Chapter Eleven

**Ensuring Quality &
Accountability
through Service
System Management
and Training Initiatives**

Developing a Quality Improvement and Evaluation Strategy in a Children's Mental Health Centre

Sherrilyn M. Sklar
Katherine Sdao-Jarvie

Introduction

The growth of performance measurement systems in Canada's public sector is driven by an increasing demand for accountability from government, funders and consumers. To meet this demand, organizations are expanding their commitment to evidence-based decision-making by developing performance measurement systems. At a national level in Canada and the United States, healthcare accreditation bodies are revising the standards to include service quality indicators (Joint Commission on Accreditation of Healthcare Organizations, 1999; Canadian Council on Health Services Accreditation, 1998). In Ontario, the healthcare system has embraced the balanced scorecard framework (Baker & Pink, 1995; Kaplan & Norton, 1996) and published evaluative reports (Ontario Hospital Association, 1998; Toronto Academic Health Science Council & Department of Health Administration, 1998). These performance measurement efforts represent the start of an ongoing process of evaluation and improvement. Simply stated, performance measures are tools derived from program evaluation and quality improvement initiatives.

Together the processes of program evaluation (PE) and continuous quality improvement (CQI) play a paramount role in enhancing organizational effectiveness by building organizational evaluative capacity and culture, demonstrating a commitment to quality service, measuring performance and supporting organizational change (Barrington, 1999; National Quality Institute, 1999; Patton, 1999; Thomas, 1995). This summary describes how an Ontario regional children's mental health centre initiated and is developing its quality improvement and program evaluation strategy *(QUEST)* to design a framework that will be integral to the agency's future performance measurement model.

Method

Getting Ready

Peel Children's Centre (PCC) is an accredited Children's Mental Health Centre providing a wide range of services to more than 3,000 children, aged 0-18 and their families in the region of Peel including: outclient (i.e., outpatient) individual and family counseling; day and residential treatment services; respite services; case management services; multidisciplinary assessments; inter-agency consultation, and parent education and support.

PCC's mission is to provide a range of high quality mental health services for children, youth and their families who are experiencing or may experience serious behavioral, emotional and social difficulties. To substantiate its mission and take the performance measurement pathway, the agency recognized that in order for internal evaluation to be useful and credible, it must have "high status in the organization and real power to make evaluation meaningful" (Patton, 1999, p. 104). This corporate decision confirmed senior management's commitment to quality improvement (QI) and program evaluation (PE) processes, a necessary first step towards creating an organization-wide culture of change and continuous quality improvement.

QUEST is our process of developing a quality improvement and program evaluation framework. *QUEST* is guided by:

- a strategic focus on PCC's vision, mission and values;
- the quality and program evaluation standards of excellence;
- a practical, flexible and pluralistic PE practice (e.g., evaluability assessment, program monitoring, process and outcome evaluation);

- a continuous quality improvement (CQI) philosophy and practice (e.g., client-focused, stakeholder involvement, education and training, communication and teamwork); and
- a systematic methodology using a range of tools and techniques.

Getting Started

The use of evaluation and quality improvement processes can facilitate organizational change by involving people in, and training them in the logic, methods, and utility of QI/PE in order to build evaluation and quality improvement into an organization's philosophy, culture, and how people carry out their day-to-day work (Thomas, 1995; Patton, 1999). Our first step in building the capacity for PE involved a cross-representation of staff from all programs and levels participating in a 2-day "hands-on" logic modeling workshop. These sessions provided staff with an orientation to program evaluation and quality improvement and the opportunity to use a PE tool. It also introduced a cross-functional way of working and a method for involving all programs in a process. The result of this practical, reality-based team exercise is a PCC-wide logic model that graphically displays *what PCC does and what we expect to achieve* (see Figure 1).

As part of *QUEST's* orientation, learning and practicing process, all program teams have been introduced to quality improvement by participating in drafting their program-specific process maps. Using this CQI tool to chart the flow of a program's process from client need to client satisfaction, teams can now answer the question, *"how do we do our work?"* Identification of programs strengths, weaknesses and opportunities for improvement is a first step in developing quality improvement plans.

QUEST in Motion

In March 2000, a centralized intake process for Mental Health Services for Children and Youth in Peel was launched. This involved a collaborative effort among PCC and three community partners to plan and implement a centralized intake process to enable users of children's mental health services to gain access to services provided by the four agencies quickly, easily and efficiently. Since the intake process effects all programs, this challenge presented the ideal opportunity for informing our quality enhancement plan starting "at the front door." To frame the project, we were guided by the PDCA (plan, do, check, act) cycle: a universal CQI method for making changes (Alberta Treasury, 1996).
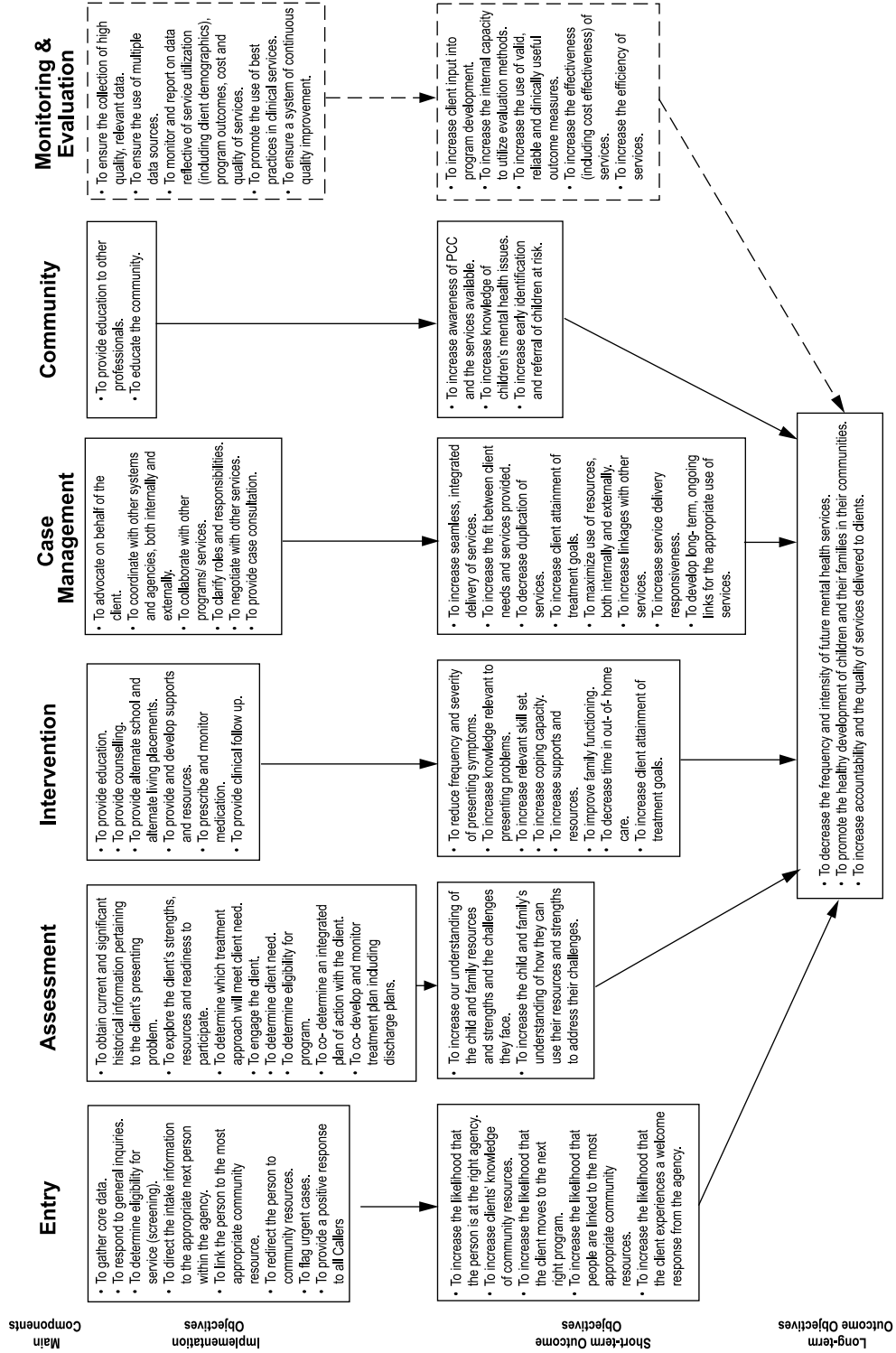
Planning and Doing

Recognizing that people closest to the work have the most knowledge about the work, and are the most competent to assess the effects of changes, the intake workers were actively involved in the process redesign. Mapping of the existing model identified a number of problems, many of which were caused by a misunderstanding about how to conduct the telephone intake, from both a clinical and data collection perspective. From a service quality and data integrity viewpoint, a standardized data collection protocol including clinical guidelines needed to be developed.

The process map was an invaluable tool throughout the planning phase. By superimposing additions or changes to the procedures on the most recent map, the impact could clearly be assessed in terms of efficiency and effectiveness. The process map also had major utility for designing the standardized protocol and training plan and revising the intake module of the client information system.

Checking and Acting

The user's manual provides clear clinical guidelines and data collection instructions that facilitate consistent practice by intake workers to ensure that clients are referred to the service that best meets their needs, to enhance the assessment process at the four partner agencies, and to promote data integrity. Feedback indicates that the new system is more client-centered and user-friendly. We consider the manual to be a living document. Since changes will occur and improvements will invariably be identified, the PDCA cycle will continue. In fact, planning is underway to integrate a standardized behavioral and emotional screening tool (Cunningham, Pettingill & Boyle, 2000) with our on-line

Figure 1
Peel Children's Centre System Logic Model

Main Components	Implementation Objectives	Short-term Outcome Objectives	Long-term Outcome Objectives
Entry	• To gather core data. • To respond to general inquiries. • To determine eligibility for service (screening). • To direct the intake information to the appropriate next person within the agency. • To link the person to the most appropriate community resource. • To redirect the person to community resources. • To flag urgent cases. • To provide a positive response to all Callers	• To increase the likelihood that the person is at the right agency. • To increase clients' knowledge of community resources. • To increase the likelihood that the client moves to the next right program. • To increase the likelihood that people are linked to the most appropriate community resources. • To increase the likelihood that the client experiences a welcome response from the agency.	
Assessment	• To obtain current and significant historical information pertaining to the client's presenting problem. • To explore the client's strengths, resources and readiness to participate. • To determine which treatment approach will meet client need. • To engage the client. • To determine client need. • To determine eligibility for program. • To co-determine an integrated plan of action with the client. • To co-develop and monitor treatment plan including discharge plans.	• To increase our understanding of the child and family resources and strengths and the challenges they face. • To increase the child and family's understanding of how they can use their resources and strengths to address their challenges.	
Intervention	• To provide education. • To provide counselling. • To provide alternate school and alternate living placements. • To provide and develop supports and resources. • To prescribe and monitor medication. • To provide clinical follow up.	• To reduce frequency and severity of presenting symptoms. • To increase knowledge relevant to presenting problems. • To increase relevant skill set. • To increase coping capacity. • To increase supports and resources. • To improve family functioning. • To decrease time in out-of-home care. • To increase client attainment of treatment goals.	• To decrease the frequency and intensity of future mental health services. • To promote the healthy development of children and their families in their communities. • To increase accountability and the quality of services delivered to clients.
Case Management	• To advocate on behalf of the client. • To coordinate with other systems and agencies, both internally and externally. • To collaborate with other programs/services. • To clarify roles and responsibilities. • To negotiate with other services. • To provide case consultation.	• To increase seamless, integrated delivery of services. • To increase the fit between client needs and services provided. • To decrease duplication of services. • To increase client attainment of treatment goals. • To maximize use of resources, both internally and externally. • To increase linkages with other services. • To increase service delivery responsiveness. • To develop long-term, ongoing links for the appropriate use of services.	
Community	• To provide education to other professionals. • To educate the community.	• To increase awareness of PCC and the services available. • To increase knowledge of children's mental health issues. • To increase early identification and referral of children at risk.	
Monitoring & Evaluation	• To ensure the collection of high quality, relevant data. • To ensure the use of multiple data sources. • To monitor and report on data reflective of service utilization (including client demographics), program outcomes, cost and quality of services. • To promote the use of best practices in clinical services. • To ensure a system of continuous quality improvement.	• To increase client input into program development. • To increase the internal capacity to utilize evaluation methods. • To increase the use of valid, reliable and clinically useful outcome measures. • To increase the effectiveness (including cost effectiveness) of services. • To increase the efficiency of services.	

intake process. In addition, we are currently developing an implementation plan for integrating a treatment outcome measure into our ongoing assessment process (Hodges & Wong, 1996).

