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National Trends in Implementing Wraparound: Results from the State Wraparound Survey

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Abstract The wraparound process has been promoted in the children's services field as a mechanism to achieve collaborative service planning and delivery for families of young people with complex emotional and behavioral needs that span multiple agencies. We compared results of two surveys of state children's mental health directors, completed in 1998 and 2008, to derive estimates of the extent of wraparound implementation in the United States and to better understand trends in how wraparound has been implemented and supported over time. Results from 2008 found that 88% of states reported having some type of wraparound program that conformed to the definition and provided an estimate of 100,000 children and families served via wraparound in that year. Between 1998 and 2008, states reported increased application of wraparound standards, a greater number of agencies involved in wraparound initiatives, and more formal evaluations of wraparound initiatives. Results provide substantiation of the widespread implementation of wraparound implementation in the United States, and evidence that the model is becoming more consistently supported by formal implementation structures over time.

Keywords Wraparound · Children's mental health · Treatment planning · System of care · Implementation

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Introduction

Over the past two decades, advocates, researchers, Presidential commissions, and the Surgeon General all have called upon public systems to enhance the effectiveness of services for children and youth with emotional and behavioral disorders, and to improve the likelihood that youth with the most serious and complex needs will be able to thrive in their homes and communities. Several recommendations are consistent: (1) Ensure that each youth has a holistic and individualized plan of care; (2) Develop plans of care in full partnership with families and youth; (3) Ground plans and strategies on youth and family preferences and culture; (4) Coordinate services and supports across systems and helpers; and (5) Ensure access to empirically supported psychosocial and pharmacological treatments wherever appropriate (Cooper et al. 2008; Schoenwald et al. 2010; Stroul and Friedman 1994; United States Public Health Service 2000).

Given these directives, it is perhaps not surprising that implementation of the *wraparound process* has continued to be so prevalent among the many systems that serve youth with complex needs and their families. Wraparound is based on a set of defined principles and procedures that have the potential to address many of the above recommendations, including: (1) Engaging youth, caregivers, and families in a strengths-based process; (2) Identifying priority needs; (3) Assembling an integrated team that provides the basis for collaboration; (4) Managing the work of the team so that cross-system, solution-based problem-solving occurs; (5) Building the youth and family's self-efficacy and social support; and (6) Setting goals and monitoring success over time.

When implemented with adherence to its core elements, the intervention provides a locus of planning and

accountability for participating youths and families for whom services might otherwise be fragmented and uncoordinated. At the *practice level*, similar to the notion of a "medical home" for individuals with complex or chronic illnesses (Sia et al. 2004), and relevant to the new "health home" option for Medicaid beneficiaries with multiple chronic behavioral health conditions under the Affordable Care Act (Center for Medicare and Medicaid Services 2010), well-implemented wraparound can provide a "mental health home" (Schoenwald et al. 2010) for youth with serious emotional and behavioral problems that require interventions across several systems. At a *system level*, a well-functioning, wraparound-based service system trains and supports a set of skilled generalists (e.g., care coordinators, family and youth peer-to-peer support partners, behavioral support workers) to intervene to meet the needs of youths with a diverse range of presentations, and organizes access to an array of specialists in evidence-based assessment procedures and treatments (Bruns et al. 2010; Walker et al. 2008).

Given the prevalence of mental health disorders and serious emotional disturbance in youth involved in systems such as juvenile justice (Skowyra and Cocozza 2006) and child welfare (Horwitz et al. 2010), an added appeal for states and large systems is that wraparound provides a universal, community-based operating system for coordinating the care of youth with complex needs, regardless of which system has primary responsibility for a particular youth. Thus, wraparound holds the promise of reducing reliance on costly out-of-home placements (e.g., residential treatment, juvenile detention, group homes, foster care) by redirecting resources for such placements toward coordinated, intensive, holistic, family- and community-based care. Growth in the research base on its effectiveness (see Bruns and Suter 2010; Suter and Bruns 2009), as well as a number of evaluations demonstrating reductions in out-of-home care and related expenditures (e.g., Kamradt et al. 2008; Rauso et al. 2009), have also played a role in state and large jurisdictions adopting wraparound. Wraparound's prominence has also increased due to recent class-action lawsuit settlements (e.g., *Rosie D.* vs. *Romney* in Massachusetts, *JK* vs. *Eden* in Arizona, *Katie A.* vs. *Bonta* in California) directing states to provide individualized, team-based, service coordination via some version of wraparound (Bruns et al. 2010).

