

Chapter Nine

Wraparound Implementation

Symposium

Wraparound Fidelity: Different Aspects

Symposium Introduction

Eleanor Castillo

The symposium addressed three aspects of wraparound fidelity. The first paper examined the relationship between wraparound fidelity and youth behavior and functioning. In particular, there was a strong focus on community-based services, as it was the most consistent relationship to clinical outcomes. The second paper examined the relationship between wraparound fidelity and other constructs related to wraparound (i.e., family-centeredness and satisfaction). The third paper presented findings from a pilot of the Wraparound Supervisor Adherence Measure (W-SAM), an instrument completed by the facilitator to rate the clinical supervisor's fidelity to wraparound services via supervision. Use of the W-SAM as a quality improvement tool was discussed. In summary, the implications of the various aspects of fidelity were described.

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The Relationship Between Fidelity to Wraparound and Outcomes

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Introduction

Treatment fidelity, the degree to which a program is implemented as intended (Moncher & Prinz, 1991; Rast & Bruns, 2003), has emerged as a major issue in the delivery of mental health services. Adherence is critical to the provision of wraparound services, a team-based individualized service planning process that is described as a promising practice for seriously emotionally disturbed youth (Burns, Hoagwood, & Maultsby, 1998). Despite no nationally recognized manual to guide the delivery of wraparound, the field has advanced the development of implementation measures for assessing fidelity to the model. With the increased interest in the effectiveness of services, research is also beginning to demonstrate the relationship between adherence to the wraparound principles and outcomes for youth (Bruns, Burchard, Suter, & Force, 2005). However, limited studies have focused on the specific elements of wraparound that are linked to success.

The following study examined the relationship between fidelity to wraparound's core elements and emotional and behavioral functioning (as defined by the CAFAS and CBCL), as well as successful graduation (as defined by living in the community at the time of discharge). In particular, as community-based services and supports are an essential distinguishing element of wraparound, this study investigated the impact of fidelity to community-based services on treatment outcomes for high-risk youth.

Method

Participants

Participants in this study included youth ($N = 146$), caregivers ($N = 124$), and resource facilitators ($N = 183$) for families receiving wraparound services by a large family service agency in the Sacramento region. The average age of these youth at the time of admission was 14 years ($SD = 2.55$). Sixty-three percent of the youth were male. Ethnicity was 62% Caucasian; 26% African-American; 8% Latino; 2% Asian/Pacific Islander; 1% Native-American; and 1% Other. The average length of participation in wraparound services was 15 months ($SD = 11$).

Measures

The WFI-3.0 (Suter, Force, Bruns, Leverentz-Brady, & Burchard, 2002) is a structured interview tool that assesses adherence to the 11 core elements of wraparound. Interviews are conducted with the wraparound resource facilitator, caregiver, and youth. The responses from each interview result in a total fidelity score, ranging from 0 to 8, with 0 indicating *low adherence* to the wraparound philosophy and 8 indicating *high fidelity* to the wraparound philosophy. An overall fidelity score is also calculated by combining the reports of the three respondents.

The Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2001) measures a youth's competence and problem behaviors and is administered to caregivers. Scoring produces a Total Problems score that includes Internalizing and Externalizing Problem scores which are displayed in relation to percentiles and T scores based on a nationally representative sample of children of the participant's gender and age.

The Child and Adolescent Functioning Assessment Scales (CAFAS; Hodges, 2003) measure a youth's emotional and behavioral functioning across eight domains. Subscale scores on these dimensions are summed to produce a Total CAFAS score, with a higher value indicating more severe impairment.

Information about the youth's living arrangement at discharge was derived from the agency's electronic health record. Community living arrangement was defined as living with biological/adoptive parents, kinship care, foster family, or a youth living in an independent living program.

Procedures

The WFI was collected six months after admission and every six months thereafter for each youth until discharge. Youth 11 years of age and older, caregivers, and resource facilitators participated in a structured interview. The CAFAS and CBCL were completed by the resource facilitator and caregiver, respectively, at the youth's admission to wraparound services, semi-annually, and at discharge. The CAFAS and CBCL scores at discharge were used in this study.

Analysis

Non-parametric correlations (Spearman's rho) were conducted to demonstrate relationships between WFI Total fidelity and element scores and outcome measures at discharge. The average score of each element across the respondents was calculated for the analysis. The analysis also factored in the pre-test scores on the outcome measures to account for the differences in the pre- and post- scores on youth functioning.

Results

Results found that the mean WFI Total fidelity score was 73% ($SD = .82$) and individual respondents' mean total fidelity scores were 79% ($SD = .78$) for Resource Facilitators, 67% ($SD = 1.21$) for Caregivers, and 67% ($SD = 1.22$) for Youth. Elements of wraparound rated as 80% or above included Voice and Choice, Cultural Competence, Individualized Services, and Outcome-Based Services. Relative weaknesses below 65% included Community-Based Services, Child and Family Team, and Natural Supports. Table 1 shows the mean scores for the fidelity measure, the WFI, and the outcome measures, CAFAS and CBCL.

Table 2 displays the correlations between fidelity scores and outcome measures. As shown, statistically significant relationships were consistently found between fidelity to Community-Based Services and Supports and various outcome measures at discharge: CBCL Total Problem Score ($r = -.19, p < .05$); CBCL Externalizing Problem Score, ($r = -.25, p < .01$); CBCL Internalizing Problem Score ($r = -.21, p < .05$); CAFAS Total Score ($r = -.40, p < .01$); and Living in the Community ($r = .21, p < .01$). Other significant relationships were found with certain elements; however, these correlations were consistently weak or the direction of the relationship was unexpected. For example, positive significant relationships were found between the CAFAS Total Score and the elements of Voice/Choice ($r = .15, p < .05$) and

Outcome-Based Services ($r = .14, p < .05$) on the WFI. These results indicate that greater fidelity to these elements is related to higher impairment on the CAFAS. Additionally, total fidelity, as measured by the WFI, did not have a significant relationship to outcomes, including pre-post change scores on the CAFAS and the CBCL.

Table 1
Outcome and Fidelity Variables

<i>Variable</i>	<i>Mean</i>	<i>SD</i>
Outcome Measures		
CBCL Total T-Score	88.13	19.29
CBCL Externalizing T-Score	87.16	19.71
CBCL Internalizing T-Score	79.88	25.20
CAFAS Total Score	94.78	43.78
Fidelity Measure		
WFI Total Fidelity	5.81	.82
Resource Facilitator WFI Total Fidelity	6.30	.78
Caregiver WFI Total Fidelity	5.39	1.21
Youth WFI Total Fidelity	5.38	1.22
Voice/Choice	6.66	1.16
Youth and Family Team	4.5	1.26
Community-Based	5.00	1.72
Cultural Competence	6.64	1.04
Individualized	6.85	1.28
Strengths-Based	6.43	1.14
Natural Supports	3.78	1.52
Continuation	6.04	1.30
Collaboration	6.10	1.34
Flexible Resources/Funds	5.2	1.32
Outcomes-Based	6.83	1.37

Table 2
Correlations among WFI Scores and Outcome Measures at Discharge

	<i>CBCL Total</i>	<i>CBCL Externalizing</i>	<i>CBCL Internalizing</i>	<i>CAFAS Total</i>	<i>Living in Community</i>
1. Voice and Choice	.12	.07	.12	.15*	.47
2. Youth and Family Team	-.04	-.04	.01	.07	.10
3. Community-Based Services	-.19*	-.25**	-.21*	-.40**	.21**
4. Cultural Competence	.06	.01	.02	.10	.15
5. Individualized Services	.09	.06	.01	.11	.05
6. Strengths-Based	-.10	-.09	-.14	.08	.05
7. Natural Supports	-.19*	-.12	-.13	-.07	-.11
8. Continuation of Services	-.06	-.02	-.12	.12	-.02
9. Collaboration	-.04	-.03	-.17*	.13	.10
10. Flexible Resources/Funds	-.06	.04	-.14	.05	.20**
11. Outcome-Based Services	-.16	-.04	-.18*	.14*	.21**
12. RF Total Fidelity	-.09	-.20	-.08	-.15	.16
13. Caregiver Total Fidelity	-.04	-.02	-.12	.04	-.15
14. Youth Total Fidelity	-.03	-.01	-.05	.02	-.05
15. WFI Total Fidelity	-.10	-.09	-.15	.05	.04

Note: * $p < .05$; ** $p < .01$

Discussion

This study suggests that greater fidelity to the provision of community services and supports for youth receiving wraparound is related to the achievement of positive outcomes. No other elements of the wraparound process consistently had as significant relationships to outcomes as did the adherence to community services and supports. Unlike previous research that has found a strong relationship between overall wraparound fidelity and positive youth and family outcomes, this study did not find a significant association between total fidelity, as measured by the WFI, and improvements in child and family functioning. Nevertheless, the results suggest that fidelity to certain elements of wraparound, particularly community services and supports, may be more critical in the determination of outcomes than overall fidelity to the service delivery. Although correlations were significant, overall the relationships were not strong across all elements, indicating a weak association between fidelity and outcomes.

