

National Trends in Implementing Wraparound: Results of the State Wraparound Survey, 2013

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Abstract The wraparound process aims to provide an effective practice-level approach to coordinating care for youths with complex behavioral health needs, and reformed system structures to support such integration of care. The current study provides an update to two prior surveys of state children’s mental health directors, completed in 1998 and 2007, on the extent of wraparound implementation in the United States and implementation supports that have been employed. Results from 2013 found that 100 % of states reported having some type of wraparound program that conformed to the definition and yielded an estimate of 75,000 children and families served via wraparound in that year. States reported a continued increase in use of wraparound standards; however, fewer states reported collection of fidelity data, and availability of internal resources for training and coaching. Over three-quarters of states reported availability of parent to parent peer support, and 46 % of states are supporting wraparound implementation by blending or braiding funding across child-serving systems. Results also revealed that 61 % of states had a centralized oversight entity for wraparound, an important finding given that such “statewideness” was also associated with more youth served, greater accountability, use of standards, and other implementation supports.

Keywords Wraparound · Children’s mental healthcare coordination · System of care · Implementation · Serious emotional disorder

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Introduction

Greater coordination of care and better integration of service delivery for individuals with complex needs are priority goals of health care reform (Au et al. 2011; Institute of Medicine 2003; McDonald et al. 2007). Because they often receive services from multiple systems and helpers, children and adolescents with serious emotional and behavioral disorders (SEBD) are a priority focus for service integration initiatives (Bruns et al. 2008; Burns 2002; Tolan and Dodge 2005; U.S. Public Health Services 2001). In addition to improved clinical and functioning outcomes, better coordination of care holds promise for reducing utilization of costly and disruptive out of home placements. Such placements have been a primary reason mental health is now the most costly health condition among children in the United States (Pires et al. 2013; Soni 2009).

Care coordination initiatives typically aim to provide children and youth with SEBD and their families access to a comprehensive array of services and supports that can meet a broad range of youth and caregiver needs, as well as an individual who is trained to manage the process of developing and overseeing a coordinated plan of care for the family (Bruns et al. 2010; Simons et al. 2014). Whether implemented as a standalone care coordination program or within a broader behavioral health system reform effort, the *wraparound process* is commonly cited as the most prevalent integrated service delivery model for youth with SEBD (Bruns et al. 2008; Simons et al. 2014; Stroul et al. 2008).

Wraparound is not a service *per se*, but rather a system- and practice-level strategy that provides a structured approach to care planning and service delivery for children, youth, and their families. Wraparound is built on a key set of values (e.g., family- and youth-driven, team-based,

collaborative, individualized, natural supports, outcomes-based) while also dictating use of specified procedures across four phases of effort: engagement, care planning, plan implementation and monitoring, and transition (For more details see Bruns et al. 2010; Walker and Bruns 2006a, b; Walker et al. 2008).

Over the 25 years since it was first referenced in the research literature (Burchard and Clarke 1990), wraparound's diffusion into service delivery environments has been characterized by a shift from a *philosophy of care* that was implemented with wide variation to an increasingly *well-defined integrated service model*. To encourage service quality, accountability to funding sources, and replication of positive findings from previous research studies (see Bruns and Suter 2010; Suter and Bruns 2009 for a review and meta-analysis, respectively), in recent years there have been a range of efforts to better specify the wraparound practice model (cf. Walker and Bruns 2006a, b) and support to high-quality implementation (Bertram et al. 2011; Bruns 2015). Examples of implementation supports that have emerged in recent years include reliable and valid fidelity measures (Bruns, Suter, et al. 2008; Bruns et al. 2014; Pullmann et al. 2013); sustainable financing mechanisms using federal resources (Simons et al. 2014) and training, coaching, and supervision models based on principles of implementation science (Walker and Matarese 2011).

Results of controlled research continue to accumulate showing both wraparound's potential for positive effects and cost-effectiveness e.g., (Grimes et al. 2011; Jeong et al. 2014; Yoe et al. 2011). On the basis of this growing evidence base, in 2013, the Substance Abuse and Mental Health Services Administration (SAMHSA) and Centers for Medicare & Medicaid Services (CMS) issued a federal bulletin encouraging states to design Medicaid benefits for youth with SEBD that incorporates, among other services, "intensive care coordination using the wraparound approach" (US Department of Health and Human Services 2013). At the same time, however, other research studies have found null to small effects when fidelity controls, workforce development, and policy and fiscal supports are lacking (e.g., Bruns 2015; Bruns et al. 2014). Thus, while results from controlled research continue to be encouraging, unfavorable system conditions and implementation barriers can hinder the effectiveness found for some initiatives.