The wraparound practice model and associated system requirements are aligned with trends in the child-serving field, and provide a face-valid approach to serving youth with complex emotional and behavioral needs, particularly those at risk of out-of-community placement. However, achieving any type of change in health care delivery procedures requires many levels of attention. As described by Fixsen et al. (2005), faithful implementation requires carefully selected practitioners; organizations that provide the infrastructure necessary for skillful training, supervision, and coaching; regular process and outcome evaluations; and feedback loops that connect all of the above. Adequately attending to all these areas is typically difficult for any empirically supported treatment; it may be even more difficult for an intervention such as wraparound that aims to meet such a diverse array of needs and relies to such an extent on collaboration among child-serving systems to be effective. Wraparound implementation requires attention to a wide range of implementation supports that span practitioners, teams, organizations, and systems, including effective agency and community partnerships, human resource development and support, an effective and accessible service array, supportive fiscal structures, and accountability.

In one of the most cited studies relevant to wraparound implementation, Faw (1999) conducted a survey of state mental health directors and estimated that wraparound was available in 80–90% of states and U.S. territories. Based on estimates provided by 24 of the responding 49 states and territories, the author estimated that, as of 1998, as many as 200,000 youth might be served by the wraparound process annually. Though the number of youth served by wraparound was impressive, the study also found that fewer than half the states had any defined standards for wraparound implementation, and that only about half had dedicated resources to support wraparound training and professional development. In addition, the study found that few states measured fidelity or were conducting program evaluation. Faw (1999) concluded that there was a "lack of a concurrent definition" of wraparound, and there was "a need for a definition as well as an established set of standards" (p. 64).

A follow up to the 1998 survey was begun in 2007 and completed in 2008. During the time between surveys, wraparound had been better specified in the published literature (see Walker and Bruns 2006), fidelity measures made more consistently available (Bruns et al. 2008) and standards had been more consistently established (Walker et al. 2008). Therefore, the purpose of the 2007–2008 survey (hereafter referred to as the 2008 survey) was to gain an updated and more refined estimate of the number of wraparound initiatives and participating youth. As with the original 1998 survey, the intent was also to better understand how wraparound implementation was being supported, and to collect qualitative information about implementation successes, barriers, and lessons learned.

Method

A 17-item survey about wraparound implementation in the respondent's state was created based on the original 1998

13-item survey. This survey was mailed to Children's Mental Health Directors (one per state, to the individual identified by the National Association of State Mental Health Program Directors or NASMHPD) in all 50 states, 4 U.S. territories, and the District of Columbia. For this update, wraparound was defined more precisely, using descriptions based on the model specification work of the National Wraparound Initiative (Walker and Bruns 2006). Specifically, respondents were asked to report on initiatives in their state that adhered to the following definition:

> Wraparound is a team-based process to develop and implement individualized service and support plans for children with serious emotional and behavioral problems and their families. Wraparound implementation is typically facilitated by a trained wraparound facilitator or care coordinator, who works with a team of individuals relevant to the youth and family. The wraparound process also ideally includes the following characteristics:

1. Efforts are based in the community;
2. Services and supports are individualized to meet specific needs of the children and families;
3. The process is culturally competent and strengths-based;
4. Teams have access to flexible funding;
5. Family and youth perspectives are sought and prioritized;
6. Team members include people drawn from family members' natural support network;
7. The wraparound plan includes strategies that draw on sources of natural support;
8. The team monitors progress on measurable indicators of success and changes the plan as necessary.

Respondents could complete the survey online, via hard copy, or via email. Respondents who did not return surveys were sent two email reminders, after which they were reminded by phone calls from the study team. For 10 states whose identified respondent did not respond to email or phone reminders, the research team contacted colleagues in the state for potential alternate respondents who would be adequately knowledgeable about wraparound implementation in the state. Five surveys were completed through this mechanism.