These findings reinforce the importance of exploring the central mechanisms that contribute to change in multi-component interventions, such as wraparound. The value in such an examination of key elements through which children and families experience behavioral change has, in fact, been underscored by other researchers of complex therapies for troubled youth (Huey, Henggeler, Brondino, & Pickrel, 2000). The results of the present study reveal that the wraparound provider's focus on developing community supports and services may be a key mechanism in the achievement of positive outcomes. This essential element prescribes the team's support for youth school attendance and involvement in work, training, and other community activities. It also incorporates an emphasis on supporting the youth's success in community-based living situations, as an alternative to the use of residential and institutional care. The fact that this aspect of wraparound service emerged as a central component may not be surprising given that previous research has highlighted wraparound's role in enhancing the community adjustment of high-risk youth (Hyde, Burchard, & Woodworth, 1996).

It should be recognized that the current study was limited in important ways. Caution should be exercised in the interpretation of its findings given that a correlational analysis was conducted; thus one cannot assume that increased community services and supports caused positive results. The field would benefit from experimental studies that offer a more rigorous examination of the impact of fidelity to various wraparound elements on outcomes for youth. A further limitation of this investigation pertains to the relatively low fidelity scores that were obtained on certain elements (e.g., Community-Based Services, Child and Family Team, and Natural Supports) and respondent total scores (Caregiver and Youth). If these scores had been higher, the current analysis may have detected significance and increased strength in the relationship between a wider range of fidelity scores and outcomes. However, low scores on natural supports and composition of the child and family team have also been common to other wraparound providers. Additional research is needed to investigate the relationship of high fidelity scores and outcomes and to assess the nature and types of community supports (e.g., community-based living situations, community activities, vocational training) that are most beneficial to the youth and families who are receiving wraparound.

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The Wraparound Fidelity Index (WFI) as a Framework for Service Delivery

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Introduction

Wraparound is a way of providing services to children and families that adheres to particular principles identified as important to service delivery. These principles hold that services should be community-based, strength-based, culturally-competent, and family-centered. In short, “Wraparound is not a service and not a program, but a *process for providing care* for children and families” (Kendziora, Bruns, Osher, Pacchiano, & Mejia, 2001, p. 1). As interest in the wraparound process has increased, the necessity to effectively assess fidelity has also increased. Measuring fidelity allows a better understanding of the effectiveness of service delivery in meeting the principles of wraparound and a more complete interpretation of research outcomes. Furthermore, linking fidelity to outcomes ensures that service providers are serving the best interests of the children and families. (Moncher & Prinz, 1991).

While fidelity assessment increasingly has become a part of evaluating the wraparound process, studies of the relationship between fidelity and outcomes have produced tenuous results. The findings generally indicate that the two are related, with satisfaction being more related to fidelity than clinical outcomes, but the nature of the relationship is not clearly understood (Bruns, Burchard, Suter, Force, & Dakan, 2003). In seeking to further understand the dynamics between wraparound fidelity and outcomes, this study looked at the relationship between the wraparound Fidelity Index- Version 3.0 (WFI-3.0; Suter et al., 2002) and various satisfaction and clinical outcome measures. Based on the literature and the construct of the WFI, it was hypothesized that wraparound fidelity would be related to satisfaction more than clinical outcomes.

Method

Participants

The participants in this analysis included youth who received wraparound services at any time during July 2004 to June 2005. The studied youth averaged approximately 15 years of age and the sample included predominantly Caucasians (58.7%) and males (58.0%). Oppositional Defiance Disorder (ODD; 22.0%) and Post Traumatic Stress Disorder (PTSD; 22%) were the two most prevalent primary diagnoses.

Measures

This analysis examined the Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 2003), Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2001), and the WFI. The CAFAS Total score ranges from 0 (*highest level of functioning*) to 240 (*lowest level of functioning*). Lower Total

CAFAS scores indicate higher levels of functioning. Similarly, lower Total CBCL *t*-scores indicate higher levels of functioning. The WFI measures adherence to wraparound principles with scores ranging from 0 (*lowest fidelity*) to 8 (*highest fidelity*).

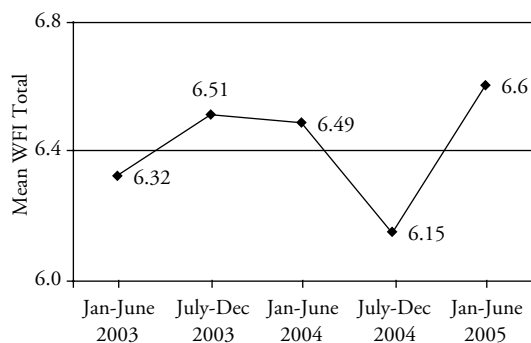
The Family-Centered Behavior Scale (FCBS; Allen, Petr, & Cay-Brown, 1995), Youth Services Survey for Families (YSS-F; Brunk, 1999a), and Youth Services Survey (YSS; Brunk, 1999b) were also examined. The FCBS Total score ranges from 1 (*low level of family centeredness*) to 5 (*very high level of family centeredness*). Both the YSS-F and YSS have total scores that range from 1 (*low level of satisfaction*) to 5 (*very high level of satisfaction*). All measures included in this study were analyzed with the statistical program, Statistical Package for Social Sciences (SPSS; Statistical Package for Social Sciences, 2004).

Analysis

An inspection of WFI scores during five 6-month periods from January 2003 until June 2005 revealed a pattern where WFI scores were lower during July to December 2004 when compared to the other four 6-month periods (see Figure 1). This “dip” in WFI scores provided the impetus to further explore potential relationships between WFI scores and measures of youth’s problems and functioning.

Pearson correlations were run from two perspectives (resource facilitator and caregiver) and at two time periods (Time 1: July-December 2004 and Time 2: January-June 2005). The first set of correlations examined the resource facilitator’s perspective by comparing the resource facilitator’s WFI Total to the CAFAS Total during the period of July to December 2004 and then by comparing the WFI Total from the same time period to the CAFAS total during January to June 2005. The same type of analysis was done from the caregiver’s perspective by comparing the caregiver’s WFI Total to the CBCL Total. Last, a cross perspective analysis was conducted by examining the correlations between the resource facilitator’s WFI Total and the CBCL Total and the caregivers WFI Total and the CAFAS Total. This cross perspective analysis was also conducted for both time periods. It was hypothesized that there would be negative correlations between treatment fidelity and measures of youth behavior and functioning.

Figure 1
Mean Resource Facilitator WFI Total
January 2003–June 2005



Results

Resource Facilitator’s Perspective (WFI and CAFAS)

These relationships were in the expected direction, suggesting that lower treatment fidelity levels were associated with higher functional impairment levels. The patterns of the correlations were similar across time points and the smaller sample sizes are likely related to fewer of the correlations being statistically significant (see Table 1).

Table 1
Resource Facilitator CAFAS Correlations

WFI	CAFAS June-Dec 2004 (n = 49)	CAFAS Jan-June 2005 (n = 22)
WFI-Total	-.34*	-.29
WFI-Community	-.46**	-.55**
WFI-Strength	-.29*	-.38

p* < .05 *p* < .01

Caregiver Perspective (WFI and CBCL)

Although not statistically significant, analyses of WFI and CBCL data from Time 1 indicated a moderate negative correlation between the WFI (CG-WFI-Total) and the CBCL Total Problems score (CBCL-Total), *r* (15) = -.43, *p* = .10. The lack of statistical significance may be attributed to the relatively small sample size. Analyses of WFI data from Time 1 and CBCL data from Time 2 indicated no significant relationships.

Cross Informant Perspective #1 – RF-WFI and CG-CBCL

Analyses of WFI and CBCL data from Time 1 indicated a statistically significant negative correlation between the WFI (RF-WFI-Strength) and the CBCL (CBCL-Total), $r(31) = -.39, p = .03$; the WFI (RF-WFI-Community) and the CBCL (CBCL-Internalizing), $r(31) = -.40, p = .03$. These relationships were in the expected direction, suggesting that lower treatment fidelity levels were associated with higher behavior problem levels across informants' perspectives. Analyses of WFI data from Time 1 and CBCL data from Time 2 indicated no statistically significant correlations.

Cross Informant Perspective #2 – CG-WFI and RF-CAFAS

Analyses of WFI and CAFAS data from Time 1 indicated a statistically significant negative correlation between the WFI (CG-WFI-Community) and the CAFAS Thinking score (CAFAS-Thinking), $r(19) = -.59, p = .008$. Also, although not statistically significant, there was a trend toward a moderate negative correlation between the WFI Total (CG-WFI-Total) and the CAFAS (CAFAS-Thinking), $r(19) = -.40, p = .09$. These relationships were in the expected direction, suggesting that lower treatment fidelity levels were associated with higher functional impairment levels, across informants' perspectives.

Although not statistically significant, analyses of WFI data from Time 1 and CAFAS data from Time 2 indicated a moderate negative correlation between the CAFAS (CAFAS-Total) and (a) WFI-Total, $r(9) = -.40, p = .30$; (b) WFI -Community, $r(9) = -.49, p = .19$; and (c) WFI-Strength, $r(9) = -.58, p = .10$. Again, the lack of statistical significance may be attributed to the relatively small sample size.