As described above, care coordination generally and wraparound specifically have become cornerstones of behavioral health reform efforts for youth with SEBD, with multiple federal initiatives such as SAMHSA's Children's Mental Health Initiative (Simons et al. 2014) and SAMHSA and CMS's Psychiatric Residential Treatment Facility (PRTF) Waiver Demonstration Project

(Urdapilleta et al. 2012) aiming to achieve greater service integration via implementation of wraparound service coordination and achievement of system of care principles. As such, monitoring uptake of such system reform efforts and use of such practice models can help the field understand trends, monitor successes, and guide policy, provision of technical assistance, and investment of resources. Given the aforementioned salience of implementation supports to achieving fidelity and outcomes, surveillance of intervention and implementation strategies adopted by systems also is critically important.

Since its founding in 2004, the National Wraparound Initiative (NWI), with guidance from its advisors and members, has promoted understanding about the components and benefits of wraparound, and provided the field with resources and guidance that facilitate high quality and consistent wraparound implementation (Walker et al. 2010). Among its many activities, the NWI seeks to monitor the prevalence and penetration rates of wraparound initiatives nationally. The NWI also aims to illuminate how wraparound implementation is being supported in different places across the country; examine the relationship between system conditions and implementation; and collect qualitative information about implementation successes, barriers, and lessons learned.

To do so, the NWI first relied on data from a national survey conducted in 1998 by Duke University and the Georgetown National Technical Assistance Center for Children's Mental Health. Results of this first national survey (Faw 1999), were used to estimate that wraparound was available in approximately 88 % of states and U.S. territories. Based on estimates provided by 24 of the responding 49 states and territories, the authors also estimated that as many as 200,000 youth may be served by the wraparound process annually. Though the estimated 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 or resources dedicated to wraparound training and professional development, and that few states measured fidelity or conducted program evaluation. The authors concluded that there was a "lack of a concurrent definition" of wraparound at the time of the survey, and "a need for a definition as well as an established set of standards" (p. 64).

A follow up survey was conducted by the NWI in 2006–2007. Results of surveys were received from 49 of 55 states and territories (an 89 % response rate) and found that 88 % (43 of 49) of states reported one or more wraparound initiatives in their state. Although the number of states reporting wraparound implementation was found to be increasing, the total estimated number of youth served nationally was 98,000—far lower than the 1998 estimate of

200,000. It was hypothesized that this finding was the result of the field's better understanding of what the wraparound model entailed, and a shift from a values-based definition of "wraparound" that could be applied to many children served in public systems to better understanding of the specific practice model (as well as provision of a more fully operationalized definition of wraparound in the survey).

As a reflection of that shift, by 2007, the percent of states reporting existence of standards for implementation had increased, from 42 to 56 %. Along with greater prominence of standards, a number of seemingly positive trends were observed from the 2007 survey results. For example, states reported 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. Results showed that 71 % of states providing wraparound had in-state resources for wraparound training and professional development, 67 % reported measuring fidelity, and 97 % had some sort of training provided in the past five years (an increase from 86 % in 1998). Finally, 74 % of states reported having conducted formal evaluation of their wraparound initiative(s) in 2007, compared to only 31 % in 1998 (Bruns et al. 2011).

At the same time, however, fewer states reported that their wraparound initiatives were being overseen at the state level. This was viewed as potentially unfortunate, because results also showed that statewide initiatives are associated with greater deployment of standards, active involvement by more agencies, and more consistent fidelity and quality monitoring.

With six more years of activity around model specification, resource development, and training and technical assistance, it is our perception that wraparound has become even better understood and supported at local and state levels. With this hypothesis in mind, we undertook a new state wraparound survey with a purpose of gaining an updated and more refined estimate of the number of wraparound initiatives and participating youth. As with the original two studies, the intent was also to better understand how wraparound implementation was being supported in different places across the country, and collect qualitative information about implementation successes, barriers, and lessons learned. Specific research questions included:

1. How widespread is the current use of wraparound in the U.S. (in terms of states using wraparound, numbers of unique initiatives, and youth served) compared to previous years?
2. To what degree are certain implementation support conditions (e.g., application of standards, monitoring of fidelity, workforce development, availability of evidence-based practices and parent and youth peer-to-peer support in the service array) present in states compared to previous years?
3. What is the association between having a statewide wraparound initiative and/or statewide implementation standards with level of adoption (i.e., youth served and number of initiatives) and level of implementation support?