Measuring Up

A strategic initiative for fiscal year 2000-2001 is to make improvements to promote continuity, efficiency and effectiveness of clinical services. By using a systematic approach, starting with the analysis of program-specific process maps, followed by additional data gathered from a series of staff focus groups, a set of recommendations suggested a significant redesign of our service delivery model. As part of the planning phase, program-specific logic models are being constructed to include a monitoring and evaluation component. Program teams will be involved in identifying critical evaluation questions that meet the *SMART* test, i.e., Smart, Measurable, Achievable, Realistic, and Timely (Canadian Evaluation Society, 1998) to assist in developing meaningful and useful process and outcome indicators.

Since quality measures represent the most positive step in broadening the basis of performance measurement (Eccles, 1991), we are developing measures of accessibility, appropriateness, effectiveness, efficiency and responsiveness, consistent with the type of quality indicators being developed by the accreditation bodies for health services in Canada (Canadian Council on Health Services Accreditation, 1996) and in the United States (Joint Commission on Accreditation of Healthcare Organizations, 1999). Given that PCC's values mirror these international quality standards, we are confident that we are on the right performance measurement pathway.

Discussion

Moving Forward

The ultimate goal of *QUEST* is to demonstrate, in a measurable way, that PCC provides high quality clinical services. The *QUEST* motto expresses where we're going and how we're going to get there:

We want to monitor it so we can measure it;

We want to measure it so we can manage it;

We want to manage it so we can improve it;

We want to improve it so we can excel at it.

Building monitoring and evaluation into all programs reinforces the belief that QI/PE is integral to program management (Porteous, Sheldrick & Stewart, 1997). Consistent with the empowerment literature, by engaging staff in these QI/PE learning and practicing processes, the greater the likelihood that they will be motivated to not only participate in, but take responsibility for, and ownership of, ongoing QI/PE (Barrington, 1999; Lee, 1999). The key to *QUEST* is:

Planning, procedures, practice

Repeating QI/PE message

Official corporate commitment to QI/PE

Communicating

Education and training

Stakeholder involvement

Systematic, strategic focus

References

Alberta Treasury (1996, September). *Measuring performance: A reference guide.* Edmonton: Author.

Baker, R. & Pink, G. (1995). A balanced scorecard for Canadian hospitals. *Healthcare Forum, Winter, Vol. 8*(4), pp. 7-13.

Barrington, G. V. (1999). Empowerment goes large scale: The Canada prenatal nutrition experience. *The Canadian Journal of Program Evaluation, Special Issue [published annually],* pp. 179-192.

Canadian Council on Health Services Accreditation. (1996). *A guide to the development and use of performance indicators.* Ottawa: Author.

Canadian Council on Health Services Accreditation. (1998). *Quality improvement and the client-centered accreditation program.* Ottawa: Author.

Canadian Evaluation Society. (1998). *Understanding program evaluation, Essential skills series,* Toronto.

Cunningham, C. E., Pettingill, P. & Boyle, M. (2000). *The Brief Child and Family Phone Interview (BCFPI).* Hamilton, ON: Canadian Centre for the Study of Children at Risk, Hamilton Health Sciences Corporation, McMaster University.

Eccles, R. G. (1991). The performance measurement manifesto. *Harvard Business Review, January-February,* pp. 55-62.

Hodges, K., & Wong, M. M. (1996). Psychometric characteristics of a multidimensional measure to assess impairment: The Child and Adolescent Functional Assessment Scale. *Journal of Child and Family Studies,* 5, 445-467.

Joint Commission on Accreditation of Healthcare Organizations. (1999). *ORYX Performance Measurement: Core Measures.* Retrieved from: http://www.jcaho.org/oryx_frm.html

Kaplan, R. S. & Norton, D. P. (1996). Using the balanced scorecard as a strategic management system. *Harvard Business Review, January-February,* pp. 1-13.

Lee, L. E. (1999). Building capacity for school improvement through evaluation: Experiences of the Manitoba School Improvement Program Inc. *The Canadian Journal of Program Evaluation, Special Issue [published annually],* pp. 155-178.

National Quality Institute. (1999). *Canadian Quality Criteria for the Public Sector. Retrieved* from: http://www.nqi.ca.

Ontario Hospital Association (1998, November). *The Hospital Report '98: A system-wide review of Ontario's hospitals.* Toronto: Author.

Patton, M. Q. (1999). Organizational development and evaluation. *The Canadian Journal of Program Evaluation, Special Issue [published annually],* pp. 93-113.

Porteous, N. L., Sheldrick, B. J. & Stewart, P. J. (1997). *Program Evaluation Tool Kit: A blueprint for public health management [ISBNO 9694956-3-3].* Toronto: Public Health Research, Education and Development Program and Ottawa-Carleton Health Department, Public Health Branch, Ontario Ministry of Health.

Thomas, J. (1995). *Quality improvement and the client-centred accreditation program.* Ottawa: Canadian Council on Health Services Accreditation.

Toronto Academic Health Science Council & Department of Health Administration. (1998). *Performance '98, A performance scorecard for Canadian teaching hospitals.* Toronto: Hospital Management Research Unit, Department of Health Administration.

CONTRIBUTING AUTHORS

Sherrilyn M. Sklar, M.A.
Quality Improvement and Program Evaluation Specialist, Peel Children's Centre,
85A Aventura Court, Mississauga, ON, Canada L5T 2Y6; 905-795-3500;
E-mail: ssklar@peelcc.org

Katherine Sdao-Jarvie, Ph.D., C. Psych.
Director, Clinical Standards and Development, Peel Children's Centre,
85A Aventura Court, Mississauga, ON, Canada L5T 2Y6; 905-795-3500;
E-mail: ksdaojarvie@peelcc.org

Use of Clinical Practice Guidelines in Managed Care Environments: Policy, Practice and Clinical Utility

Jennifer Taub
Angela Gomez
Mary I. Armstrong

Introduction

The Florida Agency for Health Care Administration (AHCA) has been interested in evaluating a number of recent initiatives that are designed to improve the efficiency and effectiveness of the Medicaid program. One initiative to be evaluated was the Medicaid Prepaid Mental Health Program (PMHP) that was initiated in an area of Florida. AHCA contracted with the Louis de la Parte Florida Mental Health Institute at the University of South Florida. A portion of this evaluation included an examination of the impacts of managed care practice guidelines on the services provided under the PMHP. This study was then expanded to include providers that treat a range of consumers (Medicaid and non-Medicaid) who participate in mental health services through managed care. The result has been two descriptive studies that gathered information about administrators' and clinicians' perspectives on clinical practice guidelines (CPGs) in managed care mental health settings. CPGs are also known as treatment guidelines, treatment protocols or best practices.

The Institute of Medicine (1990) has defined a CPG as, "A set of systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances." CPGs that fall within this definition have been developed by professional scientific organizations, by insurance companies; and by Managed Care Organizations (MCOs); these guidelines may or may not be evidence-based. Sometimes the CPGs used by MCOs are adaptations of evidence-based guidelines that have been developed by professional scientific organizations (Gomez & Taub, 2000).

Many behavioral health care agencies, MCOs, and insurance carriers recommend or require clinicians to use CPGs. However, it is unknown how providers view the use of these guidelines, how well they have been integrated into clinical care, and what barriers there may be to their use. Hetznecker (1996) has suggested several possible barriers to use of CPGs, including: (a) concerns on the part of the providers that their personal judgment based on knowledge of the patient should be the basis of all clinical decisions, (b) disagreement by experts on the clinical effectiveness evidence, (c) ineffective dissemination of guidelines, (d) concern about not being able to follow the guidelines and thereby risking malpractice, and (e) guidelines that are so broad-based that they are rendered meaningless.

Two studies were developed to identify barriers to the use of CPGs in clinical practice, to determine whether organizations providing behavioral health services, such as Community Mental Health Centers (CMHCs), have adopted CPGs and, if so, what the adoption process has entailed. We also wanted to learn what administrators from Health Maintenance Organizations (HMOs), CMHCs, and clinicians find beneficial or disadvantageous about CPGs, and in what ways their viewpoints differ on this topic. Finally, we sought to address implications for policy makers and health care organizations regarding the use of clinical practice guidelines in the behavioral health care sector. The first and second studies interviewed administrators and clinicians, respectively.

Study 1: Semi-structured telephone interviews with administrators

Telephone interviews were completed with medical directors of five Managed Care Organizations (MCOs), and seven Community Mental Health Centers (CMHCs). Participants were asked about the process of adopting CPGs, and perceived benefits and disadvantages.

Results

Use of CPGs. Results indicated that use of CPGs by clinicians in the mental and behavioral health care settings are typically required and expected. Administrators from MCOs indicated consistency and quality as the primary reason for utilization of CPGs, while CMHC administrators said CPGs are used because it is a requirement by the MCOs with whom they contract. CMHC administrators also indicated quality treatment and accreditation requirements as reasons for utilization, but these responses were indicated less frequently.

Implementation and training. Training efforts most typically involved giving clinicians copies of the guidelines during employee orientation. There were few ongoing or systematic efforts to provide in depth or ongoing training. There was one notable exception; one CMHC tests new hires on the protocol and follows up with record reviews and subsequent training to ensure proper use.

Benefits. Although no consistent themes became evident in their responses, numerous benefits to the use of CPGs were identified by MCO respondents. Consistency and quality of services, better and more well monitored patient care, and promotion of solution-focused therapy were noted. Benefits to CPG use identified by CMHC administrators included shorter treatment length, less room for clinician error, and more focused, appropriate and standardized treatments.

Disadvantages. Three respondents from MCOs and two from CMHCs identified no disadvantages to the use of CPGs. The only disadvantage noted by an MCO administrator was limited flexibility for the clinician. CMHC administrators noted the following disadvantages to CPG use: (1) clinician resentment of CPGs, (2) they are designed for the "walking well" and not for complex cases with co-morbidity, (3) improvement in symptomatology leads to services being cut off by insurers (and subsequent deterioration), and (4) difficulty in compliance due to complexity of the guidelines.

Study 2: Focus groups with clinicians

Four focus groups were conducted with 31 clinicians. One group (*n* = 9) consisted of private practitioners, and the other three groups (*n* = 22) consisted of clinicians from CMHCs. On average, these clinicians had caseloads of 60% children and adolescents, and 40% adults.

Results

Training and use. Many clinicians had never seen CPGs. Those who did have familiarity with CPGs often had limited knowledge of them. For example, some CMHC clinicians reported that they knew where they could be located, or of having seen them once. Private practitioners had somewhat more intimate knowledge of the CPGs. Some reported using them as reference tools when completing treatment request forms for insurance companies. Clinicians, for the most part, had received no formal training in the use of CPGs, although some private practitioners reported receiving training notices from some insurance companies that may have included CPG training.

Service provision. Several main themes were identified in the discussion of how CPGs have affected service provision: (1) clinicians felt CPGs were used to question skill and training; (2) clinicians were doing more "band aid therapy," i.e., focusing on symptoms and surface behavioral issues during fewer sessions; (3) only very ill clients can be treated, and when these clients improve, further services are denied, and; (4) psychological research does not always match CPG guidelines. For example, there was concern that some CPGs make recommendations for medication for children that are not supported by the literature. Secondary themes in the focus groups centered around the fact that CPGs do not allow for co-occurring disorders (i.e., only one diagnosis must be the focus of treatment), and some treatment modalities (i.e. school visits) may not be included.