Caregiver and Youth Family Centered/Satisfaction Perspective (WFI and FCBS, YSS-F, & YSS)

Due to similarity in construct, correlations were run between scores on the WFI and satisfaction measures. It was hypothesized that there would be a positive correlation between treatment fidelity and levels of satisfaction. An analysis of the WFI with satisfaction measures across all five 6-month periods from January 2003 until June 2005 indicated a statistically significant moderate to strong correlation between the CG-WFI and both the FCBS, $r(79) = .56, p = .000$, and the YSS-F, $r(34) = .72, p = .000$. Analyses also indicated a statistically significant strong correlation between the youth WFI (Y-WFI) and YSS $r(42) = .62, p = .000$. These relationships were in the expected direction, suggesting that higher treatment fidelity levels were associated with higher levels of satisfaction.

Discussion

The findings in this study are similar to previous studies, which have found moderate relationships between wraparound fidelity and youth functioning and behavior (e.g., Bruns, Burchard, Suter, Force, & Dakan, 2003). Although there were correlations with the WFI total score, there was a more consistent relationship between the community-based and strength-based domains with functioning and behavior. It was also demonstrated that fidelity moderately influenced functioning and behaviors at a later time. In addition, this study indicated that WFI principles were more highly correlated with other measures of similar constructs (e.g., family-centeredness and satisfaction) than to measures of clinical functioning.

The moderate results of this study, moreover, are conceptually consistent with the definition of wraparound stated in the introduction. If wraparound is indeed a process and not a program, hypothetically, a robust relationship would not be expected between WFI principles and youth functioning and behavior, because there are more aspects to treatment than just the process. To be sure, service processes are fundamental to treatment, but they are only one aspect and may not be the most important in terms of improving clinical outcomes. Thus, while it appears WFI principles provide a framework for service delivery processes, there are likely other factors that are related to improvements in youth functioning and behavior. In order to better understand these factors, future studies should examine other aspects of treatment, such as evidence-based practices.

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Wraparound Supervisor Adherence Measure: A Pilot

Eleanor Castillo & Veronica Padilla

Introduction

Currently, the term “wraparound” has been used very loosely to define a wide range of services. As a result, the research on “wraparound” has yielded inconsistent results. There are a number of reasons to further define wraparound. First, there are political and legislative reasons to do so, as there is a trend to have wraparound services legislated (e.g., California Mental Health Services Act, 2004; Katie A. et al., v. Diana Bonta et al., 2006). Second, there is a trend toward the use of evidence-based practices. In order to establish wraparound as an evidence-based service, it is critical to differentiate wraparound practices that adhere to the 11 core elements from those that do not, to better define the service, and to tie outcomes to the service. Third, treatment fidelity has been associated with more positive outcomes. Treatment fidelity refers to the degree to which an intervention is implemented as intended (Moncher & Prinz, 1991; Rast & Bruns, 2003). Wraparound involves a family-driven, individualized plan of care developed by a team of people who have a stake in seeing the family succeed (Walker & Burns, 2003). Adherence is critical in the provision of quality wraparound services. As Rast & Bruns (2003, p. 21) note, “wraparound requires

intensive and ongoing training, supervision, and administrative support.” As wraparound is better defined, fidelity to the model can be more accurately measured and relationships to outcomes can be better understood.

As with a number of evidence-based services (e.g., Multisystemic Treatment, Multi-treatment Foster Care, etc.), in order to assure appropriate services and fidelity to a model, supervision has been identified as a critical component in service provision. Although supervision has been identified as a critical aspect of wraparound, there are limited measures, if any, that directly assesses wraparound fidelity in individual supervision. The wraparound Fidelity Index version 3.0 (WFI; Suter, Burchard, Bruns, Force, & Mehrtens, 2002) measures 11 elements of the wraparound process from the youth, caregiver, and facilitator perspective in an interview format. Our experiences indicate that an average length of time to administer the WFI 3.0 is 2 - 3 hours per child. The Wraparound Observation Form version 2.0 (WOF 2.0; Nordess & Epstein, 2003) elicits information of the wraparound process via the child and family team meetings. However, there are even fewer, if any, tools that directly assess fidelity to wraparound via individual supervision.

Developed on the same premise as the Multisystemic Treatment Supervisor Adherence Measure (SAM; Henggeler, Schoenwald, Liao, Letourneau, & Edwards, 2002), in that the supervisor plays a critical role in maintaining fidelity, the wraparound Supervisor Adherence Measure (W-SAM) is a 40 item questionnaire that rates the supervisor's fidelity to the wraparound principles and practices from the facilitator's perspective on a 5-point likert-type scale, 1, *Never*, to 5, *Almost Always*. The items were based on (a) the guidelines and principles of wraparound; (b) a review of various satisfaction tool such as the Family Centered Behavior Scale (Allen, Petr, & Cay-Brown, 1995) and Youth Satisfaction Survey (Brunk, 1999); and (c) derived by a team of experienced wraparound supervisors and trainers (see Table 1). The measure is intended to be administered every six months. In addition to being a tool to better understand the relationship between fidelity and clinical outcomes, the W-SAM can serve as a quality assurance tool, as well as a quality improvement tool, because it can identify areas of strengths and improvement for individuals, single teams, and aggregate of teams and therefore inform training, coaching, and mentoring to improve practice.

Given the complexity of wraparound, a single measure may not be sufficient to capture the intricacies of the service. All of these tools are useful in ensuring high quality wraparound as they measure different aspects of the wraparound process (e.g., WFI-3.0 for the core elements, WOF 2.0 for the team meeting, and W-SAM for the the supervision structure). The information will benefit service providers as it will provide a tool for effective wraparound supervision and help the field further know “what it takes to do wraparound right” (Walker & Bruns, 2003, p. 3).

EMQ Children & Family Services provides wraparound services in three counties throughout California. Although the agency has over ten years of experience in providing wraparound, the systems in which we operate vary significantly and as such, have been a challenge for implementation. Thus, a wraparound supervision fidelity measure was developed as a means to ensure the same quality of wraparound provision, despite the different systems.

Method

The pilot was conducted throughout the three counties in which we operate. To increase the likelihood of participation in the study, the W-SAM was sponsored by the Clinical Directors in each region (as opposed to the Outcomes and Evaluation Department). Facilitators (primary clinical staff responsible for the wraparound services, including the Child and Family Team Meetings) were introduced to the topic within the context of the agency's commitment to continuous learning and provision of high quality wraparound services. As such, this measure was introduced as one aspect of quality care. Each facilitator completed the measure during staff meetings. The completed measures were submitted to the Outcomes and Evaluation Department to ensure confidentiality of the responses.

Table 1
EMQ Wraparound Supervisor Adherence Measure

1. My supervisor focuses on how I have helped families build community linkages.	Never	Rarely	Sometimes	Often	Almost Always
2. My supervisor provides me coaching and feedback on how I address both the child and family developmental needs.	Never	Rarely	Sometimes	Often	Almost Always
3. My supervisor demonstrates knowledge of and uses the EMQ Wraparound planning process in coaching/supervisory sessions.	Almost Always	Often	Sometimes	Rarely	Never
4. My supervisor provides me a model of how the ICFP and interventions are logically linked to expectations and outcomes.	Never	Rarely	Sometimes	Often	Almost Always
5. My supervisor teaches and role models good relationships with system partners. (e.g., social services, juvenile probation)	Never	Rarely	Sometimes	Often	Almost Always
6. My supervisor understands and helps me to integrate my own theoretical orientation as it relates to the EMQ Wraparound process.	Never	Rarely	Sometimes	Often	Almost Always
7. My supervisor provides me feedback on how I have helped the family understand, engage, and create alignment to the EMQ Wraparound process.	Almost Always	Often	Sometimes	Rarely	Never
8. When new needs are identified, my supervisor asks me questions to clarify and implement new strategies involving the child and family strengths.	Never	Rarely	Sometimes	Often	Almost Always
9. My supervisor regularly discusses with me the ways I foster empowerment and independence of the family in the treatment planning process.	Never	Rarely	Sometimes	Often	Almost Always
10. My supervisor strongly encourages me to focus on the natural ecology of the child and family.	Never	Rarely	Sometimes	Often	Almost Always
11. Supervisory recommendations are described in terms of EMQ Wraparound principles.	Never	Rarely	Sometimes	Often	Almost Always
12. My supervisor provides inquiry or feedback if meetings are not held at the convenience of the caregiver.	Almost Always	Often	Sometimes	Rarely	Never
13. My supervisor and I regularly discuss my strengths and needs with respect to adherence to EMQ Wraparound principles.	Never	Rarely	Sometimes	Often	Almost Always
14. My supervisor encourages me to focus on the strengths of the child and family team when discussing strategies.	Never	Rarely	Sometimes	Often	Almost Always
15. My supervisor ensures that I discuss both proactive and reactive safety plans when I report on children and families.	Almost Always	Often	Sometimes	Rarely	Never
16. When I reported a family was considering institutional care, my supervisor asked if I explored with the family what it "would take" for the family to feel safe and for the child to remain in the community.	Never	Rarely	Sometimes	Often	Almost Always
17. My supervisor regularly questions me about the transition plans of my families.	Never	Rarely	Sometimes	Often	Almost Always
18. My supervisor regularly helps me evaluate the level of family decision making.	Never	Rarely	Sometimes	Often	Almost Always
19. When flex-funds were suggested for use, my supervisor inquires whether I asked if community resources were available instead, and whether a plan was in place to use alternative resources in the future.	Almost Always	Often	Sometimes	Rarely	Never
20. My supervisor uses the Connectedness Model in exploring the natural human resources available to the child and family.	Never	Rarely	Sometimes	Often	Almost Always