Method

Participants

The 2013 State Wraparound Survey was sent to state Children's Mental Health directors (as identified by the National Association of State Mental Health Program Directors or NASMHPD) in the state mental health authority (SMHA) of each of the 50 United States, 4 Territories, and the District of Columbia (hereafter referred to as "states"). In states where a secondary contact not affiliated with the state mental health authority was known to the research team through the work of the NWI (e.g., a local researcher, trainer, or program manager), a survey was also sent to that individual. This occurred in 60 % (33 of 55) of states. This was an attempt by the research team to try to increase response rates, as well as obtain a validity check.

Procedures

Each respondent was mailed a hard copy of the survey, emailed a hard copy of the survey as an attachment, and sent a link to an online version of the survey both via mail and email. Those who did not complete or return the survey were given reminders via email each week after the initial invitation was sent, for 3 weeks.

Surveys were completed by at least one respondent in 49 of 55 states (89 %). The first contact was with the individual identified as the SMHA's Children's Behavioral Health Director. If no SMHA children's lead was available to complete the survey, a secondary contact, someone either referred by the state lead, or another known wraparound expert in the state, was sent the survey. Surveys were completed by the state children's behavioral lead in 29 states, by the secondary contact in 14 states, and by both in 6 states, yielding a total of 55 surveys returned across 49 states. Forty-four of the 55 (80 %) surveys were completed online, 9 (16.3 %) were completed via paper and pencil and returned by mail, email, or fax; and 2 (3.6 %) were completed over the phone.

If differences were found between two respondents from the same state, discrepancies were resolved by the second author via follow up with both respondents, resulting in one response per state that reflected a resolution of the two respondents' perspectives. When responses varied greatly, as was the case for three states, this was accomplished by using one respondent's perspective, which was accepted by the other respondent as more accurate, or having the second author resolve the difference by evaluating the information provided and assigning a final response based on his best understanding of the information provided. When differences were minor and/or presented small differences in, for example, estimated number of youth served (3 states), we simply calculated the mean of both responses.

Measures

The 2013 State Wraparound Survey included four types of items. First, respondents were asked to provide quantitative estimates of the number of unique initiatives statewide that implemented wraparound as defined in the survey (see below) and the number of youth/families served. Second, as shown in Table 1, respondents were asked to endorse (1) whether wraparound is available in the state; and (2) whether specific types of practice, implementation supports, and methods of oversight were evident in their state (all using a Yes/No scale). Third, respondents were provided with a list of 7 types of child-serving agencies (e.g., Mental Health, Juvenile Justice, Child Welfare) and asked to endorse which participate in wraparound initiatives in the state, and which are in a lead role. Fourth, respondents were asked two open-ended questions: "what lessons have you learned from your experience with implementing wraparound," and/or "do you have any other comments about wraparound in your state."

All items from previous versions of the survey were retained (13 from 1999 and 17 from 2007) to ensure consistency and enable analysis of trends over time. Seven new dichotomous items were included that focused on level of centralized oversight, training and coaching received, availability of evidence-based practices, and the role of youth and parent peer-to-peer support services in wraparound implementation.

As in the previous version (2007), in order to inform their responses, respondents were given a definition of wraparound using the model specified by the National Wraparound Initiative (Walker and Bruns 2006a, b). Specifically, wraparound was defined as follows:

"Wraparound" is a team-based process to develop and implement individualized service and support plans for children with serious emotional and behavioral needs and their families. Wraparound

implementation for a specific youth or family is typically coordinated by a trained wraparound facilitator or care coordinator, who convenes and works with a team of individuals relevant to the youth and family, including natural supports. Teams meet regularly (e.g., at least every 30–45 days), and transition out of formal wraparound occurs when priority needs have been met or adequate progress has been made toward these needs. The wraparound process also includes the following characteristics: Efforts are based in the community; family and youth perspectives are sought and prioritized; services and supports are individualized to meet specific needs of the children and families; the process is culturally competent and strengths based; wraparound teams have flexible funding; team members include people drawn from family members' natural support network; and the team monitors progress on measurable indicators of success and uses this information to change the plan as necessary.