Discussion

A number of implications can be drawn from this study. First, findings show that the use of CPGs is quite prevalent in the behavioral and mental health service providers surveyed. Nevertheless, this finding certainly begs the question of whether or not CPGs should be used at all. We were indeed surprised to learn of the large number of clinicians in our groups who did not even have a passing familiarity with the CPGs that have been adopted by their agencies, or by the insurance companies with whom they contract. Two areas require systematic investigation before mandating use of CPGs can have sound justification: (1) how much of what clinicians already do in practice is consistent with CPGs?, and (2) if CPGs are followed, are there differences in clinical outcomes? Currently, MCOs report requiring use of CPGs for quality and consistency in service provision. While this is a concern of administrators at CMHCs, the primary motivation for their use is this requirement imposed by MCOs or accrediting agencies. Results from this study show that CPGs are rarely used by clinicians to guide clinical services. It is vitally important to examine the extent to which clinicians may already practice recommendations similar to those of CPGs, and whether compliance with CPGs may make a significant difference at the level of practice.

Second, CPGs vary tremendously in breadth, depth, quality, and intended use (Gomez & Taub, 2000). Consequently, they vary in clinical utility, and terminology is not well defined. If CPGs are to have sound clinical utility, they must reflect established scientific and professional guidelines (such as those by the American Academy of Child and Adolescent Psychiatry, 1998). Also, as the knowledge base for known effective and efficacious treatments develops, CPGs should be updated regularly.

Third, research shows that patient factors such as functional impairment, subjective distress, resistance to treatment, and coping style are important factors in matching treatment to a client (Beutler, 2000; Norcorss & Beutler, 1997). In order for CPGs to have maximum clinical utility, they must take into account the influence of such moderating factors as patient variables, ethnic background of the patient, and co-morbidity.

Finally, barriers to use of CPGs need to be thoroughly addressed, such as lack of availability at the clinical level, and general misconceptions about the CPGs themselves. Another barrier identified by clinicians was that CPGs call into question their clinical judgment, training and expertise; this concern was often brought up by those with the least familiarity with CPGs. Education and training in the content and expected clinical utility of the CPGs should help to reduce these barriers at the level of practice. Discussion groups or meetings with clinicians and administrative staff together (in agency settings) may also help address concerns about CPGs.

In summary, there are numerous important issues for both clinicians and administrators regarding the use of CPGs in managed care settings. While this set of studies focused on CPG use for treatment of children and adolescents with emotional, adjustment or behavior disorders, the overall issues around CPG usage in managed care behavioral health services should apply to adults as well. Clinicians and administrators have different perceptions of the use and utility of CPGs. There are many barriers to use of CPGs at the level of practice. There is inconsistency in the quality and intent of the treatment protocols, CPGs or best practices manuals that MCOs have adopted or adapted. Finally, research as to the ultimate impact of guideline use at the level of service is largely absent. For guidelines to be useful clinical and management tools, administrators, policymakers and researchers will need to further investigate the ways in which guideline usage is related to client outcomes.

References

Beutler, L. (2000). *Relationships that suit patients: Status of empirical research*. Paper presented at the 108th Annual Convention of the American Psychological Association, Washington, D.C.

Gomez, A., & Taub, J. (2000). *Use of best practice protocols in managed care environments: Report to the Agency of Health Care Administration*. Tampa, FL: University of South. Florida.

Hetznecker, W. (1996). Are practice guidelines useful in managed care? In A. Lazarus (Ed.) *Controversies in managed mental health care,* (pp. 41-54). Washington, DC: American Psychiatric Press.

Institute of Medicine. (1990). *Clinical practice guidelines: Directions for a new program*. M. J. Field & K. N. Lohr (Eds.) Washington, DC: National Academy Press.

Norcorss, J. C., & Beutler, L. E. (1997). Determining the therapeutic relationship of choice in brief therapy. In J. N. Butcher (Ed), *Personality assessment in managed health care: Using the MMPI-2 in treatment planning* (pp. 42-60). New York: Oxford University Press.

CONTRIBUTING AUTHORS

Jennifer Taub, Ph.D.
Children's Hospital & Harvard Medical School, Boston, MA; 617-355-6940, Fax 617-734-2663; E-mail: taub_j@tch.harvard.edu

Angela Gomez, M.A.
Department of Child and Family Studies, Louis de la Parte Florida Mental Health Institute, University of South Florida, 133101 Bruce B. Downs Blvd., Tampa, FL 33612; 813-974-6415, Fax 813-974-7376; E-mail: Gomez@fmhi.usf.edu

Mary I. Armstrong, M.B.A., M.S.W.
Department of Child and Family Studies, Louis de la Parte Florida Mental Health Institute, University of South Florida, 133101 Bruce B. Downs Blvd., Tampa, FL 33612; 813-974-4601, Fax 813-974-7376; E-mail: Armstrong@fmhi.usf.edu

The Utilization of Case Study Results for Continuous System Improvement in a TIP System

Sarah E. Stewart
Alyssa M. Voss
Nicole Deschênes
Hewitt B. "Rusty" Clark

Introduction

The transition period into young adulthood for youth struggling with emotional/behavioral difficulties is fraught with unique barriers that put this particular population at significantly greater risk for school failure, involvement with correctional authorities and/or dependency on social services. Concerned with the future well-being of these students, the Florida Department of Education awarded the Louis de la Parte Florida Mental Health Institute (FMHI) of the University of South Florida with a grant to assist school districts in improving transition services for students and young adults with severe emotional/behavioral difficulties (SED) through the development and implementation of the Transition to Independence Process (TIP) System. This study describes a method used in the development and implementation of the TIP system in a large metropolitan county. The TIP Case Study Protocol for Continuing System Improvement (Deschênes, Gomez, & Clark, 1999) was used to identify and describe common features of practice as they relate to the transition of students and young adults with an SED classification.

Focus

The mission of the TIP system is to assist young people with SED in making a successful transition into adulthood, with all young persons achieving, within their potential, their goals in the transition domains of employment, education, living situation and community life. The TIP system includes six guidelines, which involve person-centered planning, individually tailored, and coordinated services and supports, safety-net of support, and competency based skills that are outcome-driven (Clark, Deschênes, & Jones, 2000).

Methodology

The analysis of the data followed a model outlined by Yin (1994) in his exploratory case study design where data is coded, sorted, rated, and examined. All of the interview questions were pre-coded at the time the TIP Case Study Protocol was developed. The TIP Study for Continuing Improvement studied individual young persons, along with their primary sources of information concerning their experience and satisfaction with the transition process. The data received from the case study interviews were triangulated and analyzed for frequency of the responses from the interviews and examined for emerging patterns and trends. At this particular site, ten students were selected for a total of 30 interviews and 10 document reviews. The results were contrasted against the TIP guidelines resulting in a conclusion regarding the extent to which the TIP system was implemented. The results were then used to assist stakeholders to develop an action plan for system improvement, to track and monitor system development and refinement in future years.

Findings

The site under study functioned overall neither with a high nor a low implementation of the TIP guidelines (see Figure 1). Major strengths identified in the study were that school personnel were very aware of the young person's strengths, interests, competencies and goals and that diversity and cultural background were valued. The staff appeared supportive and committed to students and respectful of their interests, lifestyles and goals by being available to them through their flexibility and adaptability.

Every youth had an up to date IEP on record and most youth and parents were aware of IEP meetings. However, major problems with the IEPs were revealed. These individualized plans were not always reflective of the actual strengths, resources, or priorities of the students, and they focused primarily on behavioral and academic change. The goals were stated in general terms, were difficult to measure, and were not always individualized and reflective of the four transitional domains (i.e., employment, education, living situation and community life) Few students and parents attended the IEP meetings and families reported difficulties related to the advocacy process. More coordination of outside services and "real life" experiences as well as independent skills were suggested to assist the young people to successfully transition into adulthood.

Figure 1
Scores for TIP System Guidelines
of a Sample School District

Person Centered Planning (PCP): M =4.42; SD=2.31
Individualized and Encompassing Services and Support (IE): M=4.18; SD=2.29
Coordination of Services and Support (C): M=5.09; SD=1.94
Safety-Net (S): M=5.26; SD=1.87
Competency-based (CB): M=4.41; SD=2.28
Outcome-Driven (O): M=4.10; SD=2.25
Impact (I): M=4.35; SD =1.93

Conclusion

Based on these findings, an action plan was developed to permit the site to function at a higher level of implementation of the TIP system. A follow-up study will be conducted to measure changes, especially in the areas of person centered planning, individualized and encompassing services and support, and outcome driven guidelines. For additional information on the TIP system please visit our website: www.fmhi.usf.edu/cfs/policy/tip

References

Clark, H., Deschênes, N., & Jones, J. (2000). A framework for the development and operation of a transition system. In H.B. Clark & M. Davis (Eds.). *Transition to adulthood: A resource for assisting young people with emotional or behavioral difficulties*. Baltimore: Paul H. Brookes.

Deschênes, N., Gomez, A., & Clark, H. B. (1999). *TIP case study protocol for continuing system improvement*. Tampa, FL: Florida Mental Health Institute, Department of Child and Family Studies, University of South Florida.

Yin, R. K. (1994). *Case study research: Design and methods* (2nd ed.). Thousand Oaks, CA: Sage.

CONTRIBUTING AUTHORS

Sarah E. Stewart, M.S.W.
Registered Clinical Social Work Intern, Residential Therapist, Children's Home, Inc.
813-855-4435, Fax: 813-855-8640; E-mail: sstewar3@hotmail.com

Alyssa M. Voss, B.S.
Research Assistant, Department of Child & Family Studies, De la Parte Florida Mental Health Institute, University of South Florida, 13301 Bruce B. Downs Blvd., Tampa, FL 33612; 813-974-4661, Fax: 813-974-6257; E-mail: avoss@hsc.usf.edu

Nicole Deschênes, M.Ed.
Co-Principle Investigator, Department of Child & Family Studies, De la Parte Florida Mental Health Institute, University of South Florida, 13301 Bruce B. Downs Blvd., Tampa, FL 33612; 813-974-6448, Fax: 813-974-6257; E-mail: deschene@fmhi.usf.edu

Hewitt B. "Rusty" Clark, Ph.D.
Co-Principle Investigator, Department of Child & Family Studies, De la Parte Florida Mental Health Institute, University of South Florida, 13301 Bruce B. Downs Blvd., Tampa, FL 33612; 813-974-6409, Fax: 813-974-6257; E-mail: clark@fmhi.usf.edu

Transition of Young People into Adulthood: Process and Outcomes Measurement Methods

Nicole Deschênes
Hewitt B. "Rusty" Clark
David Baker
Elizabeth Granucci

Introduction

The transition period for youth and young adults struggling with emotional and/or behavioral difficulties (EBD) is fraught with unique barriers that put this particular population at significantly greater risk for school failure, involvement with correctional authorities and/or dependency on social services. Among all disability groups, these youth have the highest rates of drop out from secondary school (Marder & D'Amico, 1992). Also, these youth experience the poorest outcomes in later employment, arrests, incarceration, and independent living (Davis & Vander Stoep, 1997; Marder & D'Amico, 1992; U.S. Department of Education, 1998). The transition period for youth and young adults with EBD is complicated further by the lack of coordinated services among children's mental health, child welfare, educational, adult mental health, substance abuse treatment, and rehabilitation sectors (Clark, Unger, & Stewart, 1993; Friedman, Kutash & Duchnowski, 1996; Knitzer, Steinberg, & Fleisch, 1990; Koroloff, 1990; Modrcin & Rutland, 1989; Stroul & Friedman, 1986). The resulting poor outcomes for these youth and young adults are extremely costly on three fronts: the individual and his/her family, security and comfort of the community, and local, state, and federal government entities.

Concerned with the future well-being of these students, the Florida Department of Education awarded a grant to the Louis de la Parte Florida Mental Health Institute of the University of South Florida to assist school districts in improving transition services for students and young adults with severe emotional/behavioral difficulties (EBD) through the development and implementation of the Transition to Independence Process (TIP) System. The mission of the TIP system is to assist young people with EBD in making a successful transition into adulthood, with all young persons achieving, within their potential, their goals in the transition domains of employment, education, living situation, and community life. The TIP system aims to improve the educational opportunity, graduation rate, academic success and competencies for post-secondary students ages 14-22 who have a severe emotional disability (EBD) classification, and/or who have involvement in juvenile justice education programs.

This presentation described the conceptual, development, pilot testing, and preliminary findings from two interview instruments used to study the fidelity of the TIP system. We also presented findings from tracking the outcome indicators of a young person's progress or difficulty in transition into greater independence.

