relationship with one significant individual is a protective factor that can help a child thrive despite adversities. Given the significance of the teacher-student relationship in a child's early academic experience as well as the extended time that students spend within the school environment, this study focuses on the nature of the teacher-student relationship as a potential mediator of stress among young children.

Previous research has consistently highlighted the importance of a positive teacher-student relationship to overall school adjustment and performance, particularly in early elementary school years (Birch and Ladd, 1997; Pianta and Stuhlman, 2004). One moderating factor that is receiving increasing attention is teachers' beliefs about student achievement and behavior as a predictor of teachers' responsiveness and interaction style when dealing with student challenges. Attribution theory provides a conceptual framework in which one's perception of the causes of events (i.e. whether it is (1) internal (within the person) or external (situational); (2) stable or temporary, and (3) within or outside of one's control) is used to predict behavioral responses. Attributions have significant implications on one's approach to problem solving when faced with challenges. There yet remains a lack of research evaluating teachers' attributions about stress responses of typically developing students and teachers' actual student intervention methods. Several teacher variables have been examined as potential moderators of the quality of the student-teacher relationship. Perceived self-efficacy, "defined as people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives" (Bandura, 1994), is one such variable that has been examined within the context of teacher-student relationships. Teachers experiencing low selfefficacy consider their ability to impact student learning and success within the school environment to be severely limited. Following Albert Bandura's Social Cognitive Theory, previous research predicted that low teacher selfefficacy would be associated with lowered motivation and decreased efforts at classroom problem solving strategies, teaching techniques, and limited flexibility when interacting with difficult students. Conversely, teachers with high levels of perceived self-efficacy would likely utilize a greater variety of educational activities and classroom management strategies (Emmer & Hickman, 1991; Wertheim & Leyser, 2002).

The purpose of this study is to determine the nature of the relationship between early elementary school teachers' attributions about student stress and teacher self-efficacy. The study asked the following research questions: (1) What are common stressors affecting young children? (2) Are teacher attributions associated with the level of perceived self-efficacy among teachers? (3) What types of attributions do teachers make for students exhibiting externalizing versus internalizing classroom behaviors? and (4) Will teachers experience lowered self-efficacy when managing externalizing/disruptive behavioral manifestations of student stress compared with internalizing/emotional manifestations of stress?

## Methodology

All kindergarten through third grade teachers from six public elementary schools in a mid-sized upper Midwestern city were invited to participate in this study. The final sample consists of five kindergarten, eight first grade, nine second grade, and six third grade teachers for a total of 28 participating teachers.

Three students were randomly selected from each classroom from among those whose parents provided consent, for a total of 84 students. Children were excluded from the study if they were receiving mental health services. Parents provided basic demographic information as well as reported recent exposure (within the last 12 months) to stressful events for their child using the Elkind Stress Test. For each of the target students, teachers completed the Revised Causal Dimension Scale (CDS-II; McAuley, Duncan, and Russell, 1992), a measure of attributions about teacher-student interactions. In addition, for each of the target students teachers completed the Teacher Sense of Self-Efficacy form based on recent interactions with each of the target students as well as the Behavioral Assessment System for Children, Second Edition (BASC-II), a standardized measure of behavioral, emotional, social, and academic functioning within the classroom.

The mean age of the child participants is 6.67 (sd = 1.09), including 45% male participants. From the list of 39 potential stressors, parents indicated an average of 7.79 stressors (sd = 3.89) experienced by the child within the last 12 months. The four most common stressors include typical yearly events that are encountered by nearly every child, including attending a birthday party (75%), school readjustment (69%), mother returning to work (57%), and vacations (47%). Other more extreme stressors in the questionnaire were: parents' divorce (N = 4), birth of a sibling (N = 7), and chronic illness in the family (N = 12). At the time of this submission, teacher report attribution and self-efficacy data were in the process of being collected but have not yet been entered or analyzed.

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# Wednesday Intensive Workshops, February 27 - 9:00 am

#### Intensive 4—Salon A/B

### SAMHSA's Implementation Resource Kit: A Tool for Selecting Evidence-Based Interventions for Youth with Disruptive Behavior Disorders

Sylvia Fisher, Director, Evaluation, Child, Adolescent, and Family Branch, CMHS, SAMHSA, Rockville MD & Jeanne C. Rivard, NASMHPD Research Institute, Inc., Alexandria, VA

This session will inform participants about SAMHSA's new Implementation Resource Kit, a tool that participants can use to select evidence-based interventions for youth in their communities. Facilitators will provide an overview of the tools and features of the Resource Kit, and provide hands-on experience through a group exercise. Each group will utilize the model to assess relevant information and select an intervention. As each group reports on their decision-making process, guided discussion will help participants identify and explore the levels of decision-making and issues affecting choices, including age group considerations, and stakeholder perspectives.

#### Intensive 5—Salon C/D

# Assessing the Emotional and Behavioral Strengths of Children and Youth

### Michael H. Epstein, Center for At-Risk Children's Services, University of Nebraska-Lincoln

The purpose of the workshop is to orient the participant to strength based assessment. The workshop will cover the following topics. First, the principles, definition and advantages of strength based assessment will be discussed. Then, informal and formal approaches to strength based assessment will be presented and practiced. Next, the Behavioral and Emotional Rating Scale, a standardized norm referenced measure of children's strength, will be presented. Finally, applied examples of how strength based assessment can be used for planning and outcome evaluation will be presented and discussed.

#### Intensive Workshop 6—Salon G/H

### Crafting Community Created System of Care Strategies: Applying a Theories of Change Approach to Support Implementation, Evaluation and Strategic Planning

Marie Morilus-Black, Family Voices Network of Erie County, Buffalo NY; Linda M. Foss, Evaluation Manager, Central Massachusetts Communities of Care, Worcester, MA; Melodie Wenz-Gross, Research Assistant Professor, UMass Medical School Department of Psychiatry, Director of Research and Evaluation, Central Massachusetts Communities of Care, Worcester, MA; Joan B. Kernan, Research Associate, University at Buffalo Dept. of Family Medicine, and Evaluation, Family Voices Network of Erie County; Vicki McCarthy, Director, Families CAN, Families Child Advocacy Network, Inc., Buffalo, NY; and Mario Hernandez, Professor and Chair, Dept. of Child and Family Studies, Louis de la Parte Florida Mental Health Institute, University of South Florida

This intensive workshop will provide training on how to use theory of change logic models to create and support locally driven systems of care. The workshop will be based on two actual experiences from the field and will be conducted by representatives from two systems of care communities. Lessons learned regarding the theory of change building process will be shared. Of particular focus will be how the approach has supported community ownership, evaluation, and strategic planning. Trainers will describe how they keep their local system's strategy alive through the use of logic models. Attendees will learn the importance of having a clear vision and plan to the ability of a community to initiate and sustain a system of care. About our Presenters

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