Variables and Analyses

The survey consisted of 17 items assessing several aspects of the state's involvement in wraparound efforts, including the following: availability and prevalence of wraparound programs in the state, whether wraparound was implemented statewide or locally, the population of focus, the total number of youth who participated in wraparound, the systems involved in wraparound service provision, the systems that played a lead role, whether other terms or names for wraparound were used in the state, whether written standards were used, whether in-service training on wraparound had been conducted in the last 5 years, whether there was any measurement of implementation fidelity, and whether the state conducted formal evaluations of wraparound.

We also created two additional state-level variables from sources other than the survey. First, we generated a state-level estimate of the number of people under 18 years of age with serious emotional disorders (SED). This was generated from an estimate of the national prevalence of SED in youth of 7.5% (Costello et al. 1998). Second, we generated an estimate of the number of young people with SED who lived in households below 185% of the poverty level, and hence likely to be eligible for Medicaid (subsequently referred to as "Medicaid-eligible" youth). We included this variable because many of the wraparound programs that we are familiar with are state-run programs which require Medicaid eligibility. This variable was derived from both the national prevalence of SED and the 2005–2007 3-year American Community Survey estimates of state population and poverty rates (United States Census Bureau 2009).

Data Analysis

Analysis of data proceeded through basic data cleaning and screening, examining descriptive information such as means, standard deviations, and frequencies, as well as conducting analyses of bivariate relationships using chi-square tests, *t* tests, Mann–Whitney *U* tests (a non-parametric alternative to the *t* test), and Spearman's *rho* (a non-parametric alternative to the Pearson's correlation coefficient). Qualitative analysis was conducted based on the iterative process suggested by Marshall and Rossman (1989). Unique statements provided by respondents were identified by a research assistant and entered into a database. Statements were then reviewed and, in some cases, edited by the lead author (e.g., for clarity or to remove identifying information to retain anonymity of the respondent). Next, statements were reviewed by two co-investigators (EB and AS) and collaboratively sorted into a priori categories. Alternate categories were also created for statements determined not to fit these initially generated categories. The two investigators then reconciled sorting and categories differences.

Results

Response Rates

Surveys (one per jurisdiction) were completed for 47 states, one territory, and D.C., for a total return rate of 89.1%

(49 out of 55 possible states and territories). This is the same overall return rate as for the 1998 survey, when 46 states, two territories and D.C. responded. (For convenience, henceforth we will refer to responding states, territories, and D.C. collectively as "states.") Table 1 provides an overview of responses from 1998 and 2008.

Numbers of Programs and Youth Served

Of the 49 states that responded to the survey, 87.8% ($n = 43$) reported having some sort of wraparound program in the state in 2008, exactly the same number and percent that reported wraparound availability in 1998, though the specific states that reported implementation varied. Among the six states that reported no wraparound availability in 2007–2008, four also reported no wraparound in 1998. Only one state reported having wraparound in 1998 but not when they completed the survey in 2007 or 2008. Of the 43 states reporting at least one wraparound initiative, 42 gave estimates of the number of children served statewide. Among states that could provide estimates, a total of 98,293 children were estimated to be served by wraparound, in a reported 819 unique programs across the 43 responding states. The mean number of youth served in states reporting wraparound programs was 2,337, and the median was 853. This is compared to a mean of 3,805 in 1997 (*median* = 1,162).

However, mean scores may be misleading because of the non-normal distribution of the data. There were wide variations in the number of children served per state, which in 2008 was very positively skewed and ranged from 66 to 18,000 ($SD = 3{,}676$). Five states (North Carolina, Arizona, Kentucky, Maine, and Florida) reported over 5,000 youth served annually, while 21 states reported under 1,000 served annually, and five states reported fewer than 100 youth served annually. There were also large differences in the number of unique wraparound initiatives or programs estimated to be operating in each state, which ranged from 1 to 134 ($SD = 30.5$). Five states (Georgia, Ohio, Michigan, Illinois, and Indiana) reported at least 50 unique wraparound programs in the state.