TIP Case Study Protocol for Continuing System Improvement

This *TIP Case Study Protocol for Continuing System Improvement* represents an application of the case study methodology (Yin, 1994), in which individual young persons, along with a helping network of teachers and formal and informal helpers, provide the primary source of information concerning their experience and satisfaction with the transition process. In this approach, purposeful sampling is done to select what Patton (1990) calls information rich cases for in-depth study using information from multiple sources. This method is particularly useful because it allows researchers to study the complex social processes (such as the transition of young people with EBD to independence), within their real-life context, through a variety of methods. It offers detailed insight into how and why processes occur or do not occur in some cases. In addition to compiling individual case data, system strengths and emerging system performance issues observed during the case study review process are identified. This information, in addition to case study data, is then analyzed and presented to TIP demonstration site stakeholders to assist them in determining how well they are

doing with regard to the implementation of the transition process, and in defining how support and services can be improved for students and young adults with EBD in the district. Because this approach offers the potential for continuous system improvement in the delivery of transition services in a particular area, the *TIP Case Study* can also be used to monitor progress over time.

The *TIP Case Study* seeks to answer five questions:

1. Who are the students and young adults receiving transition supports and services?
2. What services/supports are these students and young adults receiving during their transition to adulthood?
3. Are these services/supports provided according to the TIP System guidelines?
4. What is the perceived level of effectiveness and satisfaction regarding services/supports offered to students and young adults during their transition to adulthood?
5. What is perceived to be most and least helpful to students and young adults in their transition to adulthood?

Methodology

Case study analysis is facilitated by summative questions answered by the interviewer once all interviews have been completed. These questions allow information from all sources to be considered while rating the site's level of effectiveness. Once all case studies in a particular site have been reviewed and rated, data may be compiled for an overall view of (a) the levels of effectiveness in person-centered planning; (b) individually-tailored and encompassing services and supports; (c) coordination of supports and services; (d) the safety-net of supports; (e) competency-based planning; (f) and the extent to which the system is outcome-driven. Using these results, the demonstration site receives feedback, and may strategize ways to improve functioning through the development of a formal action plan. Examples of action plan suggestions are: Transition facilitator positions to be jointly funded through vocational rehabilitation and the school district; and revise transition plans (forms) to be more functional.

An action plan can incorporate these singular elements to enhance the site's development. According to Figure 1, the measures of guidelines are made through assessing the level of strength-based, person-centered planning for youth within the school district, as well as incorporation of cultural factors in the context of transition planning. Since strength-based and person-centered planning scores were relatively low, this site's action plan prioritized a strategy to improve these elements within the transition planning process. This could be done in a variety of ways, but particularly through more frequent, structured transition planning meetings, revision of the transition plans (forms) to be more functional, or other site-appropriate activities.

Figure 1
Measures of Guideline 1: Person-Centered-Planning
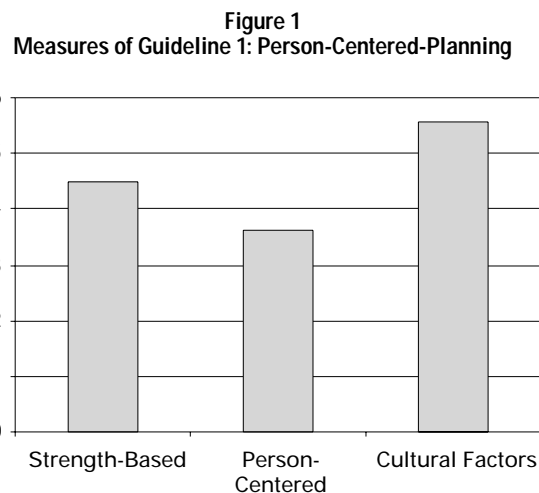
Community Adjustment Rating of Transition Success (CARTS) Progress Tracker

This portion of the presentation focused on the pilot testing of the revised *Community Adjustment Rating of Transition Success (CARTS) Progress Tracker* and the *CARTS Scoring Profile*. The purpose of the *CARTS Progress Tracker* is to measure a young person's progress or difficulty in transition to independence. The *CARTS Progress Tracker* was designed as an interview instrument and piloted-tested on youth and young adults (14-30 years of age) with emotional/behavioral difficulties (EBD). The *Progress Tracker* addresses four domains of functioning: (1) living situation, (2) secondary and post-secondary education, (3) employment, and (4) community life adjustment. The latter domain has four sub-domains that incorporate social/community responsibility, friends and mentors, health responsibilities, and quality of life. Within each section of the *Progress Tracker* specific items have been added to assess the level of satisfaction youth experience within each domain. There are also six qualitative open-ended questions to further explore progress or difficulties that are experienced within the domains.

The *CARTS Progress Tracker* was developed such that practitioners, educators, transition facilitators, and others working with a young person would be able to examine the interview results on the document and use the information in: (a) identifying areas of progress or difficulty that he/she experienced over time; (b) formulating or modifying the services and supports that he/she may need to achieve his/her current goals; and (c) guiding future person-centered planning to assist or create new goals with him/her. This instrument is administered approximately every three months via face-to-face or telephone interviews. In this way, service coordinator personnel, program mangers, parents, and the youth or young adults themselves can identify the progress or difficulties faced during the transition to independence process.

Methodology

An extensive search of the literature was conducted to identify the empirical basis for indicators within each domain that may enhance or hinder transition to adult independence. Using these indices, the *CARTS Scoring Profile* was developed from the *CARTS Progress Tracker* to measure the progress and/or difficulty faced by youth with EBD as they transitioned into adulthood. The items in the *Scoring Profile* are assigned numerical weight. The totals of the values of the weighted numbers assigned to the objective items provide indicators for the degree of progress or difficulty that a young person is having in the transition process within each of the domains. The cumulative value from the subjective items indicates the individual perceptions of his/her level of satisfaction and confidence within each of the domains. To best illustrate how the *CARTS Scoring Profile* can display the degree of progress and/or difficulty experienced by youth and young adults as they transition to adulthood, two graphs which highlight objective and subjective indicators for a fictitious young person are included (see Figures 2 & 3). These graphs exhibit the areas of progress and difficulty within each of the domains over the course of four quarterly interview periods.

Each line and associated symbols represent the *CARTS Scoring Profile* for a given domain. These domains include living situation, education, employment, productivity, which measures progress/difficulty over the combined domains of education and employment, and community responsibility, which includes the sub-domains of social responsibility, friends and mentors, health responsibilities, and quality of life. The objective indicators for this individual show a great deal of variability over the first three quarterly interview periods with substantial progress reflected in the objective indicators of the fourth quarter. In addition, the graph displays an inverse occurrence between employment and

education—as employment decreases indicating difficulty in that domain, education increases indicating improvement in that domain. The subjective indicators also show a similar pattern in satisfaction over the four quarterly interview periods.

Conclusion

The TIP system has been developed to provide communities with a framework for the operation of a system to prepare and facilitate youth and young adults with EBD for transition into adulthood roles (Clark & Davis, 2000). The TIP Case Study Protocol provides a method for communities to examine and refine the integrity of their transition at the practice, program, and system levels. The CARTS Progress Tracker provides a method for tracking the progress and difficulty that young people may be experiencing in their transitions. This tool guides program personnel to celebrate progress and adjust strategies with young people where relevant.

Figure 2*
Objective Indicators
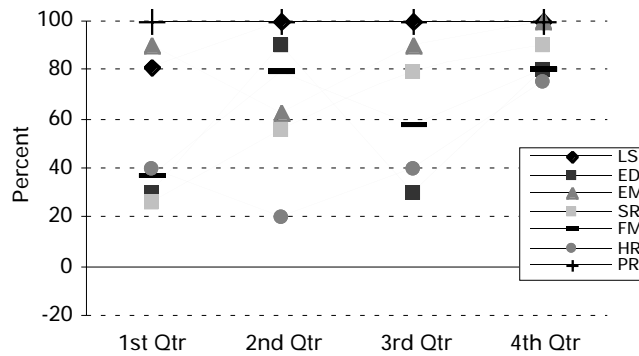
Figure 3
Subjective Indicators
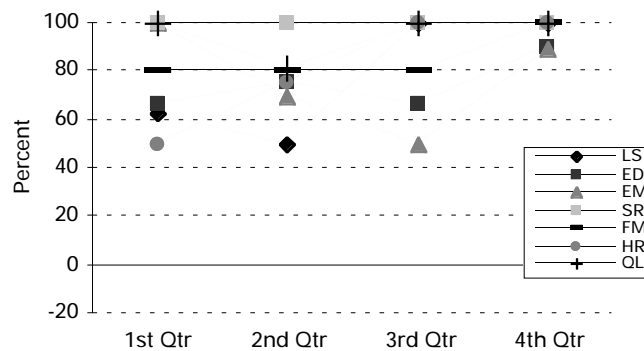
LS=Living Situation;
ED=Education;
EM=Employement;
SR=Social Responsibility;
FM=Friends & Mentors;
HR=Health Responsability ;
QL=Quality of Life;
PR=Productivity

*Note: These graphs reflect fictitious individuals.

References

Clark, H. B., & Davis, M. (Eds.). (2000). *Transition to adulthood: A resource for assisting young people with emotional or behavioral difficulties.* Baltimore: Paul. H. Brookes.

Clark, H. B., Unger, K. V., & Stewart, E. S. (1993). Transition of youth and young adults with emotional/behavioral disorders into employment, education, and independent living. *Community Alternatives: International Journal of Family Care, 5,* 20-46.

Davis, M. & Vander Stoep, A. (1997). The transition to adulthood among children and adolescents who have serious emotional disturbance: Part I. Developmental transitions. *Journal of Mental Health Administration 24*(4), 400-427.

Friedman, R. M., Kutash, K., & Duchnowski, A. J. (1996). The population of concern: Defining the issues. In B. A. Stroul (Ed.), *Children's mental health: Creating systems of care in a changing society* (pp. 69-96). Baltimore: Paul H. Brookes.

Knitzer, J., Steinberg, Z., & Fleisch, B. (1990). *At the schoolhouse door. An examination of programs and policies for children with behavioral and emotional problems.* New York: Bank Street College of Education.

Koroloff, N. M. (1990). Moving out: Transition policies for youth with serious emotional disabilities. *The Journal of Mental Health Administration, 17*, 78-86.

Marder, C., & D'Amico, R. (1992). *How well are youth with disabilities really doing? A comparison of youth with disabilities and youth in general.* Washington, DC: SRI International.

Modrcin, M. J., & Rutland, A. C. (1989). Youth in transition: A summary of service components. *Psychosocial Rehabilitation Journal, 12*, 3-13.

Patton, M. Q. (1990). *Qualitative evaluation and research methods.* Thousand Oaks, CA: Sage.

Stroul, B., & Friedman, R. (1986). *A system of care for children and youth with severe emotional disturbances (revised edition).* Washington, DC: Georgetown University Child Development Center, CASSP Technical Assistance Center

U.S. Department of Education. (1998). *Twentieth annual report to Congress on the implementation of the Individuals with Disabilities Education Act.* Washington, DC: U.S. Government Printing Office.

Yin, R. K. (1994). *Case study research: Design and methods (2nd ed.).* Thousand Oaks, CA: Sage.

CONTRIBUTING AUTHORS

Nicole Deschênes, B.Sc.N., M.Ed., R.N.
*Co-Principal Investigator, Transition to Independence Process (TIP):
System Development & Evaluation; 813-974-4493, Fax 813-974-6257;
E-mail: deschene@fmhi.usf.edu*

Hewitt B. "Rusty" Clark, Ph.D.
*Professor and Director, Transition to Independence Process (TIP): System Development
& Evaluation; 813-974-6409, Fax 813-974-6257; E-mail: clark@fmhi.usf.edu*

David Baker, M.S.W., R.N.
*Graduate Research Assistant; 813-974-5222, Fax 813-974-6257;
E-mail: dbaker@fmhi.usf.edu*

Elizabeth Granucci, B.A.
*Graduate Research Assistant; 813-974-7909, Fax 813-974-6257;
E-mail: Granucci@fmhi.usf.edu or juanita99@aol.com*

All authors: *Department of Child & Family Studies, Louis de la Parte Florida
Mental Health Institute, University of South Florida, 13301 Bruce B. Downs Blvd.,
Tampa, FL 33612.*

Utilizing Program, Fiscal and Clinical Outcome Data to Build and Sustain a System of Care

Bruce Kamradt
Mary Jo Meyers

Introduction

The Wraparound Milwaukee Program has been cited in the Surgeon General's Report as an example of a model in system of care reform and in innovative managed care approaches to serving children and families (U.S. Department of Health and Human Services, 1999). The program, which is currently six years old, annually blends over $28 million in funds from child welfare, juvenile justice, mental health and Medicaid to serve nearly 1,000 children with severe emotional, mental health and behavioral needs.