Table 1 Continued

21. My supervisor focuses on the degree to which I have assisted the development of <i>individualized</i> child and family plans.	Never	Rarely	Sometimes	Often	Almost Always
22. When interventions or strategies are not working, my supervisor encourages me to go back to the team to identify the real need(s) that is not being met.	Never	Rarely	Sometimes	Often	Almost Always
23. My supervisor provides effective EMQ Wraparound trainings during POD meetings.	Never	Rarely	Sometimes	Often	Almost Always
24. My supervisor assists me in securing timely community and natural resources.	Almost Always	Often	Sometimes	Rarely	Never
25. My supervisor effectively manages the family specialists' schedules.	Never	Rarely	Sometimes	Often	Almost Always
26. My supervisor strongly encourages creativity in planning with the child and family team.	Never	Rarely	Sometimes	Often	Almost Always
27. My supervisor regularly asks me to follow up on progress of recommendations/interventions made in previous supervisory meetings.	Almost Always	Often	Sometimes	Rarely	Never
28. My supervisor creates and fosters a dynamic learning environment that encourages me to discuss both successful and unsuccessful interventions.	Never	Rarely	Sometimes	Often	Almost Always
29. My supervisor helps me identify the level of progress of children and families that are having difficulties.	Never	Rarely	Sometimes	Often	Almost Always
30. My supervisor observes my practice in the field at least once a month.	Almost Always	Often	Sometimes	Rarely	Never
31. I meet with my supervisor at least once a week.	Never	Rarely	Sometimes	Often	Almost Always
32. My supervisor requires that intervention plans be described in observable and measurable terms.	Never	Rarely	Sometimes	Often	Almost Always
33. My supervisor insists that child and family teams have final approval on all suggested interventions before they become a part of the individualized child and family plan.	Never	Rarely	Sometimes	Often	Almost Always
34. My supervisor explores with me concrete ways to manage my own resistance to any part of the plan, process, or family dynamics.	Almost Always	Often	Sometimes	Rarely	Never
35. My supervisor links potential interventions to the family's specific goals and objectives.	Never	Rarely	Sometimes	Often	Almost Always
36. My supervisor starts coaching sessions by asking me, "What's working?"	Never	Rarely	Sometimes	Often	Almost Always
37. My positive outcomes were acknowledged and celebrated with/by my supervisor.	Never	Rarely	Sometimes	Often	Almost Always
38. My supervisor helps me to use outcome data to inform my practice.	Never	Rarely	Sometimes	Often	Almost Always
39. My supervisor provides a good model of basic supervision (e.g., arrives on time; begins and ends meetings on time, is a good listener).	Almost Always	Often	Sometimes	Rarely	Never
40. My supervisor helps me explore ways to get people and teams to work together, even if there is significant resistance.	Never	Rarely	Sometimes	Often	Almost Always

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Results

The overall Cronbach's alpha was .98. There were high inter-item correlations, ($r(38) = .34, p < .05 - r(38) = .86, p < .01$) that suggest some overlap or redundancy in item content. However, at this point in the development, it may be premature to eliminate some items. The burden of paperwork is commonly reported as the number one source of dissatisfaction by agencies that must adhere to federal, state, and local regulations for medicare or medicaid billing. EMQ is not different. Subsequently, to minimize the sense of burden on staff, it was critical to have the measure introduced by senior management of the program within the context of providing quality care rather than as a mandate and a performance evaluation tool. Furthermore, it was important to inform the Clinical Program Managers, the subject of evaluation, prior to the administration of the measure and present the information as a coaching tool versus an appraisal tool. However, it was also clearly communicated that the information would ultimately inform their performance appraisals.

It is not uncommon for staffing patterns to change within the course of treatment or one's employment. This pilot illustrated the need to be able to track the movement between facilitators and clinical program managers as they strive to meet the daily needs of the children and families that we serve.

Conclusion

As the agency expanded its services, we learned that a structure for supervision was critical in maintaining fidelity to wraparound. Furthermore, the Mental Health Services Act in California is underway. Previously known as Proposition 63, the Act places a 1% tax on individuals with income of over \$1M, resulting in funds to support improvement in the state's mental health services systems. Consequently, provision of wraparound services for youth and their families is now a mandate in every county. The W-SAMS tool may assist counties in the implementation of wraparound.

In addition to ensuring high quality wraparound services, the W-SAMS has been used for quality improvement and management within the agency and each region's program. Data are aggregated for the clinical directors to improve supervision overall, by identifying areas of strength and areas for improvement as a program and on an individual supervisor level. Furthermore, the tool has been used as a performance-based evaluation tool that informs an individual with 360 feedback. 360-degree feedback is an evaluation method that incorporates feedback from the employee, his/her peers, superiors, subordinates, and customers. The managers share the results of these confidential surveys with the employee. Interpretation of the results, trends and themes are discussed as part of the feedback. The primary reason to use this full circle of confidential reviews is to provide the employee with information about his/her performance from multiple perspectives. From this feedback, the worker is able to set goals for self-development which will advance their career as well benefit the organization. With 360-degree feedback, the employee is central to the evaluation process and the ultimate goal is to improve individual performance within the organization (Tornow & London, 1998). As such, the W-SAM has been used as one aspect of the 360-degree feedback process.

While the W-SAMS is in its infancy of development, the measure appears to be a promising tool to support high quality wraparound services. The authors are continuing to gather data for further analyses (e.g., factor analyses). Nevertheless, a combination of these instruments that measure different aspects of the wraparound process (e.g., WFI-3.0 to measure adherence to the philosophical core elements, WOF 2.0 to measure the the child and family team meeting process, and W-SAM as a measurement of the supervision structure) may all contribute to ensuring the provision of quality wraparound services and delineate high quality wraparound services from the programs that are wraparound in name only.

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Symposium Discussion

Eleanor Castillo

Despite high fidelity to wraparound, the findings in the first two papers support the inconsistent findings in the wraparound literature. While there are some significant relationships between some elements of wraparound as measured by the WFI-3.0 and youth functioning, the relationships tend to be weak or moderate. Fidelity to community-based services appears to be the most consistent element related to youth functioning, but the relationship is weak. On the other hand, fidelity as measured by the WFI appears to have a more consistent and strong relationship to other aspects of wraparound services (e.g., satisfaction and family centeredness). This does not indicate that fidelity to wraparound is not related to treatment outcomes. Rather, the question might be more related to how fidelity is being measured by the WFI-3.0. Furthermore, as wraparound is a process for service delivery, perhaps there is a missing link between the specific interventions being delivered within that process and the philosophy of the services. It is postulated that use of evidence-based interventions within the model would result in more consistent treatment outcomes for youth and families involved in wraparound planning processes. The third paper presents another aspect of wraparound that may enhance fidelity to the model and ultimately improve treatment outcomes. Furthermore, although this measure is currently in a pilot phase, it appears to be a promising tool for quality assurance purposes, as well as a tool to ultimately better understand treatment outcomes.

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Wraparound in California: The Title IV-E Child Welfare Waiver Demonstration Project Evaluation

Charlie Ferguson

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Introduction

This explanatory study is an evaluation of wraparound, one of two components of the Title IV-E Child Welfare Waiver Demonstration Project in California, sponsored by the US Department of Health and Human Services (USDHHS), and implemented by counties under the auspices of the California Department of Social Services. The USDHHS provided fiscal waivers allowing states to develop and implement innovative programming designed to improve the outcomes for federally eligible children in foster care. The present study is the final analysis of Wraparound in California, conducted by the Center for Social Services Research at the University of California at Berkeley. The study is relevant to practitioners and policy-makers interested in the use of wraparound approaches with maltreated children in the foster care system. Wraparound in California was targeted to children in the child welfare system living in the highest level of group care in California or who were at-risk of placement into that level of care. In each county, local non-profit social service organizations were contracted to provide wraparound. In each county, local non-profit social service organizations were contracted to provide a model of wraparound as described by the Wraparound Fidelity Index (WFI; Wraparound Vermont Evaluation Team, 2001).

The purpose of the study was to assess the effectiveness of wraparound at producing better outcomes for children in high-level group care, or at risk of such a placement setting. Specifically, the study tests three hypotheses: children receiving wraparound will have (a) higher levels of child safety than children receiving traditional services, (b) higher levels of placement stability, and (c) higher levels of permanence than children receiving traditional services.

Method

The data collection design for the present study was a posttest-only control group design. Children included in the study were federally-eligible child welfare dependents in a high level group care placement, or at-risk of such placement at the time of enrollment, and eligible for enrollment between June 1, 1999 and December 31, 2002. Children were randomly assigned at a ratio of 5:3, treatment group (wraparound) and comparison group (traditional child welfare services).

