

**Relationships between Fidelity and Outcomes in a Multi-Site Wraparound Initiative**  
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A System of Care: Expanding the Research Base  
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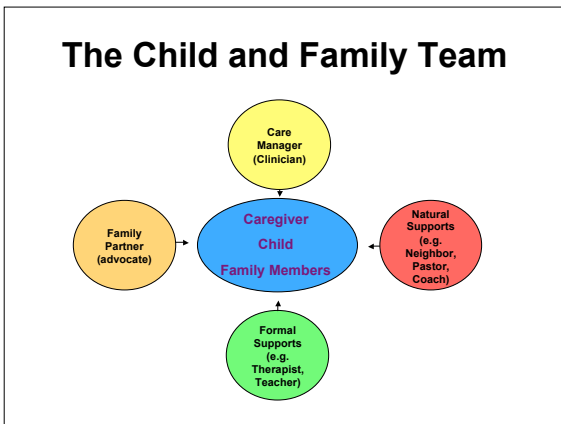
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## Coordinated Family Focused Care (CFFC)

**What is CFFC?** It's a five site wraparound services program for children with Severe Emotional Disturbance (SED) at risk for out-of-home placement in Massachusetts.

**How are children eligible for CFFC?**

- Ages 3-18
- Reside in one of the 5 cities where it is offered
- Child and Adolescent Functional Assessment Score of 100 or greater
- Presence of Severe Emotional Disturbance (SED)
- Caregiver willing to participate in team process
- Child and family have tried other, less intensive, services



### Coordinated Family Focused Care

Wraparound Principles	Program Goals	Outcome Measures
<ul style="list-style-type: none"> <li>Child &amp; Family Team</li> <li>Community Based Services &amp; Support</li> <li>Voice and Choice</li> <li>Individualized, Culturally Competent &amp; Strengths-Based</li> <li>Natural Supports</li> <li>Flexible Funding</li> </ul>	<p><b>Increase ↑</b></p> <ul style="list-style-type: none"> <li>Family Involvement</li> <li>Parent Empowerment &amp; Competency</li> <li>Child Functioning</li> <li>Child Strengths</li> </ul> <p><b>Reduce ↓</b></p> <ul style="list-style-type: none"> <li>Out of Home Placement</li> <li>Cost</li> <li>Clinical Symptoms</li> <li>Parental Stress</li> </ul>	<ul style="list-style-type: none"> <li>Child's Mental Health</li> <li>Child's Strengths</li> <li>Child's Functioning</li> <li>Parental Involvement</li> <li>Parental Stress</li> <li>Costs</li> <li>Treatment Fidelity</li> </ul>

### Evaluation Measures

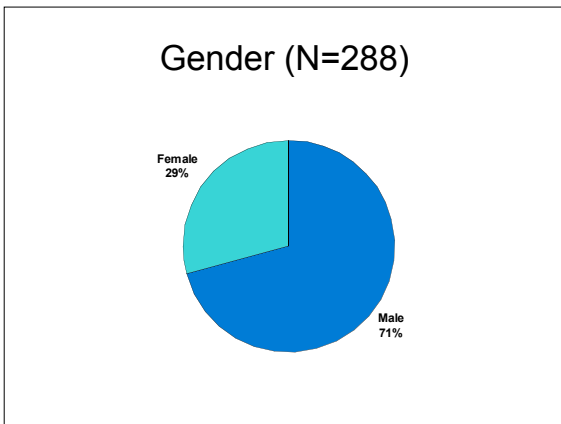
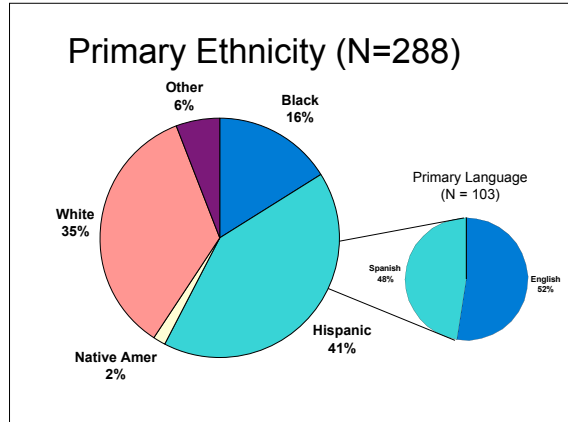
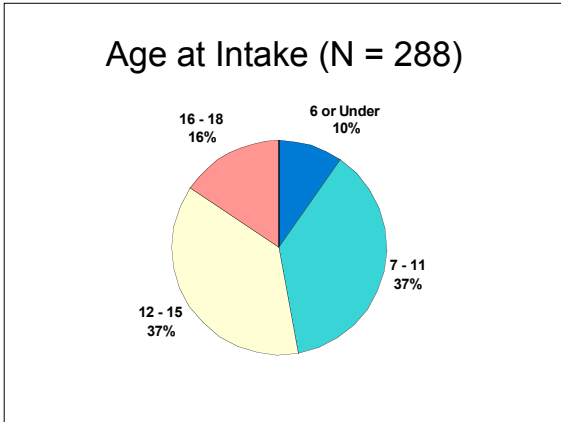
**Strengths: Behavioral and Emotional Rating Scale (BERS).** Scored utilizing norms for SED population.  
- Administered at Intake, and every 6 months while enrolled