This summary highlights the importance of designing and measuring clinical, program, and fiscal outcomes that are relevant to local key stakeholders in a system of care program model of wraparound services. The collection and dissemination of outcome data has been crucial to sustaining Wraparound Milwaukee.

Background

In 1994 Wraparound Milwaukee received a $15 million, five-year grant from the Center for Mental Health Services (CMHS) to initiate reform in children's mental health services delivery in Milwaukee. Very early on in its existence, Wraparound Milwaukee focused upon a blend of managed care techniques and approaches that incorporated the Wraparound philosophy and values as a vehicle to initiate system change. This took the form of a system that was strength-based, family focused, and needs-driven. Wraparound Milwaukee utilized components such as mobile crisis, care management, a Provider Network with an array of services, informal supports and various managed care tools and techniques.

The early Wraparound Project collected various kinds of clinical and program data required by CMHS, but those data were not very relevant to local stakeholders. The outcomes were good, but did not lead toward sustainability for the Project. Wraparound Milwaukee staff realized that the program needed to focus on a more defined group of children with severe emotional problems who could be served by all child-serving agencies in Milwaukee, with outcomes directed toward the highest risk youth in the area's child serving systems.

Twenty-Five Kid Pilot Project

Our first lesson learned concerned how a small, focused pilot project could be a catalyst for changing an entire system. At that time there was growing concern over the increased financial burden encumbered by Milwaukee County in the treatment of youth with serious emotional disabilities (SED) who were served in residential treatment centers (RTCs) and psychiatric hospitals.

The "Twenty-Five Kid Pilot Project" was designed by Wraparound Milwaukee to promote system change. It targeted 25 youth in RTCs with no immediate discharge plan. Working within a Wraparound philosophy and the components of care in our model, children were accepted on a "no reject/ no eject" policy to determine if these adolescents could be (a) returned to the community, with (b) no new legal offences, and (c) at equal or less cost to residential placement.

Results

Wraparound Milwaukee was able to return 17 of the 25 youth to the community within 90 days; all but one youth were returned within six months. The pilot and its outcomes were encouraging, and outcomes were disseminated through news releases, newsletters, meetings and even some local television coverage. Due to the success of the pilot project, Wraparound Milwaukee agreed to enroll all the remaining 375 youth in RTCs over the next 18 months as well as all youth newly identified as needing residential treatment.

Having presented cost data illustrating that community-based care could be effectively delivered at 60% of the cost of a residential placement or at a fraction of the cost for a long-term psychiatric hospitalization, Wraparound Milwaukee negotiated a monthly case rate with child welfare and juvenile justice, and a capitated rate with Medicaid; these rates were significantly less costly than institutional alternatives. Within a year, (June 1997-1998), all children in the target population were enrolled in the program.

Wraparound Milwaukee Today

Fiscal Outcomes

Wraparound Milwaukee currently serves nearly 600 children each day. The outcomes for these children are continually monitored and evaluated for internal quality assurance and for local system stakeholders. The Quality Assurance/Quality Improvement (QA/QI) Program measures and reports on program, cost, and utilization data on enrolled families. The average number of youth in placement per day has decreased from 400 to 134 youth, length of stay from 12 months to 4.5 months, and residential treatment expenditures from $17.5 million to $9.1 million per year.

Acute inpatient psychiatric care days have reduced from over 5,000 per year for the target population to under 500 days in 1999 and 2000. The outcomes of these program changes are reported monthly through a newsletter to all stakeholders, families, policymakers, and other stakeholders and through a quarterly QA/QI report to a Partnership Council attended by all agency directors for child welfare, juvenile justice, special education, Medicaid and by the Children's Court Judge.

Additional fiscal outcomes were established with the input from key stakeholders, who wanted to know if Wraparound could serve youth in the community at equal or less cost than institutional care. In response to their concerns, Residential Treatment costs are tracked monthly (at a current monthly average of $6,150 per child). However, the monthly cost of treating these youth at Wraparound Milwaukee is about $3,750 per child. Factoring additional mental health costs for hospitalization and other services into the $6,150 residential rate (at an average length of stay of 11.2 months), brings total cost to $85,993 for children serviced in residential treatment centers and hospitals. Yet even with an average length of enrollment services in the Wraparound Milwaukee project at 14.7 months, total cost averages about $55,860 per child.

Client Measures, Outcomes, and Stakeholder Concerns

Traditional clinical outcome measures such as the Child and Adolescent Functional Assessment Scale (CAFAS; Hodges & Wong, 1996), the Child Behavior Checklist (CBCL; Achenbach &, Edelbrock, 1991), and the Youth Self-Report (YSR; Achenbach, 1991), are used by Wraparound Milwaukee to evaluate changes in each child's functioning. While helpful instruments, these measurements must be used in conjunction with indicators that are relevant to the concerns and interests expressed by Judges and other child serving agencies, who ask, "Is the child's school attendance improving when enrolled in Wraparound and is there a reduction in criminal type conduct for youth with delinquent histories?"

Since comparison sites are difficult to set up and random assignment of cases does not work when all cases are court ordered and children must be offered the same services, Wraparound Milwaukee chose to review education and juvenile justice records one year prior to enrollment, during enrollment, and a year following disenrollment.

Results

The average percentage of school days attended for Wraparound Milwaukee youth has risen from about 60% attendance of eligible school days for one year prior to enrollment to 85% during enrollment. Post-disenrollment attendance has dropped slightly from 85% to 76% but generally youth still attend school with greater frequency than prior to being in Wraparound Milwaukee.

For a cohort of 129 youth, the average number of charged offenses per child during the baseline year prior to enrollment was nearly two offenses. A year following enrollment, that rate fell to under 1.5 offenses, and one year following disenrollment it had dropped to .5 offenses. The proportion of youth committing certain offenses dropped during the same period. For example: property offenses dropped from 37% one year prior to enrollment, to 18% during enrollment, and to 9% one year post disenrollment; assaults from 17% to 7% to 4%; sex offenses from 18% to 4% to 2%; and weapons offenses from 11% to 4% to 0%, respectively (Seybold, 2000). These results have been very positive and have contributed to the support received from the Juvenile Court Judges and District Attorney's office.

The Court, probation officers and prosecutors have been most interested in whether the gains made while in Wraparound can be maintained after youth leave the program. These stakeholders are concerned with whether youth and their families will be better able to cope with the daily problems and challenges, and whether youth have developed stronger coping skills, have access to more resources, and whether youth and families' needs will continue to be met after disenrollment from the program.

The outcomes appear to suggest that the reported change for youth based on the CAFAS, CBCL, and YSR for over 325 youth show significant reductions in the same scores on all three scales which demonstrates approved functioning at home, in school and the community.

Conclusion

In summary, establishing outcome indicators that are meaningful to the child serving agencies in the system of care is absolutely critical to building and maintaining support for programs servicing youth having SED and their families. While traditional clinical measures are important, it is often more important to collect and disseminate fiscal and legal outcomes to establish and maintain support for system change.

References

Achenbach, T. M. (1991). *Manual for the Youth Self-Report and 1991 Profile.* Burlington: University of Vermont, Department of Psychiatry.

Achenbach, T. M., & Edelbrock, C. (1991). *Child Behavior Checklist/4-18.* Burlington: University of Vermont, Department of Psychiatry.

Hodges, K., & Wong, M. M. (1996). Psychometric characteristics of a multidimensional measure to assess impairment: The Child and Adolescent Functional Assessment Scale. *Journal of Child and Family Studies, 5,* 445-467.

U.S. Department of Health and Human Services. (1999). *Mental Health: A Report of the Surgeon General* (pp. 185-186). Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health.

Seybold, E. (2000, December). Evaluation Study for Wraparound Milwaukee Child and Adolescent Services Branch. Unpublished manuscript.

CONTRIBUTING AUTHORS

Bruce Kamradt, M.S.W.
Director, 414-257-7531, Fax 414-257-7575; E-mail: bkamrad@wrapmilw.org

Mary Jo Meyers, M.S.
Assistant Director, 414-257-7521, Fax 414-257-7575; E-mail: mjmeyers@wrapmilw.org

All authors: *Wraparound Milwaukee, 9501 Watertown Plank Road, Milwaukee, WI 53226*

Utilization Management and Efficiency: Virginia's Comprehensive Services Act

Cecelia Kirkman

Introduction

Many public purchasers of behavioral health services have been embracing managed care models, ostensibly to more rationally allocate limited health care resources by simultaneously controlling costs, coordinating care and ensuring access to services. In Virginia, the Comprehensive Services Act (CSA) for At-Risk Children and Families, the largest public funder of behavioral health services for children and adolescents, has also adopted managed care approaches. The CSA was enacted in 1992 with the stated intent of reducing costly residential treatment placements for children and youth with serious emotional and behavioral disturbance (SED). Funds across child and family serving agencies are pooled at the state level and allocated to localities for the purchase of services for youth with serious emotional and/or behavioral disturbance, and foster care. Service decisions are made by local interdisciplinary Family Assessment and Planning Teams (FAPT), which review both pool-funded and non-pool-funded youth. Contrary to early expectations, expenditures under CSA have continued to rise. This evaluation of the CSA answered two study questions:

- Has the efficiency of local governments in administering CSA improved with the increased focus on utilization management?
- Is there a difference between the efficiency of localities that use a standardized utilization review process administered by a Commonwealth independent contractor and those that use their own locally-designed and managed system?

Methods

The entire population of Virginia localities ($n = 132$) was examined. The city/county was the unit of analysis. Pooled data for fiscal years 1996 to 1999 were used to examine trends in efficiency, for a total of 528 cases. A cross-sectional sample of all localities in FY99 was used to examine differences in efficiency based on choice of utilization review method. Data for the study were obtained from the Virginia Office of Comprehensive Services, the U.S. Census Bureau, and the Bureau of Economic Analysis, U.S. Department of Commerce.

Data envelopment analysis (DEA) was used to develop efficiency scores for each locality. DEA is a relatively new nonparametric method for the measurement of efficiency. This method focuses on technical efficiency, the production of the maximum amount of output from a fixed amount of input or, conversely, production of a given output with minimum quantities of input. DEA constructs an efficiency frontier of extreme points (best producers), measuring inefficiency as deviation from this frontier. DEA compares each locality with only the "best" localities (Cooper, Seiford, & Tone, 2000). This is in contrast to statistical methods such as regression, that compare each locality to the "average" locality. Data were analyzed using IDEAS 6.1 professional version software. Table 1 presents the variables for the DEA model. Discretionary variables are those variables over which the locality has control. In this model, non-discretionary variables are population level input variables that the locality cannot control and which may influence the efficiency of localities in administering the CSA.

Nonparametric methods were used to compare efficiency scores between years, and between localities in 1999 based on choice of utilization review method. SPSS 10.0 was used to conduct the post hoc analysis.

Results

Data Envelopment Analysis

The technical efficiency score of an efficient locality is equal to 1. Inefficient localities are measured against efficient localities, and have an efficiency score greater than zero and less than one. Table 2 presents the results of the DEA.

The number of non-pool funded youth receiving FAPT reviews made the greatest contribution to output inefficiencies. In order to become efficient, 216 localities need to increase the number of non-pool-funded FAPT reviews by nine reviews on average. Excluding the impact of non-discretionary inputs, expenditures had the greatest contribution to input inefficiencies. Concurrent with increases in outputs, on average localities need to reduce expenditures by $861,818 to become efficient.

Table 3 presents a summary of the performance of efficient and inefficient localities, and the results of tests of significance for the difference. There were statistically significant differences between efficient and inefficient providers in production of non-pool-funded FAPT reviews, and utilization of episodes of non-residential services and expenditures. As a group, efficient localities provided more non-pool FAPT reviews and utilized more episodes of non-residential treatment and expenditures than inefficient localities.