Data for the study were drawn from several sources. The Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 1997) was used as the baseline measure of behavior. The primary purpose of the CAFAS was to assess the behavioral functioning of children in the two target populations for differences to ensure that the groups could be analyzed together. The Wraparound Fidelity Index (WFI; Wraparound Vermont Evaluation Team, 2001) was used to provide the assessment of model fidelity of the intervention in one county.

Quantitative data on the variables of child safety, stability, and permanence were the primary means with which comparisons were made between the treatment and comparison groups. These data were drawn from a longitudinal relational database containing data from California's child welfare management information system. Outcome analyses include: substantiated maltreatment while in the study, number of placement moves, stepping down from high level group care/stepping up into high level group care, types of placement change, and exiting from care due to permanency. The data were not aggregated; separate analyses were conducted for each county. Additionally, an analysis was conducted to determine whether a trend in the overall findings could be found that would point to better results for children receiving wraparound.

Results

Demographics

In Alameda County the sample included 212 children (Tx = 133, C = 79). In Los Angeles County the sample included 102 children (Tx = 65, C = 37). In Sacramento County the sample included 188 children (Tx = 117, C = 71). The majority of children in Alameda County and Los Angeles County samples were at risk of high-level group care placement. In Sacramento County, the distribution was more even, though the placement level of 11% of the sample could not be determined. The analyses of the CAFAS indicated that there were no statistically significant differences between the target populations in any of the counties on overall CAFAS score or on the distribution of scores across the categories of dysfunction.

The WFI analysis was conducted in Alameda County. The analysis of the WFI Overall Score showed a statistically significant ($p = 0.002$) difference between the average percentage for the treatment group (78%) and the comparison group (67%). The Overall Score for the treatment group indicated “good” adherence to the principles of wraparound.

Outcome Objectives

Table 1 provides an overview of the results of the outcome analyses. Only two of the comparisons between groups across all of the outcome variables revealed statistically significant differences. In the analysis of type of placement change, at the time of enrollment into the study, 39% of the children receiving wraparound in Alameda County were living in a family-based placement compared to approximately 33% of children receiving traditional child welfare services. At the end of the study period, the corresponding proportions were 57% and 33% ($p = 0.0022$), respectively. The finding held in a logistic regression analysis, controlling for time, where children in the treatment group had greater odds (OR = 2.646) of being in a family-based placement at the end of the study ($p = 0.0021$).

In the analysis of exits from care, no children from the treatment group in Sacramento County exited from care due to incarceration while four children in the comparison group (6%) exited from care for that reason. The difference was statistically significant ($p = 0.0193$). The number of events was too small to allow for a logit analysis.

The results of the trend analysis indicated no clear tendency in the outcome findings, with 10 positive outcomes indicating a positive trend and 10 outcomes indicating a negative trend. The trend indicators are also displayed in Table 1.

Conclusion

Overall, children receiving wraparound, as compared to children receiving traditional child welfare services, did not have higher levels of child safety, placement stability, or permanence. However, the results suggest that wraparound was having some positive impact on child welfare outcomes, most notably the findings that children receiving wraparound had greater odds of living in a family-based (i.e., less restrictive) environment at the end of the study and a smaller percentage were exiting foster care due to incarceration.

A number of factors may account for the less than robust findings. First, it is unlikely that the wraparound programs had attained programmatic “maturity” at the time of the analysis. Second, the samples had a high level of heterogeneity in a number of areas, a situation that may have limited the influence of the intervention on the outcomes. Finally, what appears to be the most likely reason for the findings is the distal nature of the outcomes selected (child safety, placement stability, and permanence) for assessment in relation to the intervention’s focus (changing/managing child behavior). It does not seem surprising that positive changes would be undetectable in such a relatively short amount of time in variables somewhat removed from the direct intent of the intervention.

The findings suggest a number of programmatic recommendations. First, a reduction in the heterogeneity of the target population would help concentrate the intervention. This could be accomplished through clearer program enrollment and discharge criteria. Second, a focus on the development of informal supports by the wraparound providers would increase the strength of the intervention. Third, improved capacity to work with family situations where a primary caregiver is not immediately identifiable may lead to improved outcomes, particularly in stepping children down to lower levels of care and in exiting from care. Fourth, as a question of policy, the findings appear to support the continuation of wraparound in California. Finally, given the inconclusiveness of the findings and relatively short period of the study, continued research and evaluation should be conducted in conjunction with any continuation of wraparound.

Table 1
Summary of Results

	<i>Sample (n)</i>	<i>Treatment %</i>	<i>Comparison %</i>	<i>OR \ RR</i>	<i>P-Value</i>	<i>Trend</i>
Substantiated Maltreatment (yes)						
Alameda	17 of 212	7.52	8.86		0.73	+
Los Angeles	15 of 102	18.46	8.11		0.16	--
Sacramento	16 of 188	9.40	7.04		0.57	--
Number of Placement Moves (3 or fewer moves)						
Alameda	162 of 212	—	—	1.167	0.66	+
Los Angeles	95 of 102	—	—	0.683	0.66	--
Sacramento	155 of 188	—	—	1.426	0.39	+
Step Down (yes)						
Alameda	30 of 42	—	—	1.596	0.53	+
Los Angeles	12 of 17	—	—	0.542	0.38	--
Sacramento	41 of 76	—	—	0.812	0.67	--
Step Up (yes)						
Alameda	46 of 169	—	—	1.445	0.46	--
Los Angeles	10 of 70	—	—	0.740	0.74	+
Sacramento	16 of 49	—	—	1.796	0.53	--
Types of Placements (in Family-Based at end study)						
Alameda	87 of 212	—	—	2.646	0.00	+
Los Angeles	47 of 68	—	—	1.134	0.82	+
Sacramento	61 of 146	—	—	0.940	0.86	--
Exits from Care (Incarceration)						
Alameda	7 of 212	3.76	2.53		0.71	--
Los Angeles	2 of 102	1.54	2.70		1.00	+
Sacramento	4 of 188	0.00	5.63		0.02	+
Exits from Care (Permanency)						
Alameda	7 of 212	2.26	5.06		0.43	--
Los Angeles		—	—			
Sacramento	3 of 188	2.56	0.00		0.29	+

OR / RR = odds ratio or risk ratio

P-Value: threshold for statistical significance was set at $p \leq .05$

Trend: + indicates a trend towards the desired outcome in the treatment group

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Assessment of Child and Family Team Functioning Using the Participant Rating Form

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Introduction

Wraparound is a process for planning and providing services to children with serious emotional disturbances (SED). Viewed as a promising practice (Burns & Goldman, 1999; U.S. Public Health Service, 2001), it has potential for improving service delivery to children and families. Guided by a set of key principles, wraparound is designed to empower families while a “child and family team (CFT)” develops an individualized plan of care (VanDenBerg & Grealish, 1996). Growing evidence suggests that children and families served through wraparound have better outcomes than those served through more traditional processes (e.g., Peterson & Rast, 2005; Rast, O’Day & Rider, 2005).

Because wraparound is a process based on general principles, its implementation varies considerably. Consequently, the National Wraparound Initiative has helped delineate a clearer practice model, including specific principles and activities, and minimum standards for practice (Burns, Osher, Walker & Rast, 2005). Such principles and standards are essential for understanding how, why, and under what circumstances wraparound is beneficial, which can facilitate better training and implementation of a successful model.

Developing means of assessing wraparound’s components can advance the practice model, by enhancing understanding of what processes are most beneficial and providing regular feedback for quality improvement purposes. To date, several measures/processes assess adherence to wraparound principles, differing in their complexity, comprehensiveness, and difficulty or cost of use.

One approach is the Wraparound Fidelity Index (WFI; Suter, Burchard, Bruns, Force, & Mehrtens, 2002). The WFI assesses 11 aspects of wraparound from the perspectives of resource facilitators (case managers), parents/caregivers, and youth, yielding fidelity scores on each scale and an overall fidelity score. Typically administered within a month after wraparound begins and at 6-month intervals, the WFI provides feedback to service providers and teams about how well wraparound is being implemented. In a national normative study, Bruns et al. (2004) found that providers tended to struggle with the following wraparound elements:

- incorporating important members on the team
- engaging youth in community life and relationships
- using family strengths in the plan
- using natural supports
- assessing outcomes

In addition, family members differed from resource facilitators on some elements. The WFI has been used in several studies demonstrating that “high fidelity” wraparound is associated with better outcomes than “low fidelity” wraparound (e.g., Peterson & Rast, 2005; Rast, O’Day & Rider, 2005). Furthermore, the WFI asks respondents to report on services and supports received over the past 30 days, which provides fairly timely information at the risk of having respondents base their responses on global impressions rather than specific behaviors/instances of the constructs. However, although the WFI provides relevant information, its items assess a combination of outcomes, system functioning, and team processes.