**Psychological Symptoms: Youth Outcome Questionnaire (YOQ)**  
- Administered at Intake, 3, & 6 months, and every 6 months thereafter while enrolled (Intake, 3, 6, 12, 18...)

**Functional Impairment: Child and Adolescent Functional Assessment Scale (CAFAS)**  
- Administered at Intake and every 3 months while enrolled (Intake, 3, 6, 9, 12...)

**Fidelity: Wraparound Fidelity Index – 3**  
- Administered at 3 months, and every 6 months thereafter while enrolled (3, 9, 15...)

## DEMOGRAPHICS



### Public Agency Involvement

	At Intake	Ever
❖ DSS: Voluntary	15%	27%
❖ DSS: Custody	36%	61%
❖ DSS: Foster Care	10%	28%
❖ DMH	11%	15%
❖ DMR	4%	4%
❖ At least one system	59%	77%
❖ Multiple Systems	18%	38%

### Legal System Involvement

	At Intake	Ever
❖ DYS	7%	9%
❖ On a CHINS	14%	20%
❖ Ever Arrested		14%
❖ On Probation		19%

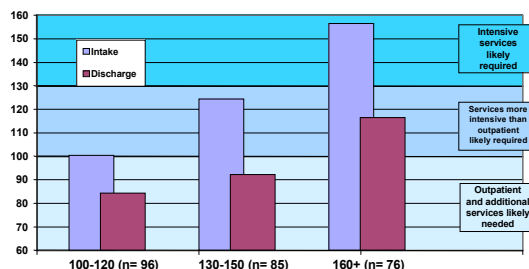
### Child's History

Physical Abuse	41%
Emotional Abuse	56%
Sexual Abuse	27%
Neglect	40%
Witness to Violence	56%
Inpatient/Residential Past year	39%
Suicidal Ideation	26%
Suicide Attempt	11%

### Family History

Caregiver Substance Abuse	39%
Caregiver MH History	71%
Both Substance + MH	33%
Child in Custody of Bio Parent	75%
Child in Custody of Other Relative	8%

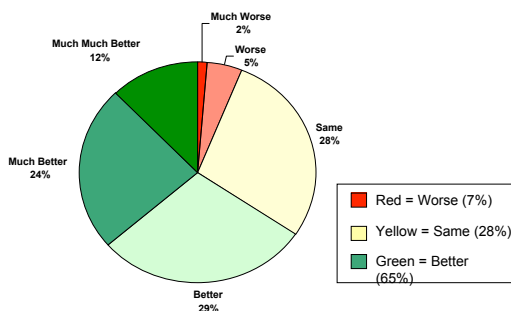
### CAFAS scores at Intake and average change while in CFFC