Percentage of Youth with Wraparound Teams

Among states reporting having a wraparound program, and assuming all youth receiving wraparound had SED, 1.9% of the estimated national population of youth with SED had a wraparound team, with state-level percentages ranging from 0.07 to 35%, and a state-level mean of 3.6% ($SD = 7.1$). The national percentage of *Medicaid-eligible* youth with SED who had a wraparound team was 5.2%, with state-level estimates ranging from 0.3 to 100%, with a state-level mean of 10.1% ($SD = 21.3$).

Statewide or Local Implementation

In 2008, 60% of states with wraparound projects (26 of 43) reported that wraparound was a statewide effort, as opposed to 17 (40%) reporting that wraparound was implemented through one or more local effort(s). This is a decrease from 1998, when 81% of states (35 of 43) reported statewide efforts. States reporting statewide implementation reported a mean of 5.6% of youth with SED served ($SD = 8.5$) versus only 0.6% of youth with SED ($SD = 0.7$) for states with local implementation, a statistically significant difference (*Mann–Whitney* $U_{(26,\ 17)} = 73$, $p < 0.001$).

Agencies Taking Part in Wraparound Initiatives

The agencies involved in implementing wraparound efforts in 2008 were, in order of frequency: mental health (100% of states responding), child welfare (90%), juvenile justice (90%), education (79%), substance use treatment (67%), developmental disabilities (52%), and health (50%). These results indicate greater involvement by health, substance abuse, and developmental disabilities agencies in 2008 than

Table 1 Survey responses for states in 1998 and 2008

	1998 ($N = 49$)	2008 ($N = 49$)
Any wraparound program	43 (87.8%)	43 (87.8%)
Of those with any wraparound program		
Mean/median (SD) # of youth served	3,805/1,162 (5,953)	2,337/853 (3,678)
Wraparound was a statewide effort (vs. local efforts)**	81%	60%
Mean (SD) # of agencies involved in wraparound*	4.67 (1.62)	5.26 (1.69)
Other names used for wraparound **	54%	76%
Use of written standards for wraparound	42%	56%
In-state resources for wraparound & professional development	N/A	71%
Inservice training on wraparound in state in last 5 years	86%	97%
Wraparound programs measure fidelity	N/A	67%
Formal evaluation conducted on one or more programs**	29%	74%

* $p < 0.10$,
** $p < 0.05$

was reported in 1998. In addition, more systems are becoming involved; in 2008 a mean of 5.26 ($SD = 1.69$) agencies were reported to be involved in the wraparound initiative(s) cited by respondents, compared to 4.67 ($SD = 1.62$) in 1998, a marginally significant difference ($t_{(39)} = 1.704$; $p < 0.10$).

We also investigated whether statewide implementation of wraparound was associated with a greater number of agencies involved or a higher percentage of youth with SED who had wraparound teams. States reported to be implementing wraparound statewide were found to have a mean of 5.54 agencies involved ($SD = 1.56$), compared to 4.94 ($SD = 1.77$) for states in which wraparound was being implemented locally. This difference, however, was not statistically significant ($t_{(40)} = 1.54$, $p = 0.255$).

Agencies in Lead Role

The agencies most often identified as taking a lead role in wraparound efforts were, in order of frequency: mental health (93%), child welfare (52%), juvenile justice (24%), education (24%), developmental disabilities (19%), substance use treatment (9%), and health (4%). Child welfare (52% in 2008 vs. 30% in 1998), juvenile justice (24% vs. 7%), and developmental disabilities (19% vs. 4%) were all much more likely to be in a lead role in 2008 than in 1998. However, it is important to note that more agencies in general were reported to be in a "lead role" in 2008 than in 1998.

Other Names for Wraparound

In 2008, 76% of states reported that terms other than "wraparound" were used to describe their programs. This was compared to only 54% of states in 1998. The most common terminologies used for wraparound-type initiatives in 2008 were: (1) Child and Family Teams (34% of states had at least one program that used this term); (2) Care Coordination/Coordinated Services (14%); (3) Individualized Treatment Plan or Individualized Service Agreement (14%); and (4) Team (or Family) Decision Making (14%). Other reported terms included: Children's System of Care Initiative, Family Centered Practice, Intensive Community Based Treatment and Supports, and Family Support Teams.