A different approach has been to observe the processes taking place in CFT meetings to determine if they are functioning in a manner consistent with accepted practice (e.g. VanDenBerg & Grealish, 1996). To that end, Epstein and colleagues (Epstein et al, 1998; 2003) developed the Wraparound Observation

Form (WOF), which has been modified by Davis and colleagues (Davis, Dollard & Vergon, 2005). These instruments rely on trained observers to rate CFT meetings on multiple dimensions. Epstein and colleagues (Epstein et al, 1998) reported reliability data, though their sample had very high performance levels, a factor that may result in inflated reliability estimates. That said, the measure can yield findings of interest to support work to implement the wraparound approach. For instance, Epstein et al. (2003) found that only 33% of 112 meetings included informal supports. Using the same form to rate 17 CFT meetings, Becker (2004) found that teams had problems developing and reviewing safety plans (17% endorsed), including nonprofessionals at the meetings (35%), and basing the plan of care upon strengths (41%). Describing 118 team meetings, Davis and Dollard (2004) reported similar results, with about 32% of meetings and 40% of the plans including informal supports. Moreover, strengths were “often not related to needs or goals”. Such results are of obvious value; however, while external raters provide the potential for relatively unbiased, detailed observations focusing specifically on the meeting’s processes, such observation is also quite costly.

Using videotaped meetings from 26 different teams in 13 communities, Walker, Koroloff, and Schutte (2003) reported similar findings. Approximately 40% of team meetings included informal supports, and only 15% of plans included informal community services or supports. They concluded that “attributes of high quality planning appear rare,” with only 15% of teams considering more than one option in decision making, and only one-third of teams discussing strengths during meetings. Additionally, fewer than 10% of CFTs were facilitating access to community supports.

In sum, these various observational studies (Becker, 2004; Davis & Dollard, 2004; Epstein et al., 2003; Walker et al., 2003), have found that many teams fail to implement some of the basic components viewed as central to wraparound. It is apparent that a key need for CFTs is a quick and simple means of assessing team functioning during meetings, so that teams can be provided with clear feedback about what they are doing well and about areas in need of attention.

Method

A new measure, the Child and Family Team Participant Rating Form (PRF), was developed through a rational process, involving parents, line workers, administrators, and university personnel. The PRF provides data about individual team meetings from the perspective of their participants. Specific aspects of the meeting are rated, rather than global perceptions. The PRF is simple to administer, score, and interpret, and yields data from multiple sources.

The CFT PRF consists of five separate, overlapping forms (parent, child, facilitator, service provider, and informal support) that team facilitators can quickly distribute at the end of each meeting. The form takes 5-7 minutes to complete and includes sections assessing *Access*, *Participants*, *Process*, and *Accomplishments*. Between 21 and 28 items are included, depending upon the form. The PRF was designed to be used alone or in conjunction with the Team Observation Form (TOF; an adaptation of Epstein’s Wraparound Observation Form), and its items focus primarily on participants’ perceptions of what took place at the meeting (e.g., the parent felt heard; participants know what they are to do) as opposed to readily observable characteristics of the meeting (e.g., the presence of a written agenda).

Results

The PRF has been used as part of a broader effort to assess team functioning in 98 meetings of 20 teams. Changes over time have been demonstrated, and the differential perceptions of facilitators versus families have been delineated, with facilitators often viewing meetings more positively than family members. Two different types of PRF-based meeting profiles have been found particularly useful to teams, specifically, comparisons of (1) the team’s functioning at a particular meeting compared to recent meetings of that team (Figure 1), and (2) the team’s profile and the average ratings of other teams (Figure 2). Such profiles can help facilitators or supervisors engage teams in discussions of their relative strengths and weaknesses, and PRF ratings can also be used to assess the impact of training or changes in team

Figure 1
Team Now vs. Prior Team Meetings

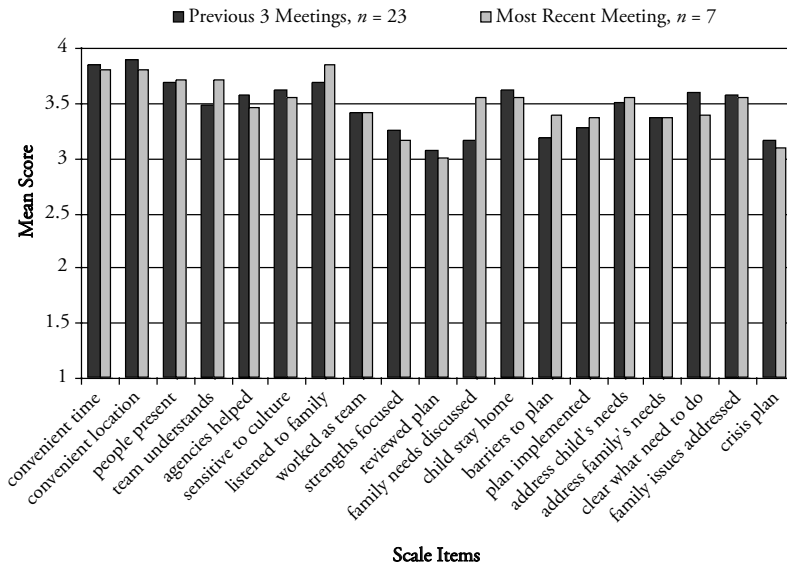
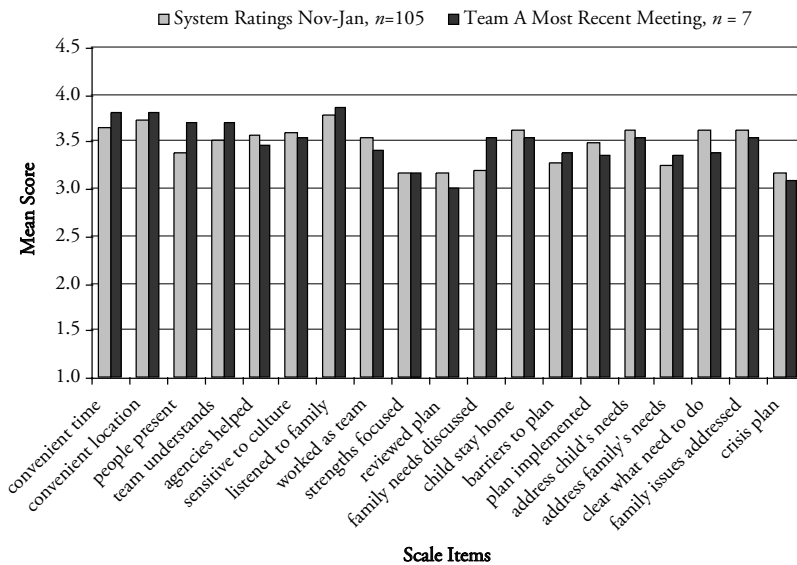


Figure 2
Team Now vs. System Ratings



composition. In the context of a “learning environment,” facilitators have asked for more specific and frequent information regarding changes in team functioning.

Although PRF items are not identical to those rated by trained observers on the TOF, it is possible to compare TOF and PRF ratings on similar items to assess the ratings’ validity. Although participants tend to rate the meetings more positively than trained observers, the patterns of relative strengths and weaknesses are quite similar. For example, 67% of the team members report it is “very true” that the team

meeting focused on the child's strengths, while observers indicated that child strengths were identified and discussed in 75% of the meetings.

Participants rated the meetings most poorly on the items:

- Everyone who needed to be at the meeting was present.
- We discussed things that may make it hard to follow the plan, and how to deal with them.
- All parts of the plan created at the last meeting were carried out.
- We have a good back-up plan for what to do in a crisis, if the main plan isn't working.

These items reflect many of the same issues identified in other studies of CFTs, such as the limited presence of informal supports and effective problem solving. Observer ratings also indicated that crisis plans were developed or reviewed in only 25% of the meetings, that non-professional supports were present at 29% of meetings, and that barriers to services or resources/interventions were identified and solutions discussed in 58% of meetings. Thus, there appears to be consistency in the ratings of the PRF and the observations of these particular meetings, and with findings from other studies.

Discussion/Conclusion

The Participant Rating Form is a simple means of providing feedback to CFTs. The feedback is based on the team's views of the meetings, and appears consistent with findings from trained observers. Although additional examination of its validity is needed, results suggest that the PRF is a promising approach to assessing and improving the degree to which teams implement the wraparound model.

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School Functioning for Children Enrolled In Community-Based Wraparound Services

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Introduction

Wraparound services seek to provide comprehensive treatment planning and supports for children with serious emotional disturbances (SED) who may experience behavioral and emotional difficulties that cut across settings: school, home and community. It has been suggested that utilizing a community-based wraparound approach to put school, home and community mental health professionals at the same table is advantageous in best meeting the needs of individual children (Cook-Morales, 2002). While studies have addressed the impact of school-based wraparound programs on children's school outcomes (e.g., Eber, Osuch, & Redditt, 1996), there has been little research addressing how a community-based wraparound approach impacts school-related outcomes for children. This study explores the effects of a community-based wraparound approach on school-related outcomes, including school functioning, grades, disciplinary actions, and IEP status.

Children with serious emotional disturbances (SED) who are served in the community often have school difficulties, including behavioral and learning problems in school. The national average number of students with a disability that qualifies for special education services is 11.46% (U.S. Department of Education, 2004). It is rare for SED to be the primary educational disability. SED accounts for 8% of all students with a disability or < 1% of student population. The educational outcomes of students with SED are the worst of any disability group. Fifty percent of students with SED drop out of high school, compared to 30% of all students with disabilities (New Freedom Commission on Mental Health, 2003).