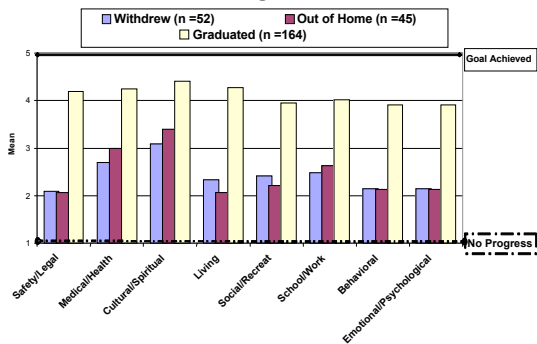
### CAFAS change definitions

- Change must be sufficient to move into the next category of severity
- Categories:
  - 60 or below
  - 70 - 90
  - 100-120
  - 130-150
  - 160+
- Definitions:
  - Better = Improvement by at least one category
  - Much better = Improvement by at least 2 categories
  - Worse = Worsen by at least one category
  - Much worse = Worsen by at least 2 categories

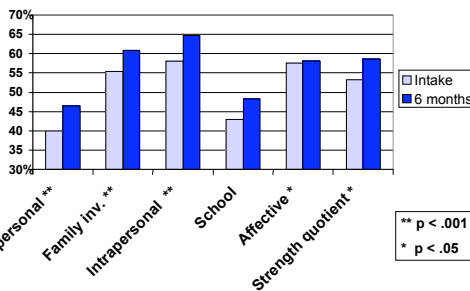
### CAFAS change Intake to Discharge in CFFC (n=264)



### Progress towards goals at Discharge by Discharge Reason



### BERS Intake to 6 Months (N = 188)



**CFFC: Treatment Fidelity & Parent Perspective**

The **Wraparound Fidelity Index - 3 (WFI-3)** is a standardized, reliable and valid measure to assess how much the caregiver perceives services are being delivered along 11 "wraparound" principles:

1. Child and Family Team
2. Community-based Services and Supports
3. Parent and Youth Voice and Choice
4. Cultural Competence
5. Individualized Services
6. Strength-based Services
7. Natural Supports
8. Continuation of Care
9. Collaboration
10. Flexible Funding
11. Outcome-based Service

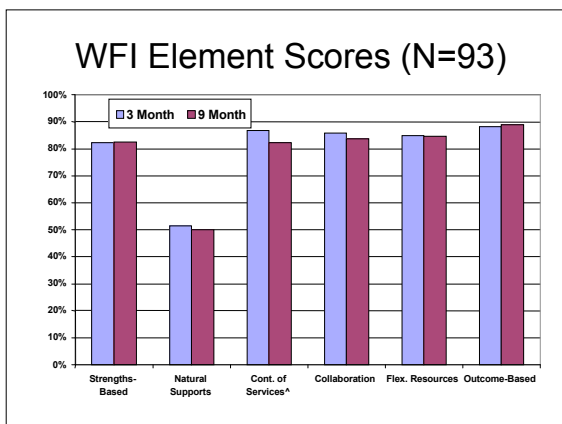
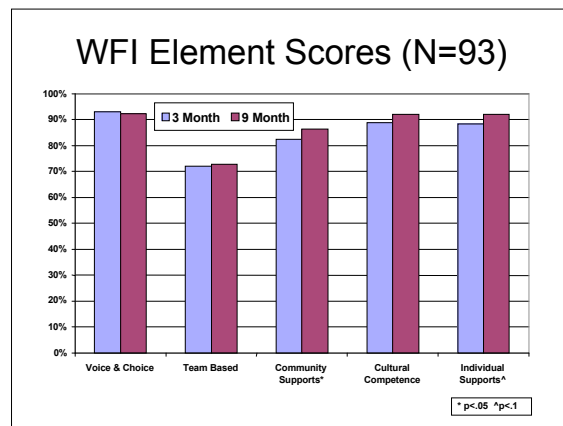
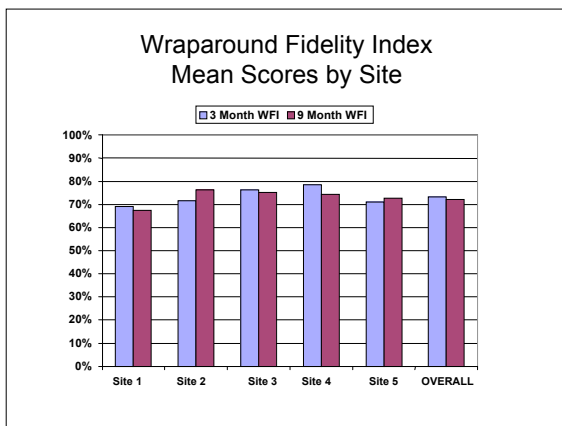
**Who collects:** The WFI is collected by the U Mass Evaluation team via telephone interviews with parents/caregivers. Parents are paid \$10 for each interview.