Data Analyses

Quantitative data analysis consisted of review of frequencies, means, and standard deviations for each survey item. Bivariate relationships and changes from 2007 to 2013 were examined using t-tests for continuous variables (e.g., estimated numbers served) and Chi square tests for categorical variables (e.g., whether fidelity is monitored in the state). Repeated measures analysis of variance (ANOVA) was used for all continual and dichotomous (Yes/No) variables for which data were available across all three time points (1998, 2007, and 2013). The Greenhouse-Geisser correction was used in instances where the sphericity assumption was not valid. The correction provides a more accurate significance value, to compensate for the fact that the test is too liberal when sphericity is violated (Greenhouse and Geisser 1959).

Qualitative data analysis was conducted based on the iterative process suggested by Marshall and Rossman (1999). Unique statements provided by respondents were identified by a research assistant and entered into a database. Statements were then reviewed by two authors (EB and AS) and sorted into a priori categories. Alternate categories were also created for statements determined not to test against these categories. The two investigators then reconciled sorting and categories differences. Counts of statements that mapped to unique theme categories (and subthemes within main categories) were then tallied and calculated as percent of the total number of statements overall for that item.

Table 1 Survey results for states in 1998, 2007, and 2013

	1998 <i>N</i> = 49	2007 <i>N</i> = 49	2013 <i>N</i> = 49
Wraparound available in the state	43 (87.8 %)	43 (87.8 %)	49 (100 %)
Of those states with wraparound available			
Mean/Median (<i>SD</i>) <i>N</i> of youth served (<i>n</i> = 23)	3805/1162 (5953)	2337/853 (3678)	1593/700 (2358)
Mean/Median (<i>SD</i>) <i>N</i> of unique local initiatives	N/A	19/4.5	14.73/7.0
Mean/Median (<i>SD</i>) <i>N</i> of agencies involved in wraparound (<i>n</i> = 38)	4.67 (1.62)	5.26 (1.69)	5.16 (1.63)
Centralized statewide oversight of wraparound	N/A	N/A	61 %
Use of written standards for wraparound** (<i>n</i> = 34)	42 %	56 %	60 %
Other names used for wraparound* (<i>n</i> = 37)	54 %	76 %	48 %
Blended or braided funding	N/A	N/A	46 %
Coordinated state-wide effort for training, coaching, and workforce development	N/A	N/A	49 %
In-state resources for training and workforce development	N/A	71 %	49 %
Wraparound programs measure fidelity	N/A	67 %	56 %
Wraparound programs measure outcomes	N/A	N/A	65 %
Availability of parent peer-to-peer support	N/A	N/A	78 %
Availability of youth peer-to-peer support	N/A	N/A	43 %
Range and Mean (<i>SD</i>) of youth in each state estimated to have SEBD served by wraparound	N/A	N/A	0.07–35 % 3.6 % (7.1)
Range and Mean (<i>SD</i>) of Medicaid-eligible youth who received wraparound	N/A	N/A	.3–100 % 10.1 % (21.3)

* Change over time significant at $p < .05$

** Change over time significant at $p = .01$

Additional variables were derived from the 3-year American Community Survey estimates of state population and poverty rates (U.S Census Bureau 2009) and from an estimate of the national prevalence of serious emotional disorders (SED) in youth of 7.5 % (Costello et al. 1998). By combining these sources we developed two additional variables used to analyze results. The first was an estimate of the number of people under 18 years of age with serious emotional disturbance in each state. The second was a similar estimate, but only included those people who were below 185 % of the poverty level, hence likely to be eligible for Medicaid—hereafter referred to as “Medicaid-eligible” youth. We included this variable both because many public state-run wrap-around initiatives require Medicaid eligibility and because intensive community-based case management using a wraparound model is increasingly considered an entitlement for Medicaid-enrolled youths with SEBD; hence we deemed it relevant to examine wraparound utilization rates as a function of the percentage of youth who were Medicaid-eligible (based on estimates of the prevalence of SED and earning less than 185 % of the poverty level).

Results

Of the 55 surveys distributed, at least one survey was completed for 47 states, one territory, and Washington DC, for an 89 % (49 out of 55) completion rate. The response rate is equal to both the 1998 and 2007 surveys (Bruns et al. 2011). Of those who responded, the average amount of time spent working in children’s services was 12.47 (*SD* 8.50) years and ranged from 1 to 30 years.