The Coordinated Family Focused Care (CFFC) initiative has been undertaken by the Massachusetts Executive Office of Health and Human Services in order to better organize the care of children and adolescents who are at risk of hospitalization or residential placement because of their SED. The program builds on family strengths and available support systems to help children remain in or return to the community. CFFC has been designed to be consistent with the National Institute of Mental Health's CASSP (Children and Adolescent Support Services Programs) principles, which require services to be child-centered, family-focused, community-based, culturally competent, and provided in the least restrictive environment. In accordance with these principles, the CFFC program strives to deliver services in accordance with these core elements. Additionally, the services include flexible funds to provide whatever services the care planning team determines are necessary to the child and family, including concrete supports (e.g. shelter, clothes) and services that are not typically fundable through insurance mechanisms (e.g. respite care, summer camp). In essence, CFFC does strive to literally "wrap" needed services around the child and family in addition to working to adhere to the core principles of "wraparound" services listed above. Each child enrolled has a team assigned to them, which consist of the Care Manager (a Master's level clinician) and a Family Partner, (an individual who has been a primary caregiver for a child with serious emotional disturbance).

For the present study, school outcomes were examined for 377 children enrolled in the CFFC program between July 2003 and October 2005. We sought to understand factors related to school involvement on the wraparound team, and hypothesized positive changes in school functioning and school disciplinary actions (e.g. suspensions) over time in services.

Procedures and Methods

In order to be eligible for enrollment in CFFC, the child must be 3-18 years old (inclusive), at risk for residential or more restrictive placement, attain a score of 100 or higher on the CAFAS/PECFAS, reside in one of the five CFFC designated communities and have a serious emotional disturbance. A parent or caregiver must also agree to participate in the child's services and service team.

Measures. Standardized measures are collected by program staff at intake at set intervals throughout program enrollment. Additional demographic information as well as updates on treatment progress are collected by care managers. Additionally, the research staff at UMass complete telephone interviews with caregivers at 3 and 9 months into services to assess treatment fidelity and parent empowerment. All procedures are done in accordance with the UMass IRB.

Child functioning. The Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 2000) is collected quarterly (at Intake into the program, and every 3 months thereafter). The CFFC program has established a CAFAS score of 100 as part of the entry criteria for the program. Overall, children in CFFC have average intake CAFAS scores of 140, indicating a likely need for “intensive treatment” (Hodges, 2000), compared with average reported intake scores in other system of care wraparound programs of 65 – 95 (Hodges, Doucette-Gates & Liao, 1999; Kamradt, 2000; Rosenblatt & Rosenblatt, 2000). For the purposes of best understanding change in the CFFC program, CAFAS severity categories were created to reflect the overall high level of severity upon intake into the program, as well as a reflection of the score distribution at intake (100 – 120, 130 – 150, and 160+; see Figure 1). In order to be seen as having a “positive change” a child needed to move to a lower category of severity.

Treatment Fidelity. To assess Treatment Fidelity, the Wraparound Fidelity Index (WFI-3; Bruns, Burchard, Suter, Leverentz-Brady, & Force 2004) is being used by the evaluation team to assess how closely the five CFFC sites are implementing wraparound. The WFI includes 11 elements such as Voice and Choice, and Strength-Based Services. The WFI contains a question which asks if a school person is on the wraparound team, which was the item used for this study.

Child Strengths. The Behavioral and Emotional Rating Scale. (BERS; Epstein, 1999) is collected at intake, 6 and 12 months into treatment to assess caregiver’s perceptions of child strengths. The amount and type of peer relationships, adult relationships, and being bullied are also collected at intake and 6 months.

School data. Information on school disciplinary actions (e.g. suspensions), grades, and attendance are gathered by the care manager working with the family, via interviews and school visits. This information is then recorded every 6 months, and submitted to the program.

Results

School behavior. Repeated measures analyses indicated no notable findings in the areas of school disciplinary behavior between intake and 6 months in treatment, including suspensions, expulsions, tardies, absences, and truancy.

School functioning. To assess functioning in school, the School subscale of the CAFAS was examined at intake, 6 months ($n = 343$) and 12 months ($n = 163$). Repeated measures analyses indicated significant improvement in the CAFAS school score from Intake to 6 months ($F = 60.32$; $df = 342$; $p < .0001$), and Intake to 12 months ($F = 24.73$; $df = 162$; $p < .0001$). Mean school CAFAS score at Intake was 26.7, at 6 months was 23.7 and at 12 months was 22.3. While these changes were statistically significant, the means scores still indicate very high degrees of impairment. At intake, about 75% of children scored in the highest impairment category (30 = severe), and over 50% of children scored in the highest impairment category at 6 and 12 months (see Figure 1).

School Strengths. On the BERS, scores in all areas except School Strengths improved from Intake to 6 months. The School Strengths subscale assesses the caregiver’s opinion of the child’s strengths in school areas, such as paying attention in the classroom.

Individualized Education Plans (IEP). Sixty-five percent of children are on an IEP at Intake ($N = 377$), 71% are on an IEP at 6 months ($N = 229$), and 78% are on an IEP at 12 months ($N = 94$). Most children on IEPs at Intake remain on them; 94% of those on IEP at Intake are still on an IEP at 6 months, and 97% of those on an IEP at Intake are still on an IEP at 12 months. Chi-square analyses

indicate significant movement onto IEPs while in services for those who are not on IEPs at Intake. Twenty-three percent of those *not* on IEP at Intake *are* on an IEP at 6 months ($\chi^2 = 100.983, N = 223; p < .0001$), and 39% of those *not* on IEP at Intake *are* on an IEP at 12 months ($\chi^2 = 55.728, N = 92, p < .0001$).

Grades. There was a significant increase in the number of children with average or above grades between Intake and 6 months. ($\chi^2 = 29.152, N = 192, p < .0001$; see Figure 2), with 8% more children in the above average category. The overall effect between Intake and 12 months was significant ($\chi^2 = 10.458, N = 79, p < .001$). However, almost as many children went from the below average to above average as moved from above to below, so the net effect was not a positive one.

Predictors of school personnel on Wraparound Team.

One of the questions the WFI addresses is if there is a school member on the CFFC team. At 3 months, 53% of parents report a school person on the Wraparound Team, and at 9 months, 59% of parents report a school person on the Wraparound Team. There is a large range across sites: 38% - 68% reporting a school member on the team at 3 months, and 50% - 71% at 9 months. At both the 3 and 9 month interviews, having a school member on the team was related to having a younger child (age 11 or younger), being on an IEP, and having a higher School CAFAS score. School behavior, academic performance, ethnicity, and gender were not significantly related factors to having a school member on the wraparound team.

Discussion

This is one of the first studies to examine school outcomes for children receiving community based wraparound services. No changes were seen in school disciplinary behavior, such as suspensions. This was in contrast to expected findings, which hypothesized that community-based wraparound services would positively impact these areas. Non-compliance, defiance (Fields, 2004) and physical confrontations with peers (Dupper & Bosch, 1996) are among the most common reasons for school suspensions. We may therefore conclude that this service does not significantly impact those behaviors in the school environment. Conversely, many educators find punishment a more acceptable approach for managing students' challenging behaviors than positive reinforcement (Maag, 2001). A program such as CFFC focuses on meeting the needs of the child and family, but is less likely to have an impact on the culture and policies of educational institutions regarding difficult behaviors. Positive changes over time were seen in school CAFAS scores, grades at 6 months, and movement onto IEPs at 6 and 12 months. While the school CAFAS changes are encouraging, the children in this study still have very high levels of school impairment at 6 and 12 months into services, indicating a high need for school based services and supports. The movement to IEP programs show that the children who need specialized programs at school are being placed in them. Further, IEP status is an indicator of school personnel being involved on the wraparound team.

Figure 1
School CAFAS Over One Year

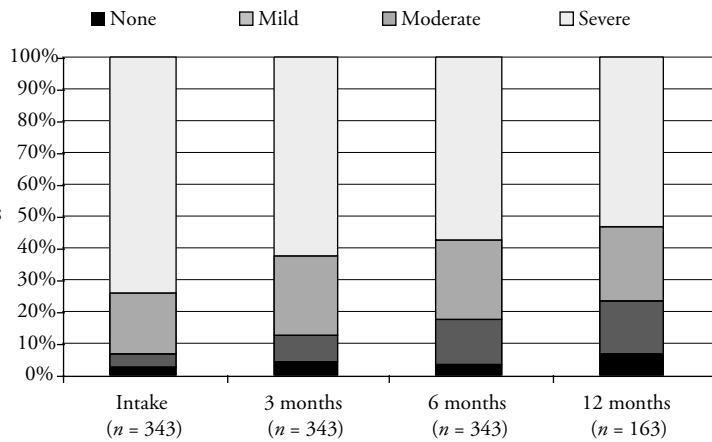
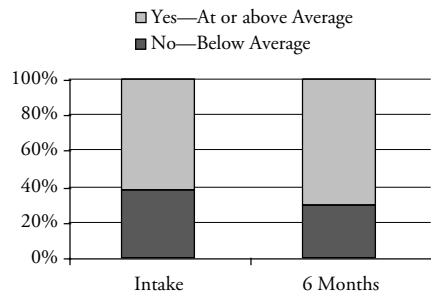


Figure 2
Average Grades Intake to 6 Months (N = 204)



Since the study employs a pre-post design, we are not able to determine if the changes in school functioning, grades and IEP status are direct results of the program. Future research efforts should include matched samples of comparison programs, or care as usual, to better understand the effects of a wraparound services program such as CFFC.