**When is it collected:** At 3 months, 9 and 15 months post-enrollment

**How is it scored?** The U Mass team scores the profiles and gives feedback to sites in aggregate form.

### WFI Interviews Completed as of 2-16-06

3 Month	244
9 Month	174
15 Month	51
Both 3 & 9 Month	99



### Does Fidelity change over time?

Simple repeated measures analyses were done to assess change between 3 and 9 months in Fidelity (N=93)

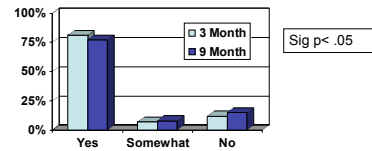
- There were no significant changes on the overall WFI scores from 3 to 9 months.
- There was a significant increase in the Community Supports element from 3 months (82%) to 9 months (86%) (p < .05)
- There were statistical trends in 2 other elements:
  - Individual Services and Supports (increase; p = .096)
  - Continuation of Services and Supports (decrease; p = .051)

### Post-hoc analyses

- To aid in our understanding of specific areas of treatment fidelity, an item analysis was done for the 3 elements with statistical significance or trends.
- Results indicated that each element contained one item which showed strong statistical change over time.
- These results should be taken as “food for thought” since the predictive validity of single items is uncertain, and the analyses were done post-hoc.

### Continuation of Services and Supports

Do you think that in the future services will be there when you need them?

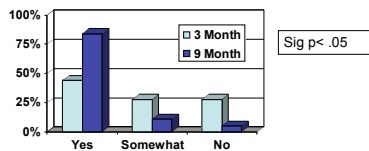


Other questions included in this element:

- Does the team change the plan when your family's goals and needs change?
- Is it possible for your child or family to get “kicked out” of services?

### Community-Based Services & Supports

Does the team help your child get involved with activities in your community?

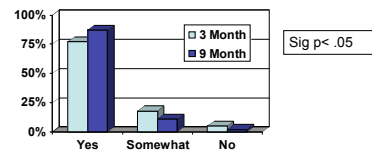


Other questions included in this element:

- Does your child spend at least 20 hours a week in school or at a paying job?
- Are the services and supports that your family needs hard to reach because they are far away?

### Individual Services and Supports

Did you take part in creating a written plan that identifies supports and services that meet your child's needs at home, at school and in the community?



Other questions included in this element:

- Do your child and family receive the supports and services stated in the plan?
- Is there a crisis or safety plan that specifies what everyone must do?

### Intake Factors that Predict Fidelity

- Child showing Family Involvement at Intake (BERS) and 3 mo Community Supports (Higher Strengths = Higher Fidelity)
- Caregiver history of Substance use and 3 mo Community supports, Flexible Funding (+ Hx = Higher Fidelity)
- Recent suicidal ideation (past 30 days) was negatively related to Collaboration and Outcome-based.
- Intrapersonal Distress (YOQ) is negatively related to the Outcome-Based element (+ Sx = Lower Fidelity)
- Somatic Sx at Intake (YOQ) are negatively related to several Fidelity elements (+ Sx = Lower Fidelity):
  - Community
  - Natural Supports
  - Outcome-based
  - Collaboration

### Agency Involvement and Fidelity

Many aspects of Fidelity are related to the Team building process, and a smoothly running team where the family feels they have agency and empowerment. For families involved with public agencies, there are additional people to bring to the table in this process.