Wraparound Standards

The 2008 survey showed that 23 of the 41 responding states (56%) with wraparound programs reported having some type of written standards for wraparound. This is an increase in use of written standards for wraparound from 1998, when 17 states (42%) reported having written standards, though this difference was not statistically significant ($\chi_{(1)} = 1.75$, $p = 0.19$). Many of the respondents who provided details, however, said that standards were from a training entity or a fidelity scale. Thus, the number of states that have incorporated practice standards directly into provider or agency contracts or reimbursement codes is likely to be fewer.

Interesting differences emerged for states with standards versus those without standards. First, among states with written standards, more reported having statewide wraparound initiatives (74%) than among states without standards (44%) ($\chi_{(1)} = 3.69$; $p = 0.05$). Second, 83% of states with written standards reported formal fidelity monitoring in the state, versus only 50% of states without standards ($\chi_{(1)} = 4.96$; $p < 0.05$) Third, states with written standards also reported more agencies being involved in their wraparound initiative than states without written standards, 5.65 on average versus 4.78, with borderline statistical significance ($t_{(39)} = 1.73$; $p < 0.10$). However, states with written standards did not have a higher percentage of youth with SED in wraparound teams ($M_1 = M_2 = 3.8$, Mann–Whitney $U = 151$, $p = 0.121$).

Implementation Resources

In the survey completed in 2008, 71% of states who reported having wraparound in their state also reported that there were in-state resources available for wraparound training and professional development (this question was not asked in 1998). However, in 2008, 97% of states reported having some sort of in-service training in the last 5 years. This is compared to 86% in 1998. Unlike the existence of standards, the availability of in-state resources for wraparound implementation did not differ significantly for states with statewide versus local wraparound initiatives.

Fidelity Measurement

Of the 42 states that responded, 28 (67%) stated that fidelity measurement was conducted (this question was not asked in 1998). States that collected fidelity data were compared to states that did not measure fidelity on a number of factors; states that measured fidelity more often reported having standards for wraparound (68% vs. 31%; $\chi_{(1)} = 4.96$; $p < 0.05$), but were not significantly different in their likelihood to have a statewide wraparound initiative (61% vs. 64%) or to have an in-state training and TA resource (75% vs. 61%).

Evaluation

In 2008, 42 states responded to an item inquiring about whether a formal evaluation had been conducted in the state on one or more of its wraparound programs.

Thirty-one respondents reported that one had been conducted (74%), which is an increase from 1998 when only 9 of 31 states (29%) reported an evaluation. States that reported formal evaluation were more likely than states that reported no formal evaluations to measure fidelity of implementation (74% vs. 45%; $\chi_{(1)} = 3.018$; $p < 0.05$). There were observable but non-significant differences on whether states with a formal evaluation were more likely to have a statewide wraparound initiative (65% vs. 55%) and to have written standards (61% vs. 36%).

Responses to Open-Ended Questions

Respondents were asked "What lessons have you learned from your experience with implementing wraparound in your state?" Thirty-six of the 43 states reporting wraparound programs responded to this item, providing a total of 92 unique statements. As shown in Table 2, over two-thirds of these statements were related to three issues: Maintaining fidelity ($n = 28$), ensuring stakeholder buy-in and engagement ($n = 18$) and maintaining active family and youth participation and engagement ($n = 17$). After these, funding/sustainability ($n = 13$), interagency collaboration ($n = 8$), outcomes ($n = 6$), and definitional issues regarding wraparound ($n = 4$) were all identified as themes.

Regarding the topic of *maintaining quality and fidelity*, respondents emphasized the importance of training, quality assurance, and maintaining fidelity to the wraparound model. For example, one respondent reported "Fidelity processes are very important but are time consuming and it is difficult to find funds to support the process." Others reported that staff training and coaching were important for ensuring certain aspects of the model were achieved, such as using a strengths-based approach or including natural supports on teams and in plans.

In other statements, respondents noted specific types of data collection necessary to support wraparound implementation. For example, one respondent stated, "treatments should be monitored for congruence to the plan, otherwise you end up with two distinct plans/approaches." Respondents also reported specific approaches in their states for ensuring fidelity, training, and/or support. Examples included using national experts, developing local training entities, and/or efforts to train and mobilize family advocates. One respondent gave this advice: "utilize technical assistance from the 'experts,' but don't be afraid to challenge them to look 'outside the box' of unique characteristics of your local area."