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Relationships Between Fidelity and Outcomes in a Multi-Site Wraparound Initiative

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Introduction

The Coordinated Family Focused Care (CFFC) pilot initiative has been undertaken in order to better coordinate the care of youth in Massachusetts who are at risk of hospitalization or residential placement because of their severe emotional disturbances (SED); 39% have had a hospitalization and/or stay in residential treatment at the time of intake into CFFC. There are five sites across the state, each serving up to 50 children at any given time. This wraparound program builds on family strengths and available support systems to help children remain in or return to the community.

Unique features of the CFFC program include a blended funding from public agencies in Massachusetts: the Departments of Mental Health, Social Services, Youth Services, Education and Medicaid. The Medicaid mental health carveout, Massachusetts Behavioral Health Partnership (MBHP), is managing the CFFC program. While one of the five CFFC sites (Worcester Communities of Care) has been a recipient of a SAMHSA System of Care grant, the program currently operates entirely on state monies. Through a grant from the Center for Health Care Strategies, the University of Massachusetts Medical School (UMass) is studying program outcomes.

CFFC has been designed to be consistent with the National Institute of Mental Health's CASSP (Children and Adolescent Support Services Programs) principles, which require services to be child-centered, family-focused, community-based, multi-system, culturally competent, and provided in the least restrictive environment. In accordance with these principles, the CFFC program strives to deliver services in accordance with these core elements. Additionally, the services include flexible funds to provide whatever services the care planning team determines are necessary to the child and family, including concrete supports (e.g. shelter, clothes) and services that are not typically fundable through insurance mechanisms (e.g. respite care, summer camp). In essence, CFFC does strive to literally “wrap” needed services around the child and family in addition to working to adhere to the core principles of “wraparound” services listed above. Each child enrolled has a two-staff team assigned to them, which consist of the Care Manager (a Master's level clinician) and a Family Partner (an individual who has been a primary caregiver for a child with serious emotional disturbance).

It is believed that adherence to the CASSP principles is related to more positive child and family outcomes. However, there has been little empirical research in this area. This paper seeks to understand whether fidelity to the wraparound model and CASSP principles is positively related to child outcomes. We first examine child outcomes in the areas of child functioning and strengths, and then examine the relationship to treatment fidelity.

Method

All data are from the CFFC evaluation. Consent for participation in the study is obtained by program staff upon intake into services. The risks and benefits are explained, and a consent form is signed that has been approved by the University of Massachusetts Medical School IRB. To date, 93% of families who have been invited have consented to participate in the evaluation; 7% have declined. The evaluation follows a pre-post design; there is no comparison group.

Participants. For this study, data were accessed for 293 children who enrolled, received services, and were discharged from CFFC, who were also part of the ongoing evaluation.

Measures. Standardized measures are collected by program staff at intake at set intervals throughout program enrollment. Additional demographic information as well as updates on treatment progress are collected by care managers. All data are submitted electronically by MBHP to UMass.

Child functioning. The CAFAS (Hodges, 2000) is collected quarterly (at Intake into the program, and every 3 months thereafter). The CFFC program has established a CAFAS score of 100 as part of the entry criteria for the program. Overall, children in CFFC have average intake CAFAS scores of 140, indicating a likely need for “intensive treatment” (Hodges, 2000), compared with average reported intake scores in other system of care wraparound programs of 65 – 95 (Hodges, Doucette-Gates & Liao, 1999; Kamradt, 2000; Rosenblatt & Rosenblatt, 2000). For the purposes of best understanding change in the CFFC program, CAFAS severity categories were created to reflect the overall high level of severity upon intake into the program, as well as a reflection of the score distribution at intake (100 – 120, 130 – 150, and 160+; see Table 1). In order to be seen as having a “positive change” a child needed to move to a lower category of severity.

Treatment Fidelity. To assess Treatment Fidelity, the Wraparound Fidelity Index (WFI-3; Bruns, Burchard, Suter, Leverentz-Brady, & Force, 2004) is being used by the evaluation team to assess how closely the five CFFC sites are implementing wraparound. The WFI includes caregiver ratings of the philosophical elements of the wraparound process. These elements include Voice and Choice, Youth and Family Team, Community-Based Services, Cultural Competence, Individualized and Strength-Based Services, Natural Supports, Continuation of Care, Collaboration, Flexible Resources and Outcome-Based Services. To address how involved parents and caregivers feel they are with their child’s services, the Competency subscale of the Family Empowerment Scale and the Family Participation Measure are also being administered with parents and caregivers.

Child Strengths. The Behavioral and Emotional Rating Scale (BERS; Epstein, 1999) is collected at intake, 6 and 12 months into treatment to assess caregiver’s perceptions of child strengths. The amount and type of peer relationships, adult relationships, and being bullied are also collected at intake and 6 months.

Results

Results of repeated measures analyses indicated statistically significant changes over time in the expected directions in all areas assessed. On the CAFAS, mean score at Intake is 139, and mean score at 6 months is 102 (Within Subjects Repeated measures: $df = 267$; $F = 328.74$; $p < .0001$). For children enrolled for a year or more, mean scores went from 143 at intake to 99 at one year (Within Subjects Repeated measures: $df = 116$; $F = 171.78$; $p < .0001$). All subscales also had statistically significant change. While all children had CAFAS scores at or above 100 at intake, 76% did at 3 months, 57% did at 6 months, 55% did at 9 months, and 54% did at 12 months.

In order to assess clinically meaningful change, CAFAS scores were grouped by severity as suggested on the instrument, with an additional category of extreme severity added. Subsequent analyses were performed looking not just at CAFAS change in the correct direction, but also for change into a category of lower severity. Results of distribution of these scores can be seen below.

Table 1
CAFAS Score Distribution at Intake

	<i>Frequency</i>	<i>Valid Percent</i>
100-120	100	37.4
130-150	89	33.1
160+	79	29.6
Total	268	100.0

By 3 months in the program, half the children experienced change into a lower category of severity, and by 6, 9 and 12 months, 74% had. Of those who did not, only a very small percentage of children moved into a more severe category (under 5%), so those children were grouped together with the No Change group for subsequent analyses. The median score for the Positive Change group at Intake was 140, and for the Same/Worse group was 130. The average change in scores for the Same/Worse group was 1 point, and for the Positive Change group was 48 points.

Table 2
Mean CAFAS Scores by 6 Month Change During Services

	<i>Intake</i> <i>CAFAS Mean</i>	<i>6 Month</i> <i>CAFAS Mean</i>
Same/Worse (<i>n</i> = 72)	130.56	129.17
Positive Change (<i>n</i> = 196)	141.94	93.11

Fidelity and CAFAS change

The WFI was administered at 3 and 9 months into services. At the 3 month interview (*N* = 196), children who had who had significant CAFAS change at the 3 month mark had significantly higher scores on the Community Supports element of the WFI-3 than those who did not have CAFAS change (*df* = 195; *F* = 5.612; *p* < .05). There were trends for higher scores in the area of Strengths Based services and positive CAFAS change at 6 months, 9 months and 12 months (*p* < .10).

Fidelity and Discharge Status

There were significant differences in almost all areas of treatment fidelity (at 9 months) by discharge status. That is, higher fidelity to the treatment model was strongly related to attaining graduation goals. In most areas, the lowest fidelity scores were related to those who withdrew from treatment without attaining graduation goals, although children who were discharged to out of home placements had lower fidelity scores in the area of Community Supports than those who graduated. In many areas, however, children discharged into restrictive out-of-home placements had fidelity scores similar to those who graduated. It should be noted that the numbers of children in these groups area small, and the results are preliminary.

Fidelity and Strengths

Finally, relationships between ratings on the strengths measure and fidelity were examined. There were significant positive relationships at both 3 and 9 months between all areas of strengths as assessed on the BERS and Community Supports on the WFI. WFI scores at 9 months in the areas of Cultural Competence, Continuation of Services, and Collaboration were also positively related to 12-month scores on the BERS in the areas of Family Involvement and Intrapersonal Strengths.

Discussion

There are some relationships seen in these data between aspects of fidelity and positive outcomes in the CFFC program. Notably, positive relationships were seen between the Community Supports and Strengths based Services areas of fidelity, and positive change on the CAFAS. We also found relationships between fidelity and attainment of graduation goals, although many caregivers of children discharged to out-of-home placements had fidelity ratings similar to children who graduated. The key difference was that caregivers of children who withdrew from services (voluntarily discontinued without meeting graduation goals) reported lower fidelity ratings. From this research, it appears that the caregiver's perception of services being strengths-based, and of connecting the family with community supports, are related to positive programmatic outcomes.

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