Table 1
Input and Output Variables

Variable	Variable Type	Mean	SD
INPUTS			
Youth population	Non-discretionary	12,435	25,079
Poverty (%)	Non-discretionary	19.01	8.37
Per capita income ($)	Non-discretionary	21,871	5,360
Residential episodes	Discretionary	88	168
Non-residential episodes	Discretionary	43	83
Expenditures ($1,000)	Discretionary	1,266	3,220
OUTPUTS			
Youth served	Discretionary	107	200
Non-pool-funded FAPT	Discretionary	15	28
Pool-funded FAPT	Discretionary	64	102

Table 2
Data Envelopment Efficiency Results

Number of Localities	528	%	
Number efficient (%)	168	32%	
Number inefficient (%)	360	68%	
Average Efficiency Score	**Number**	**Mean**	**SD**
All localities	528	0.53	0.39
Inefficient localities only	360	0.31	0.27
Average Output Inefficiencies			
Youth served	146	6.90	13.25
Non-pool-funded FAPT	216	9.29	13.91
Pool-funded FAPT	130	24.93	37.56
Average Input Inefficiencies			
Residential episodes	160	28.61	46.99
Nonresidential episodes	113	21.66	45.50
Expenditures ($)	360	861,818	1,452,997

Table 3
Performance by Efficient and Inefficient Localities

	Efficient (n = 168)		Inefficient (n = 360)		
	Mean	*SD*	*Mean*	*SD*	*Mann-Whitney U*
Output Production					
Youth served	164	296	81	128	29806.00
Non-pool-funded FAPT	22	39	11	19	26356.00**
Pool-funded FAPT	90	146	51	69	29650.00
Input Utilization					
Youth population	18.171	38,828	9,760	14,122	23840.50
Poverty (%)	19.03	9.36	19.02	7.89	29684.00
Per capita income ($)	22,055	6,603	21,784	4,676	28456.50
Residential episodes	129	241	69	115	29991.50
Non-residential episodes	60	114	35	61	25315.00**
Expenditures ($1,000)	1,766	5,064	1,033	1,766	27939.00**

**p < .05

Utilization Management and Efficiency

Concurrent with incremental applications of utilization management, there has been a decrease in efficiency. Table 4 presents efficiency scores by year. Although the average efficiency scores of all localities steadily declined during the four year period, efficiency scores of inefficient localities were variable across the four years, with no apparent trend. Kruskal Wallis rank testing to compare for differences in medians did not reveal a statistically significant difference in average efficiency scores across the four years. However, there was a statistically significant decline in the average efficiency scores of all localities between FY96 and FY98, ($p < .05$) and the number of efficient localities ($p < .001$).

The efficiency of localities was compared by choice of utilization review method (state contractor or locally-managed). Table 5 presents the results. There was not a statistically discernible difference between localities based on efficiency status and choice of utilization review method.

Table 4
Efficiency by Year

	FY96	FY97	FY98	FY99
	N(%)	N(%)	N(%)	N(%)
Number of Localities				
Number efficient	58(43)	45(34)	32(24)	33(25)
Number inefficient	74(56)	87(66)	100(76)	99(75)
Average Efficiency Score				
All localities	.61	.56	.50	.46
Inefficient localities only	.30	.33	.34	.28

Table 5
Utilization Review and Efficiency, FY99

	State Contractor UR	Locally-managed UR	Total
Inefficient	56	43	99
Efficient	20	13	33
Total	76	56	132

Chi square = .165; *p* = .684

Discussion

The results of this study indicate that incremental applications of utilization management have not led to increased efficiency of localities in administering CSA. Analysis using cross-sectional data from FY99 found that choice of utilization review method was not related to efficiency. The finding that efficient localities had higher expenditures than inefficient providers is somewhat counterintuitive, although it should be kept in mind that these localities also served more youth and provided more episodes of non-residential treatment. Historically, these localities have been viewed as poor performers due to their "failure" to contain costs. However, these localities are portrayed in a more positive light when they are evaluated according to their efficiency (i.e., on how well they use resources in order to serve youth with SED or youth in need of foster care services), rather than by how many resources they use. In fact, efficient localities may be doing a better job of identifying and responding to the needs of children and youth than those localities that utilize less resources and serve fewer youth.

This study of the relationship between utilization management and efficiency was limited in several ways. Data on administrative costs (allocated by formula to localities) were not available at the time of the study, and could not be included in the DEA. Due to the non-experimental design of the study, causal inferences cannot be drawn from the findings. For example, it would be erroneous to conclude from the results of this study alone that the application of utilization management leads to decreased efficiency. Also, this study did not attempt to measure the quality or appropriateness of services provided.

Implications for Child Behavioral Health Services

Managed care purports to more rationally allocate resources. However, the results of this study indicate that utilization management does not have an impact on how well localities use CSA resources. This finding is consistent with a recently published study (Koike, Klap, & Unutzer, 2000), which found that very few services were denied (0.8%) or approved at a level lower than requested (1.3%) in the utilization management program of a large managed behavioral health organization. The authors of that study raised questions about the time and opportunity costs of the utilization review process. Recently, Aetna, Blue Cross/Blue Shield of North Carolina, and Cigna/Healthsource have reassessed the utility of utilization management, reducing use of this managed care technology (Horvit, 2000; Rayner, 2000). Given these findings, state and local governments should carefully assess the benefits and costs of implementing utilization management processes for publicly funded child behavioral health care services.

References

Cooper, W. W., Seiford, L. M., & Tone, K. (2000). *Data envelopment analysis: a comprehensive text with models, applications, references and DEA-solver software.* Boston: Kluwer Academic.

Horvit, M. (June 6, 2000). North Caroline insurer eliminates referral policy for HMO members. *The Charlotte Observer.*

Koike, A, Klap, R., & Unutzer, J. (2000). *Utilization management in a large behavioral health organization.* Psychiatric Services, 5, 621-626.

Rayner, A. (June 22, 2000). *Aetna: Will relax managed care policies in Virginia.* American Health Line.

CONTRIBUTING AUTHOR

Cecelia Kirkman, M.S.W., Ph.D.
Senior Research Analyst, Service Employees International Union, 1313 L St. NW,
Washington, DC, 20005; 202-989-3223, Fax: 202-989-3309;
E-mail: kirkmanc@seiu.org

An Interdisciplinary Field Training Effort and Preliminary Evaluation

Douglas A. Waring
Kellie Reed-Ashcraft
Cynthia Blanchard-Kittle

Introduction

The North Carolina PAL (Public and Academic Liaisons) project is an effort to encourage increased interactions between public mental health services and training resources available at state universities on behalf of children having a severe emotionally disability (SED) and their families. As a part of this effort the FACES (Families and Communities Equals Success) project was implemented to begin developing methods to increase the integration of system of care (SOC) principles into university curricula. A major part of the FACES effort was the development of an interdisciplinary field project. The field project was designed to be a multidisciplinary internship experience for students working at child service agencies.

Participants in this project were students and faculty at Appalachian State University from the academic departments of Sociology and Social Work; Psychology; School Psychology; Criminal Justice; Family and Consumer Sciences; Curriculum and Instruction; and Learning, Reading, and Exceptionalities. Child service agency participation included representation from New River Behavioral Health Services, Watauga County Schools, Watauga Youth Network, High Country First in Families, and the Watauga County System of Care Collaborative. Finally and most importantly, parents of children having SED were actively involved in all phases of planning, development and implementation of this project. This paper briefly describes the goals, structure, and implementation of the pilot field-training project and provides some descriptive outcome data.

Method

The FACES interdisciplinary field project was designed to provide students with an opportunity to be active participants on an interdisciplinary team (field group) with university faculty, child service agency supervisors, and students from various academic disciplines. Students who participated in the interdisciplinary field project were enrolled in supervised internship positions related to their academic discipline. Over the course of two academic semesters (Spring and Fall 2000) participants included a total of 14 students, 12 faculty, and 10 child service agency internship supervisors. There were ten primary learning goals for students.

1. Carry out their professional responsibilities based on their disciplinary perspective.
2. Learn the disciplinary perspective of professionals represented on the team.
3. Understand the mandate, structure, and operation of the agencies, schools, or programs represented on the team, and their interorganizational relationships.
4. Identify and assess strengths and problems based on their disciplinary perspective.
5. Understand the methods and techniques for dealing with strengths and problems from the various disciplinary perspectives.
6. Identify and apply "system of care" (SOC) values and ethics in their work with "client" children, families, and teams.
7. Learn collaborative techniques with persons from other disciplines on behalf of children with SED and their families.
8. Identify and use the formal and informal channels of communication within their agency, school, program, or with other members of the team.
9. Understand alternative explanations, by discipline, of the strengths and problems identified for individual children with SED and their families.
10. Learn how to work as a member of an interdisciplinary team (Gardner, 1994).

Each academic semester, implementation of the field-training project involved five primary components.

1. ***Development/revision of the FACES Interdisciplinary Field Manual (FACES Interdisciplinary Field Training Committee, 1999).*** Prior to the Spring 2000 academic semester an interdisciplinary field manual was developed that described the structure, goals, and expectations of the interdisciplinary field project. This manual was designed to be revised/updated for subsequent academic semesters.

2. ***Selection and orientation of students and agency supervisors.*** During the semester prior to the development of a field group, students who would be participating in internships at child service agencies were recruited for participation. Following student recruitment, the child service agency supervisors for each of the students were contacted and asked to participate. Participation for all parties was completely voluntary and all individuals asked to participate did so.

3. ***Delivery of a Field-Training Orientation Workshop.*** At the beginning of each academic semester, all project participants attended a four-hour field-training workshop. This workshop was used to introduce group members to one another, discuss the perspectives and differences between different disciplines and agencies, present/discuss SOC concepts, review/discuss the book *One Child* by Torey Haden (1980), and plan for the upcoming semester. At the beginning of the workshop, an SOC Concept Knowledge Questionnaire was administered to all students and agency supervisors.

4. ***Once monthly multidisciplinary meetings.*** Following the workshop, project participants met once a month (4 times) for two hours. These meeting were structured so that the first hour could be used to present/discuss topic-relevant content information and the second hour to discuss student involvement on local child and family teams and local SOC activities. The topic content for each successive meeting was a) Families, Systems of Care, and Strength Based Assessment and the Wraparound approach (LaVrier & VanDenBerg, 1995); b) Defining and Distinguishing Multidisciplinary and Interdisciplinary Teamwork (Gardner, 1994) and; c) How "Severely Emotionally Disabled" (SED) is defined by DSM-IV (American Psychiatric Association, 1994) criteria and assessed within different agencies

5. ***Field project assessment and evaluation.*** Finally, the last meeting of each semester was used to evaluate the field project and to obtain feedback. Future changes in the field-training program would be based on this outcome data. Consequently, during this meeting the SOC Concept Knowledge Questionnaire was readministered and separate structured focus groups were conducted with the students and their supervisors.

Results

Pre- and Post-Test Comparison for the SOC Concept Knowledge Questionnaire

The student results for the pre/post SOC Concept Knowledge Questionnaire are presented in Table 1. The agency supervisors showed no real knowledge gain because all had been actively involved in the development of the Watauga SOC initiative for some time. It should be noted that the data presented here are descriptive only. As can be seen in Table 1, student's self-ratings of knowledge for SOC related concepts showed substantial increases when the pre- and post-test results were compared. Overall, there appeared to be two major points of interest. Based on these results, it appears that the field-training project succeeded in teaching students about SOC related concepts such as strength-based assessment, children who have SED, wraparound care, etc. However, students did not appear to gain as much in their knowledge of the services generally available to families with children having SED. Such knowledge is critical to professionals working in SOC related field settings. Consequently, this issue will need to be addressed in any future field-training project.