Wraparound Initiatives

Of the 49 states who responded to the survey, all 49 (100 %) reported having some sort of wraparound available in their state in 2013. As shown in Table 1, this reflects an increase in wraparound’s availability in states from both 1998 (43 of 49; 89 %) and 2007 (43 of 49; 89 %). Forty-six of these states provided estimates of the number of unique wraparound initiatives in the states, which ranged from 1 to 83. The median number of initiatives per state was 7.0 and the mean per state was 14.73 (*SD* 19.19). This represents a more stable estimate compared to 2007 when the median number of wraparound initiatives was 4.5 and the mean was 19.0 (*SD*

30.52). Summing the estimates provided by all states yielded a total of 678 unique wraparound initiatives across the 46 states.

Youth Served

Of the 49 states who responded to the 2013 survey, 47 gave estimates of the number of youth served statewide per year. Estimates ranged from 40 to 9500. Ten states reported serving over 2000 youths annually and 12 states reported serving 200 or fewer youth annually. The median number of youth served was 700. Due to substantial positive skew, the mean number of youth served was 1593 (SD 2358). Summing estimates provided by all states yielded a total of 74,880 youth served annually by wraparound in 2013. These figures indicate a decrease in reported numbers of youth served from both 1997, when the mean was 3805 ($median = 1162$), and 2007, when the mean was 2337 ($median = 853$). However, it is worth noting that, in 1997, only 24 states provided an estimate of the number of youth served, and that these states may have been more likely to serve youth via wraparound.

Wraparound penetration rates. Because state population sizes vary widely, we also sought to be able to provide an estimate of wraparound penetration rates across states. Rather than calculate as a function of the total state population, or the population of children in a state, we calculated the number of youth estimated to be served by wraparound as a function of the number of youth in each state estimated to have SEBD. Although all youths experiencing SEBD are not likely to require wraparound (see Bruns et al. 2010 for a discussion), given that SEBD is a typical eligibility requirement, and estimates of the number of youth with SEBD are available, this denominator seemed to be an appropriate proxy in calculating penetration rates.

Across states, percentages of youth with SEBD who received wraparound ranged from 0.07 to 35 %, with a state-level mean of 3.6 % (SD 7.1). Percentages of Medicaid-eligible youth who received wraparound ranged from 0.3 to 100 %, with a state-level mean of 10.1 % (SD 21.3). After summing the estimated numbers of youth with SEBD and youth who received wraparound across states that responded, 1.9 % of the estimated total U.S. population of youth under 18 with SEBD was reported to receive wraparound, and 5.2 % of youth with SEBD who were estimated to be Medicaid-eligible were reported to have a wraparound team.

Statewide Oversight

Of the 49 states who responded to this item, 30 states (61.2 %) reported having a statewide entity that oversees

wraparound implementation in the state. This item was not included in previous surveys, rendering comparisons to previous years impossible.

Agencies Taking Part in Wraparound

Table 2 presents the percent of states in which specific child-serving agencies were involved in implementing wraparound efforts in 1998, 2007, and 2013. These agencies were represented at similar rates in wraparound initiatives in 2007, and the overall mean number of agencies involved in wraparound implementation was also similar across years (4.67 in 1998, 5.26 in 2007, and 5.16 in 2013).

Table 2 also shows the percent of states in which agencies were viewed as having a “lead role” in wraparound. Interestingly, while the number of agencies outside of mental health reported to be in a “lead role” increased from 1998 to 2007 (from 1.61 to 2.49), a reversal was found in 2013, when states reported a mean of 2.06 agencies in a lead role. With respect to specific agencies, declines in the percent of states reporting child welfare in a lead role declined from 52 % in 2007 to 39 % in 2013, education from 24 to 12 %, developmental disabilities from 19 to 8 %, and substance abuse from 9 to 6 %.

Other Terms for Wraparound

In 2013, 48 % of states reported using other terms to describe initiatives that resembled the definition of wraparound provided, a significant decrease from 1998 and 2007 when 54 and 76 % of states, respectively, reported using terms other than “wraparound” [$F(1.922,69.208) = 4.942$, $p < .05$]. Of the 23 respondents that indicated that other terms are used to describe wraparound, the most common terms listed were “Intensive Care/Case Management,” which was listed four times (17 %), and “Child and Family Teams,” “System of Care,” and “Intensive Community or home-based services,” which were each listed by three respondents (13 %).