Of the 18 statements pertaining to *stakeholder engagement and buy-in,* the vast majority simply emphasized the need to "build community buy-in and meaningfully engage stakeholders before implementing wraparound." Stakeholders were identified broadly as individuals such as partner agency leaders and middle managers, as well as partner agency staff and members of the provider community.

In a related theme, 17 statements pertained to the importance of *youth and family member participation* at the community as well as engagement at the individual family level. Most of these statements underscored the importance of this type of participation across all levels of effort, but several also referred to the importance of or local efforts to train youth and family members as navigators, facilitators, and support partners.

Respondents' statements related to *funding and sustainability* were very diverse. Several statements in this theme highlighted the importance of flexible funding to implementing wraparound on the ground level. The remaining open-ended feedback provided a range of insights, including the following statements:

- "Seed funding is artificial. Better to make agencies commit to blending funds and recapturing savings."
- "Financial support for families' involvement is hard to come by, but it is very important."
- "Whenever you share funds, you share accountability."
- "Need to set up payment mechanisms very carefully so that they do not become unwieldy as program services grow."
- "Blended funding is both important and difficult… we struggle when children fit many funding silos."
- "Joint funding gave communities the initiative to create other funding sources."
- "Fundraising is a critical key to sustainability."
- "Need to ensure that planning activities with the model are reimbursed through either Medicaid or state funding."

Eight statements presented suggestions, challenges, and lessons learned about *creating infrastructure for collaboration.* For example, "training [is needed] on how to integrate different plans from different systems into a single plan of care." And, "although it has been a positive process for coordinating services among multiple agencies, [wraparound] has not been able to address the development of specialized services and supports that are not available within traditional funding streams." Another respondent noted, "The team approach is what sustained wraparound through funding cuts, leadership changes, and overall changes in our system."

The remaining coded statements fell into two categories. Regarding *outcomes* ($n = 6$), most respondents lamented not having better ability to measure and document outcomes. One was much more specific, stating that, "we have been doing 'low fidelity wraparound' for 15 years. It is costly and we have little data to demonstrate effectiveness." Finally, four respondents provided responses related

Table 2 Summary of statements ($n = 94$) coded from qualitative data in response to the question "what lessons have you learned about implementing wraparound in your state"

Theme	N statements	Percent of total ($n = 94$) (%)
Fidelity and quality assurance	28	30
Buy-in/stakeholder engagement	18	19
Family & youth voice	17	18
Funding needs/cost	13	14
Interagency collaboration	8	9
Outcomes	6	6
Defining wraparound	4	4
Total	94	100

to *understanding the wraparound model.* One simply said, "understanding what 'wraparound' is, is a challenge," while another said, "after 7 years, communities still struggle with the term." Another stated, "the wraparound process should be considered as a *strategy,* not as a model—the strategy is more adaptable to each specific community and populations, while the *model* is more restricted and less flexible."

Discussion

In this paper, we presented the results of a follow-up survey about the scope and nature of wraparound implementation nationally. Identical to the 1998 results, 49 states returned a survey and 43 (88%) reported one or more wraparound efforts in their state. Among the six states that reported no wraparound availability in 2007–2008, four also reported no wraparound in 1998. Only one state—Virginia—reported having wraparound in 1998 but not in the 2008 survey (though, interestingly, follow-up conversations with officials in Virginia revealed that a state wraparound conference and initiation of two wraparound efforts occurred in late 2007).