Table 1
Mean Results for SOC Concept Knowledge Questionnaire
(1 = No knowledge to 5 = High Knowledge)

Personal Knowledge of:	*Pre-test Mean*	*Post-test Mean*	*Mean Gain*
The concept of a System of Care	2.3	4.6	2.3
Children with Severe Emotional Disturbances (SED)	2.9	4.2	1.3
The concept of family involvement in the planning delivery of services	3.0	4.6	1.6
The concept of an interdisciplinary team approach	2.9	4.6	1.7
The concept of At-Risk children	3.4	4.7	1.3
Services generally available for SED children and families at the community level in the US	2.2	3.7	1.5
Services generally available for SED children and families in Watauga County	2.1	3.9	1.8
The concept of a SOC community collaborative	2.4	4.6	2.2
The concept of wrap-around services	2.4	4.8	2.4
The concept of strength-based assessment for children with SED	2.5	4.6	2.1

Focus Group Results

The focus group responses from students and supervisors were collapsed across the two semesters and a summary of the most common/critical feedback is provided here. In general, both students and their agency supervisors felt that the training program was very useful and enjoyable. Additionally, both groups enjoyed and strongly praised the value of interacting with individuals from multiple agencies and disciplines. All involved felt they came away with a much better understanding of the focus, strengths/weaknesses, and orientation of the other disciplines involved in the project. Finally, both groups strongly supported the continuation and value of the training program with only minor revisions.

Student Responses

On the positive side, the students liked the focus on and presentation of SOC concepts and felt they gained a great deal of knowledge on these topics. They also had very positive comments about the faculty liaisons and agency supervisors; both groups were viewed as knowledgeable, supportive, and very accessible. Students had the highest praise for the participation of parents with children who have SED and for the review/discussion of the book *One Child* conducted in the initial workshop. They uniformly viewed each of these components as excellent ways to give students an understanding of the impact that children having SED, and the agencies that try to serve them, have on families.

On the negative side, students were uncertain as to what they would do with much of the knowledge they had gained. Because the local community had not yet implemented their SOC program, students did not have the opportunity to see a practical application of SOC concepts. Also, students felt that the goals and expectations for students in the field program needed to be much more clearly structured and explained at the beginning of the semester.

Agency Supervisor Responses

In general the agency supervisors had high praise for the program and wanted to see it continued with only minor revisions. Specifically, the supervisors felt that the opportunity to interact and work with people from different agencies was extremely valuable and enjoyable. However, like the students, the supervisors felt that the goals and expectations for both the students and supervisors needed to be

better clarified at the start of the semester. One specific addition to the program that was suggested concerned the inclusion of a pre-workshop meeting between the supervisors and faculty liaisons to clarify and discuss the university's expectations of the supervisors involved in the project.

References

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.

FACES: Interdisciplinary Field Training Committee. (1999). *FACES Interdisciplinary Field Training Manual.* Unpublished manuscript. Department of Sociology and Social Work, Appalachian State University.

Gardner, H. G. (1994). Multidisciplinary versus Interdisciplinary Teamwork. In H. G. Gardner & F. P. Orelove (Eds.), *Teamwork in Human Services: Models and Applications Across the Life Span.* Newton, MA: Butterworth/Heinemann.

Haden, T. (1980). *One Child.* New York: Avon Books.

LaVrier, B. & VanDenBerg, J. (1995). *The Wraparound Process.* Unpublished manuscript.

CONTRIBUTING AUTHORS

Douglas A. Waring, Ph.D.
Department of Psychology, Smith-Wright Hall, Appalachian State University, Boone, NC 28608; 828-262-2738, Fax 828-262-2974; E-mail: waringda@appstate.edu

Kellie Reed-Ashcraft, Ph.D.
Department of Sociology and Social Work, Chapell Wilson Hall, Appalachian State University, Boone, NC 28608; 828-265-8667, Fax: 828-262-6811; E-mail: ashcraftkb@appstate.edu

Cynthia Blanchard-Kittle, D.S.W.
Department of Sociology and Social Work, Chapell Wilson Hall, Appalachian State University, Boone, NC 28608; 828-262-2293, Fax: 828-262-6811; E-mail: blanchardcj@appstate.edu

The North Carolina Public-Academic Liaisons: Facilitating Collaboration Between University and Community

Co-Chairs
Terri Shelton
Lorin Baumhover

Authors
Kellie Reed-Ashcraft
Douglas A. Waring
Margaret Arbuckle
Carol MacKinnon-Lewis
Irene Nathan Zipper
Barbara Leach
Susan McCammon et al.
James Cook et al.

Overview

Planning, implementing, and evaluating effective systems of care requires a workforce that understands both its underlying values and has the necessary skills needed to implement and evaluate wraparound services. That workforce is comprised of practitioners who are now entering the field as well as those already working in the system. The success of the implementation of systems of care is dependent, in part, on the careful in-service and pre-service preparation of the workforce.

Universities and colleges preparing students who will be entering the workforce are vital to the effective implementation of new practices and policies. However, the many disciplines that are involved in working with children and families often operate under separate educational models with separate professional organizations and standards, and differing perspectives. The Public-Academic Liaisons (PALs) represent an initiative aimed at integrating perspectives among multiple disciplines, which then connect with local communities that are working with children and families to use new models of practice.

North Carolina has been actively engaged in facilitating collaboration among the public sector, academia, and family members/consumers through the development of these Public-Academic Liaisons or PALs. The North Carolina PAL involve seven public universities and a total of more than 120 faculty representing 15 disciplines in a coherent pre-service and in-service education initiative. The North Carolina PAL include Appalachian State University, East Carolina University, Sandhills Community College, the University of North Carolina at Asheville, the University of North Carolina at Chapel Hill, the University of North Carolina at Charlotte, and the University of North Carolina at Greensboro. The PALs hold regular PAL Council meetings for the purpose of sharing information and ideas.

The PALs offer a means by which University faculty and students and families as co-teachers provide organized educational, service, and research opportunities through the following: (1) field placements and volunteer student placements; (2) training offered to local service providers, family members, and community resources; (3) research to support the development, evaluation, and refinement of systems of care; and (4) consultation to local agencies. Conversely, PALs offer a means whereby University faculty learn about "cutting edge" practices that originate in the field and enhance their theoretical information through their direct involvement in practice.

The presenters in this Topical Discussion represented the various academic institutions and state liaisons participating in the North Carolina PAL effort. Through their various presentations, they provided an overview of the varied pre-service and in-service activities that have been initiated and nurtured through the PALs. A brief overview of these topics follows.

Public-Academic Liaisons: An Overview

Interdisciplinary Field Efforts – *Kelly Reed-Ashcraft & Douglas Waring.* Faculty from Appalachian State University described the development and implementation of their university-based interdisciplinary field effort. To carry out this effort, students and faculty from different disciplines, field supervisors from local agencies, and parent representatives collaborated on three components: (1) education, (2) interdisciplinary field placements, and (3) a non-experimental evaluation of this effort. The university coordinated the components while students and field supervisors were engaged in a local community's development of a system of care.

Faculty and Parent Rewards for PAL Participation *– Sandra Spencer, John Powell & Susan McCammon.* Representatives from East Carolina's PAL provided an overview of the institutional and personal rewards of PAL participation. They outlined how this participation responds to the university reward system. Such rewards include: increased research opportunities, increased potential for additional grants and contracts, new avenues for professional presentations, and increased opportunities for refereed publications. Other benefits include increased scholarly dialogue across disciplines, which ultimately enrich teaching and learning; increased visibility across disciplines within the university; increased knowledge of university resources; and great travel opportunities for continuing education and networking.

Integrating Primary Care and Mental Health: PALs in Medical Education *– Irene Nathan Zipper, Barbara Leach & Charles Pryzant.* The traditional "medical model" may challenge some of the values that underlie systems of care. Yet the need to integrate primary and mental health care with children and families warrants the inclusion of medical schools within the PAL framework. In this presentation, the need for integrating primary and mental health care was underscored. The presentation addressed the strategies that have been used in involving the medical school and preparing medical students for practice in a system of care. Value differences and logistical challenges were described as well as specific activities that were undertaken at the University of North Carolina at Chapel Hill.

Conducting and Utilizing Applied Research to Improve Systems of Care *– James Cook & Ryan Kilmer.* The University of North Carolina at Charlotte has developed multiple applied research projects to support the development of a family-centered System of Care (SOC) and has fostered student involvement in field-based research projects. Student projects have involved the evaluation of a summer camp for children in the SOC and their siblings a needs assessment for the family advocacy program, and have included the development of focus groups to assess ways to market the SOC for sustainability. Since sustainability is limited by the degree to which the community changes its standard practices, the University has provided funding for a longitudinal study developing measures of system change to assess how well the community is changing its system. A planned long-term study of resilience among siblings of children with SED in the SOC is also underway. The process of developing, implementing, and supporting these projects, implications for training, preventative interventions, and advocacy efforts, and steps for incorporating new knowledge into system change were reviewed.

Interdisciplinary Course Development with Parents as Co-Teachers *– Margaret Arbuckle & Carol MacKinnon-Lewis.* The University of North Carolina at Greensboro has developed an interdisciplinary course, *Family-Centered Interdisciplinary Practice: System of Care*, taught to undergraduate and graduate students representing eight academic disciplines. An interdisciplinary faculty team collaborates with parents of children with serious emotional disability (SED) in teaching the course. All students are paired with a family with a child having SED as well. During the semester, students participate in Child and Family Team meetings, school meetings, and shadow the Family Team Coordinator of their child. Preliminary data from the students show the experience deepens their understanding of the applicability and benefits of System of Care in their potential career.

Coordinating the Efforts of an Interdisciplinary Team of Project Participants *– Suzanne Biggs Gavenus.* The North Carolina Western PAL Partnership, which includes Appalachian State University, Mars Hill College, and University of North Carolina at Asheville, was created to meet the pre-service and in-service training needs of professionals in the western region. Project participants at each academic institution, family participants, and professionals from the communities where those institutions are located work in coordination on multiple system of care related activities. Additionally, coordination takes place on a statewide level in unifying the efforts of participating PAL academic institutions via the PAL Advisory Council. The format for the structure of coordinating each of these levels was described along with a rationale highlighting the importance of coordinating efforts.

Faculty and Parent Rewards for PAL Participation

Susan L. McCammon & Barbara Leach

Family Members Serving as Faculty

We have found our PAL participation to be personally, as well as academically rewarding. Family members who are working at institutions of higher learning are experiencing many personal rewards as co-teachers, guest lecturers, curriculum developers, and as participants in other, related roles. Being involved in the training of new service providers is very satisfying, in that it helps both students and university/community college faculty understand the unique challenges families experience when seeking help and resources for children who have behavioral and mental health challenges. Our ultimate goal is to make a difference by helping others understand families better, and appreciate and respect us for the challenges we face, and the determination we have to help our children and ourselves. There is great personal satisfaction in knowing that by sharing our experience and perspectives we are having some impact on the effectiveness of the services families will receive in the future. We think this increases the likelihood that both students and faculty will become our allies in systems of care. In general, families who are involved in these new roles see this as another opportunity to advocate for the needs of children with serious emotional disorders and their families, and perhaps influence the way services are provided and the quality and effectiveness of those services.

Other personal benefits for families include the opportunity to increase our understanding of the principles and theories that underlie current practice, to have our knowledge and expertise be recognized and appreciated, and to learn and enhance our interpersonal and technical skills. For many family members, involvement with higher education institutions has sparked our interest in further education and professional skills.

Higher Education Faculty

As university (college and community college) faculty collaborating with parents in classroom and curriculum development, we have also benefited richly. We (and our students) have gained information about what parents view as helpful, and hear their suggestions about services and resources that families need. This provides an important bridge between theory and practice, and promotes understanding and appreciation of the consumer's "real life" experience. We have been able to model working with family members as partners and equals in addressing the issues of families and children.

In addition to personal growth, and improved teaching, working with parents and the PAL initiative in general has also been valuable in our academic growth. We have had our understanding of the concepts related to systems of care, and the complexity of their implementation and improvement deepened. Exchanging syllabi, bibliographies, teaching and research projects has been informative. We have traveled to conferences which we might not have otherwise sought out and attended (i.e., the biennial CASSP Training Institutes, the annual conference of the Federation of Families for Children's Mental Health, and this 14th Annual Research and Training Conference). This involvement has resulted in research, presentation, and publication opportunities (which are rewarded especially in the university system). These efforts have often been interdisciplinary, and sometimes inter-institutional as well. We hope to continue to find ways to support this valuable opportunity to collaborate, and, as the family members say, to combine the "bookwork" with the "real thing."