Use of Standards

Twenty-nine of 48 states (60 %) reported having written statewide standards for wraparound implementation. This represents an increase from 42 % in 1997 and 56 % in 2007 [$F(1.975,65.159) = 4.942$, $p = .01$]. Twelve sites provided online links to their standards, while an additional 7 states reported using some version of standards promulgated by the NWI.

Table 2 Percent of states in which specific child-serving agencies were involved in implementing wraparound efforts in 1998, 2007, and 2013

Child-serving agency involvement	1998 N = 49		2007 N = 49		2013 N = 49	
	Involved (%)	Lead Role (%)	Involved (%)	Lead Role (%)	Involved (%)	Lead Role (%)
Mental health	100	79	100	93	98	92
Child welfare	90	31	95	52	92	39
Juvenile justice	90	7	83	24	88	24
Education	79	19	81	24	78	12
Substance abuse	69	2	43	9	49	6
Developmental disabilities	52	2	39	19	45	8
Health	50	2	31	4	43	4

Braided or Blended Funding

Enactment of specific financing strategies that integrate fiscal streams across child-serving agencies represents a key system-level support for wraparound implementation (Walker and Sanders 2011). Thus, the 2013 survey added an item inquiring whether or not the state “integrates (i.e., blend, braid or otherwise combine) funding from multiple agencies to cover the costs of wraparound that are not covered from other sources, or have policies that outline each system’s contribution.” Of the 48 states who responded to this question only 22 (45.8 %) reported such financing strategies.

Implementation Resources

Training and coaching. Twenty-four of the 49 states (49 %) reported having a dedicated in-state resource for providing wraparound staff with training, coaching, and other supports for skill development. This compares to 71 % states reporting such resources in 2007, a decrease that approached significance ($t_{(39)} = 1.740$; $p = .090$). An additional question regarding training on Evidence Based Practices (EBPs) was asked (in 2013 only). Of 49 states, 22 (45 %) reported state resources were available for EBP training. There was some overlap in states who reported having training resources for wraparound and EBPs; 14 of the 24 states (58 %) that reported having wraparound training resources also reported having EBP training resources, while 14 of 22 states (64 %) that reported having EBP training resources also reported having wraparound training resources.

Fidelity and Outcomes Evaluation

Twenty-seven of 48 states (56 %) reported centralized monitoring of wraparound fidelity, a decrease from 2007

when 67 % of states reported conducting centralized fidelity monitoring; however, this finding was non-significant ($t_{(38)} = .240$; $p = .812$). Thirty-two of the 49 states (65 %) reported they had access to and actively reviewed outcomes data (this question was not asked in 2007).

Access to Parent and Youth Peer Support

Given the increasing prominence of parent and youth peer support in wraparound (Lombrowski et al. 2008; Osher and Penn 2010), two new items were added to the 2013 survey regarding parent and youth peer support. Thirty-eight of 49 respondents (78 %) reported that caregivers in their state did have access to parent-to-parent peer support. Although details about each state’s approach were not solicited, this assumes some individual, whether working on a paid or volunteer basis, was available to provide direct peer-to-peer support service to the family, to include activities described in core resources on parent peer support, such as instrumental support, emotional support, and system navigation (Osher and Penn 2010). The number of parent peer support staff reported to be available to wraparound-enrolled youth statewide ranged from 1 to 315, with a median of 31.0 and a mean of 49 (SD 64.47). Youth peer support was less available, with 21 of 49 states (43 %) reporting its availability. Sixteen of the 21 states reported the number of youth support staff ranged from 2 to 25, with a median of 8.5 and a mean of 10.0 (SD 8.058).

Relationship Between State Policies and Wraparound Implementation

To explore the relationship between key state-level policies and extensiveness and nature of wraparound implementation, we compared results for key survey items for states with versus without state-level oversight for wraparound, and for states with versus without statewide standards for wraparound implementation. As shown in Table 3, states with a

central oversight entity served more youth via more unique wraparound programs. Overall, states that reported statewide implementation reported a mean of 1752 (*SD* 2427) youth served, versus 1336 (*SD* 2288) in states without centralized oversight. This difference was not, however, significant ($t(37.837) = -.593; p = .557$). Seven of the ten states that reported serving 2000 or more youth via wraparound reported having statewide oversight of their initiative.