- DMH (Mental Health):** Caregivers of youth who are DMH clients at the time of Intake had lower fidelity ratings in the areas of Collaboration and Outcome-Based (N=16)
- DMR (Mental Retardation):** Caregivers of youth who are DMR clients at the time of Intake had lower fidelity ratings in the area of Strength-Based (N=7)
- DSS (Social Welfare):** Families involved with DSS had higher fidelity ratings in several areas.
  - For those in DSS care and/or Custody (N=44), Community Supports and Outcome-Based were higher
  - For those in Voluntary DSS services (N=23), Youth & Family Team, and Individual Supports were higher

### CAFAS and Fidelity

Several relationships were found between CAFAS scores and positive change in CAFAS during treatment with Fidelity

- The only area of Fidelity with a relationship to Intake CAFAS was Voice and Choice (Higher CAFAS = Lower Fidelity)
- Higher scores in Community Supports, Strengths Based Services, and Overall Total Fidelity were negatively correlated with CAFAS scores at Discharge. (Higher Fidelity = Lower CAFAS)
- These same aspects of Fidelity were positively related with CAFAS change while in treatment. (Higher Fidelity = Positive CAFAS Change)

### Relationships between Fidelity and other outcome Factors

- Withdrawal rate (prior to Graduation) was negatively related to Fidelity on the Youth and Family Team element. (Lower Fidelity = More Likely Withdrawal)
- A Longer Length of stay was positively related to:
  - Fidelity of Community Supports
  - Fidelity of Strengths-Based Services
- High Mean Goals at Discharge were positively related to:
  - Fidelity of Voice & Choice
  - Fidelity of Cultural Competence
  - Overall Fidelity
- Family Empowerment was significantly related to:
  - Voice & Choice Fidelity
  - Cultural Competence Fidelity
  - A lesser likelihood of an Out of Home placement

### Fidelity as a Predictor of Discharge CAFAS Score

A regression with Discharge CAFAS as the dependent variable, and Intake CAFAS (entered first) and Community Supports, Strengths-Based and Total WFI scores was run.

Results indicate that both Community Supports (9%) and Strengths-Based Services (3%) contribute uniquely to the variance of Discharge CAFAS.

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	R Square Change
	B	Std. Error				
(Constant)	111.712	23.576		4.738	.000	
Caf_total_F	.441	.106	.335	4.170	.000	.152
3 mo Community Supports	-47.489	19.503	-.216	-2.435	.016	.091
3 mo Strengths Based	-38.840	16.974	-.203	-2.288	.024	.033

### SUMMARY

- Some intake factors are associated with aspects of Fidelity
- Caregivers with a substance use history are reporting greater Community Supports and Flexible Funds use, suggesting the program is utilizing resources to meet their specific needs
- Caregivers of children with recent suicidal ideation report lower levels of fidelity in Collaboration and Outcome-Based services. This may indicate that the clinical issues associated with suicidal ideation contribute to some difficulties in team members collaborating and agreeing upon treatment goals.

### SUMMARY

- Findings were mixed for children involved with public agencies at time of Intake. Involvement with some agencies were related to lower fidelity in some areas, but the N's for these agencies were small. The agency with the greatest involvement, DSS, was shown to be positively related to fidelity in some areas.
- While there were small (yet significant) increases between 3 and 9 months in some areas, overall the Fidelity ratings remained fairly steady over time.
- One clear area of change over time, however, is the Team's role in involving the child in community-based activities.
- Fidelity ratings are similar across the 5 sites.

### SUMMARY

- Perhaps most interesting, clear relationships were found between 2 areas of Fidelity (Strengths-Based and Community Supports) and changes in CAFAS scores. This lends support to the idea that Fidelity to the model impacts the effectiveness of the model.