Conducting and Utilizing Applied Research to Improve Systems of Care

James R. Cook & Ryan P. Kilmer

Introduction and Background

Since 1993, North Carolina has pioneered the development of Public Academic Liaisons (PALs), collaborations among universities, service providers, and families that work together to support the development of Systems of Care (SOCs; Behar, 1993). These PALs have identified mutually beneficial relationships between universities and communities, centering on the three key aspects of universities' missions: teaching, research, and service. PALs have developed innovative training models, involving faculty working with "parents in residence" and service providers to improve university training. In turn, students benefit from the first-hand experiences and perspectives of people directly involved in the day-to-day delivery of services, and communities benefit by having new professionals enter the workforce able to function well in a SOC. In addition, many university programs in human service disciplines involve significant applied training experiences in which students gain hands-on experience serving the community, while the community receives low-cost services and an influx of new energy. True collaboration in research is perhaps less common, since families and practitioners are less likely to identify themselves as having "research skills," and faculty are more likely to view them as "subjects" than collaborators in the research endeavor. However, collaborative research can be quite beneficial to implementation and improvement of SOCs and to university faculty and students (Handron, Dosser, McCammon, & Powell, 1998; Powell, Dosser, Handron, McCammon, Temlin, & Kaufman, 1999).

University faculty and students' research skills can help communities develop and improve Systems of Care in ways that benefit all constituent groups. The key is in finding a balance between the researchers' and the community's needs. To do this, each of the stakeholders (university students and faculty, program administrators at state and local levels, line staff and families) must be aware and respectful of the others' needs, limitations, and strengths. With open communication, trusting relationships, and sensitivity to others' needs, PALs can develop successful "marriages" between research and service, such that each partner enhances and strengthens the other.

The development of sound working relationships is crucial to research endeavors, because identifying issues and concerns shared by families, service providers, administrators, and academics occurs best through active engagement over time. Engagement and understanding are critical, because they allow university researchers to identify the intersection of interests, translate the community's needs into researchable questions, and mobilize resources to obtain answers. Furthermore, researchers need to invest time and energy early on, allowing sufficient time to cultivate a trusting relationship in which partners develop confidence that the researcher is not merely viewing them as "guinea pigs." It is from mutual interest and trust, developed over time, that applied research projects can best evolve.

There are a number of ways that SOCs, particularly when funded through the Center for Mental Health Services (CMHS) Comprehensive Community Mental Health Services for Children and Their Families Program, can be fruitful opportunities for university and community collaboration. First, communities receiving CMHS funding participate in the national evaluation of SOCs. Many communities have employed university faculty as key evaluation staff, helping faculty and students become familiar with questions and issues confronting SOCs, and providing access to useful data. Second, many universities have ongoing relationships with key agencies in SOCs, with student interns providing direct services. Those students can also work with organizations on applied theses or class projects that address questions of interest to the SOC. Thus the SOC receives "free labor," and students have meaningful topics for their projects. For example, graduate students in James Cook's Community Psychology class evaluated a summer program of a local SOC, interviewing children, parents and staff about the program and identifying specific recommendations for improvement. The SOC found the evaluation very helpful, and incorporated many of its suggestions into the next year's

program, increasing its success. This project resulted from the faculty member's awareness of the program and problems it experienced, which developed through regular contact with the SOC. Often, faculty must take the first steps to identify and develop potential research topics and projects that can advance knowledge, provide training, and serve families, since community stakeholders may not readily think about research nor be aware of possible avenues for student involvement. However, after a few successful projects, it is common to find more community members asking questions and seeking help to find answers.

In university-community research collaborations, there are several common barriers to overcome. First, while the national evaluation requirements provide an opportunity for collaboration, they also are a burden for the community. Families balk at filling out additional measures, and professionals may resist devoting more time to research, particularly since national evaluation data may be slow to filter back to the community in a way that is useful. It is important, then, to make sure that questions are of clear importance to the community and that feedback is provided in a timely fashion. A second common problem is that academics, particularly those with a rather narrow programmatic research focus, can have difficulty capitalizing on research opportunities that are outside their individual interests, thus impeding collaboration. Since academics are rewarded most highly for publishing works within their discipline, relatively "messy" applied research may not be supported within their department or university. Approval from university, school and other institutional review boards can also hinder the progress of research, and become daunting barriers to applied research in SOCs.

Despite the obstacles, there are great benefits to be had and important questions to be answered. Rewarding partnerships can develop, generating mutual support for larger, more useful research projects that can provide significant benefits for all parties. Two examples of research efforts that have evolved from the PAL at the University of North Carolina at Charlotte are described below to provide examples of possible projects.

Assessing Change in a System of Care

When UNC Charlotte was invited to partner with Cleveland County's evolving SOC, the mental health director asked the university to help "keep us honest" in the development of the SOC. Since new resources were being added to provide services, it was important to assess whether change in children and families was due to the new resources/services, or to changes in how the system does business. To address this, the first author enlisted a graduate student to examine this question as a thesis. We then identified system change variables (e.g., collaboration, family involvement, shared decision-making, organizational support), drafted specific questions to assess those variables, and then asked service providers and families to modify the draft survey that would be administered to local professionals involved in the SOC. After we incorporated their input, the statewide PAL Council, a coalition of PALs throughout NC, involving families, professionals, academics, and state mental health administrators provided further feedback, resulting in a "System of Care Questionnaire" with wide applicability. This measure has been used in Cleveland County for two years, and feedback to the community has resulted in changes in resource allocation; year three data are currently being collected. Another student has begun assessing system change based on archival data, allowing a comparison between questionnaire data, and other objective indicators.

Risk and Resilience Among Siblings

While SOCs are designed to address the needs of the entire family, parents in the local SOC have indicated that siblings of the child identified as having a serious emotional disturbance (SED) often were not given the help they needed, because of the demands of the identified child on the family and the limited resources available in the community. Parents described siblings who had adjusted well before the identified child was enrolled in the SOC, but subsequently began to have problems. Others noted the pronounced differences in adjustment among their children (i.e., some siblings were doing

quite well at home and school) and wondered how this could occur. Such questions led the authors to explore how the siblings, more generally, were faring and what might be done to help reduce any risks to them. We turned to the national evaluation, and found that no data on siblings were being collected. These discoveries led to development of the Sibling Resilience Research Project, which is examining how siblings are adapting at multiple NC sites and tracking their adjustment over time to identify factors that contribute to their successful adaptation in the face of adversity (i.e., resilience) or maladaptation (Kilmer & Cook, 2001).

The development of this project has also received input from parents, professionals, and administrators from around the state (i.e., regarding variables of interest, hypotheses and research questions). Interestingly, parents have been among the strongest allies and supporters of this project, because they are interested in a study of what is "going right" in their families, and can see the value of this data for their advocacy efforts.

Conclusion

In sum, collaborations between universities and Systems of Care provide great opportunities for university researchers to work with a range of partners on projects that benefit all parties—universities, community agencies, and families. If university faculty can develop sufficient knowledge of the needs and issues and the requisite relationships with community members, the multiple barriers to collaborative, community research projects can be overcome.

References

Behar, L. (1993). Public-academic collaboration in training child mental health professionals. In P. Wohlford, H. F. Myers, & J. E. Callan (Eds), *Serving the seriously mentally ill: Public-academic linkages in services, research, and training*. Washington, DC: American Psychological Association.

Handron, D. S., Dosser, D.A., McCammon, S.L. & Powell, J.Y. (1998). "Wraparound" The wave of the future: Theoretical and professional practice implications for children and families with complex needs. *Journal of Family Nursing, 4*(1), 65-86.

Kilmer, R. P. & Cook, J. R. (2001). Risk and resilience: Adjustment of siblings of children with serious emotional disturbances. Poster presented at the *14th Annual research conference: A system of care for children's mental health: Expanding the research base*, Tampa, FL.

Powell, J. Y., Dosser, D. A., Handron, D. S., McCammon, S. L., Temkin, M.E., & Kaufman, M. (1999). Challenges of interdisciplinary collaboration: A faculty consortium's initial attempts to model collaborative practice. *Journal of Community Practice, 6*(2), 27-47.

CONTRIBUTING AUTHORS

Margaret Arbuckle, Ph.D.

Center for the Study of Social Issues, University of North Carolina at Greensboro, 41 McNutt St., Greensboro, NC 27402; 336-315-7474, Fax: 336-315-7472; E-mail: mbarbuck@uncg.edu

Lorin Baumhover, Ph.D.

PAL Advisory Council Chair, Chair and Professor, Dept. of Sociology and Social Work, Appalachian State University, Boone, NC 28608; 828-262-2201, Fax: 828-262-2294; E-mail: baumhoverla@appstate.edu

James R. Cook, Ph.D.

Associate Professor and Director, UNC Charlotte PAL, Dept. of Psychology, University of North Carolina at Charlotte, 9201 University City Blvd., Charlotte, NC 28223-0001; 704-687-4758, Fax: 704-687-3096; E-mail: jcook@email.uncc.edu

Suzanne Biggs Gavenus, M.S.W., L.C.S.W.

PAL Academic Coordinator, Western North Carolina PAL Partnership, Dept. of Sociology and Social Work, Appalachian State University, 209 Chapel Wilson Hall, Boone, NC 28608; 828-262-6716, Fax: 828-262-2294, E-mail: biggsl@appstate.edu

Ryan P. Kilmer, Ph.D.

Assistant Professor, Dept. of Psychology, University of North Carolina at Charlotte, 9201 University City Blvd., Charlotte, NC 28223-0001; 704-687-3689, Fax: 704-687-3096; E-mail: rpkilmer@email.uncc.edu

Barbara Leach

Parent Advocate, Children's Mental Health Program, UNC School of Social Work, UNC at Chapel Hill, 301 Pittsboro St., Chapel Hill, NC 27599-3550; 919-962-6587, Fax: 919-962-8715

Susan McCammon, Ph.D.

Professor of Psychology, East Carolina University, Greenville, NC 27858; 252-328-6357, Fax: 252-328-6283; E-mail: mccammons@mail.ecu.edu

Carol MacKinnon-Lewis, Ph.D.

Director, Center for the Study of Social Issues, University of North Carolina at Greensboro, 41 McNutt St., Greensboro, NC 27402; 336-334-4423, Fax: 336-334-4435; E-mail: cemackinnon@uncg.edu

Mark O'Donnell, M.P.H.

Project Director, Child and Family Services Section, North Carolina Division of Mental Health, Developmental Disabilities, and Substance Abuse Services, 3015 Mail Service Center, Raleigh, NC 27699-3015; 919-571-4889, Fax: 919-571-4878; E-mail: mark.odonnell@ncmail.net

John Y. Powell, Ph.D.

Professor Emeritus, School of Social Work and Criminal Justice Studies, East Carolina University, Greenville, NC 27858; 252-328-4379, Fax: 252-328-0353; E-mail: powellj@mailecu.edu

Charles Pryzant, M.D.

Child and Family Services Section, North Carolina Division of Mental Health, Developmental Disabilities, and Substance Abuse Services, 3015 Mail Service Center, Raleigh, NC 27699-3015

Kellie Reed-Ashcraft, Ph.D.

Assistant Professor, Dept. of Sociology and Social Work, Appalachian State University, 209 Chapel Wilson Hall, Boone, NC 28608; 828-265-8667, Fax- 828-262-6811; E-mail: ashcraftkb@appstate.edu

Terri L. Shelton, Ph.D.

Deputy Director, Center for the Study of Social Issues, University of North Carolina at Greensboro, 41 McNutt St., Greensboro, NC 27402; 336-334-5751; E-mail: tlshelto@uncg.edu

Sandra Spencer, B.A.

Executive Director, WE CARE, 210 John Avenue, Greenville, NC 27858; 252-439-0038; E-mail: spencer@greenvillenc.com

Douglas A. Waring, Ph.D.

Associate Professor, Dept. of Psychology, Appalachian State University, Smith Wright Hall, Boone, NC 28608; 828-262-2738, Fax: 828-262-2934; E-mail: waringda@appstate.edu

Irene Nathan Zipper, M.S.W., Ph.D.

Jordan Institute for Families, UNC School of Social Work, UNC at Chapel Hill, 301 Pittsboro St., Chapel Hill, NC 27599-3550; 919-962-6432, Fax: 919-962-8715; E-mail: izipper@mail.unc.edu

Shelton, Baumhover, Reed-Ashcraft, Waring, Arbuckle, MacKinnon-Lewis, Zipper, Leach, McCammon et al. & Cook et al.