Significant differences were found between states with statewide oversight and those without such centralization across several implementation variables, including use of written standards [79.3 vs. 31.6 %, respectively; $t(46) = -3.68; p = .001$], use of blended or braided funding mechanisms [63.3 vs. 16.7 %; ($t(42.64) = -3.67; p = .001$), and measurement of outcomes for participating families at [80 vs. 42.1 %; $t(32.32) = -2.75; p = .01$]. States with centralized oversight also were more likely to have a coordinated strategy for staff training and coaching [86.7 vs. 33.3 %; $t(27.45) = -4.08; p = .000$] and dedicated resources for such professional development [66.7 vs. 21.1 %; $t(47) = -3.40; p = .001$]. Of states that reported statewide oversight, the number of participating agencies was higher than for those that reported no centralized oversight. Respondents in states with statewide oversight reported a mean of 5.36 (*SD* 1.81) agencies, compared to 4.83 (*SD* 1.25) for other states. The difference was not significant, however ($t(44.976) = -1.5205; p = .234$).

As shown in Table 3, similar patterns of differences in utilization and penetration were found for states with state standards for wraparound as was found for states with versus without centralized state oversight.

Open-Ended Responses

Respondents were invited to share “lessons you have learned from your experience with implementing wraparound,” and/or “any other comments about wraparound in your state.” Representatives from 30 states submitted comments to one or both of these fields, yielding a total of 43 unique statements. As presented in Table 4, 15 statements (35 %) focused on relationships among stakeholders. The majority of these described the importance of collaboration across child-serving agencies. For example, one respondent wrote: “Developing an understanding, appreciation of and buy-in of the benefits of wraparound both at the local level and at the state level allows us to partner with each other across systems to the benefit of youth and families; it provides us with common language and goals.” Six other respondents voiced concerns about state-level leadership. A representative statement was, “It is not enough to successfully implement a wraparound program. States need to build in training, fidelity, data collection and planning mechanisms.”

Table 3 Comparison of 2013 survey results for states with and without state-level oversight and written wraparound standards

	Statewide Oversight		Statewide Standards	
	Yes (<i>n</i> = 30)	No (<i>n</i> = 19)	Yes (<i>n</i> = 29)	No (<i>n</i> = 19)
Mean/median (<i>SD</i>) of youth served	1752/764 (2427.016)	1336/402 (2287.731)	2248/1050 (2825.664)	607/251 (782.345)
Mean/median (<i>SD</i>) of unique local initiatives	15.44/7.0 (21.028)	13.52/6.0 (16.113)	16.35/6.5 (21.883)	12.29/8.0 (14.695)
Mean/median (<i>SD</i>) N of agencies involved in wraparound	5.36/5.0 (1.810) N = 161	4.83/4.5 (1.2485) N = 87	5.4828/5.0 (1.526) N = 159	4.722/4.0 (1.742) N = 85
State-level entity overseeing wraparound	N/A	N/A	79.3 %	31.6 %*
Use of written standards for wraparound	79.3 %	31.6 %*	N/A	N/A
Other names used for wraparound	46.7 %	50.0 %	41.4 %	55.6 %
Blended or braided funding	63.3 %	16.7 %*	55.2 %	27.8 %
Coordinated state-wide effort for training, coaching, and workforce development	86.7 %	33.3 %*	89.7 %	27.8 %*
In-state resources for training and workforce development	66.7 %	21.1 %*	69 %	15.8 %*
Wraparound programs measure fidelity	60 %	47.4 %	69.0 %	31.6 %**
Wraparound programs measure outcomes	80 %	42.1 %*	89.7 %	26.3 %*
Availability of parent peer-to-peer support	83.3 %	68.4 %	82.8 %	68.4 %
Availability of youth peer-to-peer support	53.3 %	26.3 %	51.7 %	26.3 %

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

Table 4 Summary of statements ($N = 43$) 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 ($n = 43$) (%)
<i>Relationship with stakeholders</i>	15	35
Importance of Collaboration	8	17
Difficulty with regional or state leadership	6	14
Importance of stakeholders' education/understanding	1	2
<i>Funding</i>	10	23
Difficulties with funding	6	14
Importance of/need for braided funding	2	5
Need for sustainability plan	2	5
<i>Fidelity and quality assurance</i>	9	21
Importance of/difficulty with fidelity	3	7
Difficulty collecting outcomes information	2	5
Importance of training	2	5
Importance of data collection	1	2
Recommend state fidelity standards	1	2
<i>Staff</i>	4	9
Difficulty with staff retention	3	7
Importance of staff education	1	2
<i>Miscellaneous</i>	5	12
Importance of agencies using the same terminology	1	2
Push back from private providers	1	2
Importance of family voice	1	2
Need to share data with agencies	1	2
Change requires time	1	2

An additional 10 statements (23 %) focused on fiscal issues, with the majority commenting on the challenge of sustaining wraparound funding. As one respondent put it, “We made the mistake of credentialing Medicaid [providers] without clear direction and a good sustainability plan. We told providers what needed to be done rather than working with them to create a [sustainable] structure.” Two other respondents commented on the difficulty of implementing wraparound with adherence to the model in the absence of braided or blended funding mechanisms.