Though the number of states reporting wraparound implementation may be stable or increasing, the total estimated number of youth served nationally in 2008 was approximately 100,000, which is substantially lower than the 1998 estimate of 200,000. This is likely due to the more stringent definition of wraparound used in the 2008 survey, which was provided in order to ensure that estimates reflect implementation of a more specific model, such as that defined by the National Wraparound Initiative (Walker and Bruns 2006). Though the definition presented in the 2008 survey includes components of the previous description, it also specifies, for example, that wraparound features a specific individual who serves as a care coordinator or facilitator, that there is a team, and that certain activities are occurring, such as engaging sources of natural support, monitoring progress on measurable indicators of success, and regularly reviewing and changing an individualized wraparound plan. In general, movement in the past decade toward viewing wraparound as a definable practice model—rather than an overall philosophy of care—is likely to have led to lower estimates of total enrolled youth. Such increased operationalization may also be responsible for the reduction in the percent of states reporting statewide wraparound efforts—from 81% in 1998 to 58% in 2008—as it becomes more difficult for states to characterize a commitment to one or more wraparound principles as truly "implementing wraparound."

By 2008, the percent of states reporting existence of standards for implementation had increased, however, from 40 to 56%. Though having a statewide wraparound initiative is significantly associated with existence of standards, many states that reported that wraparound is overseen by local efforts nonetheless reported having state standards. In general, this trend toward use of standards probably reflects recent emphasis on use of defined and/or manualized EBPs, more specific descriptions of the wraparound process, and a growth in literature on system and program conditions required to implement wraparound (e.g., Bruns et al. 2006; Walker et al. 2003). Of course, this finding could also have a methodological explanation—since wraparound was more stringently defined in the questionnaire, programs on which respondents reported were possibly more likely to have standards. Regardless, the current results suggest that there have been efforts to address a concern that was prominent in the children's services field in the 1990s: that wraparound was not well-enough specified to be implemented consistently and subjected to research (Clark and Clarke 1996; Rosenblatt 1996).

Along with greater prominence of standards, a number of seemingly positive trends were observed from the 2008 survey results. For example, states are reporting a greater number of agencies being actively involved in wraparound implementation, and a greater diversity of child-serving systems taking a lead role, including child welfare, juvenile justice, and education. This latter finding likely reflects the expansion of the wraparound model toward serving a more diverse set of purposes and populations. In addition, results show that 71% of states providing wraparound have in-state resources for wraparound training and professional development, 67% report measuring fidelity, and 97% have had some sort of training provided in the past 5 years (an increase from 86% in 1998). Perhaps not surprisingly, all the trends reported above, particularly involvement of multiple agencies and fidelity monitoring, are associated with the presence of written standards for wraparound implementation, and nearly all of these associations are statistically significant.

Three-fourths of states reported having conducted formal evaluation of their wraparound initiative(s) in 2008, compared to only 31% in 1998. States with formal evaluation studies were significantly more likely to report measuring fidelity as well. This finding may speak to a greater overall attention to evaluation in these states; however, it may also mean that the evaluation that is being conducted in these states is largely focused on fidelity or implementation assessment, more so than outcomes. This hypothesis is supported by responses to open-ended questions in which a number of respondents reported difficulty in collecting outcomes data and documenting outcomes in general.

Implications and Limitations

Extrapolating from current results leads us to an estimate of over 800 wraparound programs nationally, serving approximately 100,000 youth and their families. As mentioned above, this number is lower than was derived from the 1998 survey. The estimate may be considered more accurate, however, given that it is based on a more stringent definition based on work done in the intervening decade to better specify wraparound (Walker and Bruns 2006). Unfortunately, the definitional change makes it difficult to determine trends in numbers of youths served via the wraparound process over time. However, the fact that the same number of states report implementation of wraparound in 2007–2008 as did in 1998, suggests that efforts to deploy wraparound (however it may be conceptualized) have been relatively stable over the past 10 years. But it remains difficult to comment with any real certainty on the stability of wraparound implementation nationally. In addition, it is difficult to know the extent of measurement error, especially in detailed questions such as estimates of numbers of individuals served.

Nonetheless, if accurate, the estimate provided from this survey would mean that wraparound is being employed far more often than other prominent community-based treatment models for youth with serious and complex needs. This includes five times as many youth as multisystemic therapy (MST; Henggeler et al. 1998), which is estimated to serve 19,000 youths (Evidence-Based Associates 2008a, b, c); over three times more youth than Functional Family Therapy (FFT; Alexander et al. 2000), which is estimated to serve 30,000 youth annually (Evidence-Based Associates 2008a, b, c); and many times more youth than Multidimensional Treatment Foster Care (MTFC; Chamberlin and Reid 1998), which is estimated to serve 1,200 youth annually (Evidence-Based Associates 2008a, b, c).

This is probably not surprising, given that wraparound is conceived as a system-level intervention that has the capacity to serve children with a range of concerns, as opposed to MST, FFT, and MTFC, which tend to have more specific youth and family enrollment criteria. But nonetheless, one major implication of the current research is that the wraparound process, even with the greater specification of its definition, is quite extensively implemented relative to other community-based models for the same population. As such, it deserves significant attention from researchers and developers so that the likelihood of its *successful* deployment for these many youth is as likely as possible. Given that MST, FFT, and MTFC generally are considered to have been tested through more rigorous research than wraparound (Farmer et al. 2004), this implication becomes all the more important.

Fortunately, results of this study show that there has been an increase in the attention paid to wraparound quality and fidelity over the past decade. Results indicate that use of state-level standards, in-state training and TA resources, fidelity monitoring, evaluation, and other implementation supports are all on the rise. This is also being reflected in an increase in the number and rigor of research studies on wraparound in the past 5 years (Suter and Bruns 2009).

At the same time, fewer states report that their wraparound initiatives are being overseen at the state level. This may be unfortunate, because results suggest statewide initiatives are associated with greater deployment of standards, active involvement by more agencies, and more consistent fidelity and quality monitoring. Even if counties or local programs are now more likely to oversee wraparound efforts, it may be advantageous for states to be in the business of overseeing implementation efforts in some way, such as through establishment of standards and/or monitoring of adherence to standards of quality. More to the point, a substantial minority of respondents continue to report the absence of clear standards for implementation, and there is some evidence that such standards are only provided by the presence of fidelity measures. Combined with results of studies that indicate wraparound staff are rarely trained and supported with manuals (Bruns et al. 2007), as in 1998, there seems to continue to be "need for definition and standards."

A final implication of the open-ended question posed to respondents is that wraparound implementation remains challenging for states, communities, and providers. Though the majority of comments suggested that wraparound is viewed as a major asset to states and their communities, many respondents noted the challenge of consistently adhering to wraparound principles such as individualized plans of care and team-based coordination in the face of siloed systems, staff turnover, and limited and increasingly inflexible resources. It may be that, over the years, the accumulation of implementation failures related to such barriers is what has led to the term "wraparound" being

used less and less frequently (as was found in this survey), in favor of finding new names for team-based individualized care programs that are less associated with past disappointments.

Conclusion

The State Wraparound Survey is one part of a broad research agenda to better identify national trends and challenges regarding wraparound implementation. Though the research base on wraparound is progressing, it has been slow to develop due to wraparound's individualized and grassroots nature. Wraparound is also conceived as both a systems intervention and as a strategy for working with individual children and families (Stroul 2002; Walker et al. 2008), making it additionally challenging to implement and study. In general, much more research is needed on what factors lead to high-quality implementation of wraparound and improved health and well-being for the individuals who are engaged in it. This is particularly important when one considers that, by 2008, nearly every state and approximately 100,000 children and their families had some involvement with the wraparound process.

Though 100,000 may seem like a large number, one possible implication of the current study could be that far *too few* children and youth receive wraparound. According to the most recent estimates, there are 5–8 million children and adolescents with a serious emotional disturbance (SED) nationally (Costello et al. 1998; Friedman et al. 1998), and about 20% of these youth receives mental health services of any kind (Kataoka et al. 2002). Our estimates reveal that, nationwide, less than 2% of youths with SED are engaged in the wraparound process. Meanwhile, only another 1% are served via one of the other evidence-based community-based treatments mentioned above. As for those 20% of youths with SED who receive some kind of service, our findings raise questions about the nature of supports provided to these youth, given that 97% apparently do not receive wraparound or one of these other intensive community treatments. Though not all youth with SED require the intensity of wraparound, MST, FFT, or MTFC, it is likely that more than the 2–3% served annually would benefit from engagement in one of these models. The children's behavioral health field continues to need to expand the availability of these intensive community interventions beyond this small group. It is hoped that the passing of the Affordable Care Act and its emphasis on use of health homes for individuals with chronic conditions (including children) will facilitate such expansion.

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