Nine statements (21 %) focused on issues regarding fidelity and quality assurance, including the importance of maintaining fidelity to the NWI-specified model (including training to the model), and the importance of measuring fidelity to that cause. Two respondents noted difficulty collecting outcomes data for wraparound-enrolled youths. Four statements (9 %) referenced difficulties around staff retention and qualifications. As voiced by one respondent, “The start and stop funding of wraparound has been hard to deal with. Difficult to implement and keep staff trained and supported without additional monies from state agencies.” There were also five other statements, focusing on diverse issues ranging from the difficulty of integrating efforts with private provider agencies to the importance of family and youth voice in state decision-making.

Discussion

In this paper, we examined wraparound utilization in the U.S. and the degree to which public systems invest in a range of implementation supports and service strategies, based on a survey of states conducted in 2013. This is a follow-up to a similar survey done in both 1998 and 2007.

Remarkably, all 49 states and territories that returned surveys reported availability of wraparound in their state, up from 89 % in 1997 and 2007. Similar to the trend found from 1997 to 2007, however, the number of youth reported to be served by wraparound continues to decrease, from the estimate of 200,000 in 1997, to approximately 98,000 in 2007, and now, according to these results, approximately 75,000 in 2013. We believe this is at least somewhat due to the ongoing development work in the children's behavioral health field that has increased understanding among stakeholders about integrated care coordination models such as wraparound, their population of focus, application in systems, and youth and family-level practice models.

However, given that the definition provided in both the 2007 and 2013 surveys were very similar, these results could also be partially or fully explained by a trend toward less investment in wraparound care coordination. Such a

finding would be in line with evidence from other state-level surveys that suggest public behavioral health systems' investment in intensive community-based EBPs is flat or declining (Bruns et al. 2016; Bruns et al. 2014). Alternatively, systems may now be employing more restrictive eligibility criteria, focusing wraparound use on a smaller number of youth and families with more complex needs.

Survey results also found some encouraging trends regarding investment in implementation supports. Presence of state standards continue to rise, if only slightly, from 56 to 60 %. To our eyes, such program and service standards also are increasingly well-operationalized and visible, with 20 state respondents providing a link to their standards online.

In addition, the finding that 46 % of states are supporting wraparound implementation by blending or braiding funding for youth with complex needs across child-serving systems is encouraging. Although we do not have trend data for this variable, it is heartening that nearly half of states have found ways to achieve such innovative financing mechanisms, which are hallmarks of effective systems of care for youths with SEBD, and an indicator of systems' capacity to extend beyond their "siloes" and collaborate on behalf of youth with multi-system involvement and/or complex needs.

Another area of growth in wraparound recognized by the field at large is a move toward providing youth and family peer support partnerships. Although this item was not administered in the 2007 survey, preventing analysis of longitudinal trends, it is promising to see that 78 % of states reported availability of parent to parent peer support. This parallels a broader trend in the behavioral health field toward greater availability of peer support, and increasing numbers of states permitting youth and family peer support to be billed via Medicaid (Center for Health Care Strategies 2012). Availability of youth peer to peer support, however, was reported less frequently (43 %), highlighting the potential need for additional development in this area.

Certain trends were found to be heading in potentially less favorable directions, compared to the 2007 survey. For example, internal implementation resources available for training and coaching of wraparound providers dropped from 71 % in 2007 to 49 % in 2013. That may be due to state behavioral health budget constraints that have persisted since the Great Recession (Neylon et al. 2014), or could reflect a greater reliance on outside entities to train and support staff in their skill development.

Evaluation of adherence to wraparound practice standards also decreased, from 67 % in 2007 to 56 % in 2013. Even more problematic, only 65 % of states reported collecting and reviewing outcomes data. Given the variation

in outcomes that have been observed in evaluations of wraparound programs nationally (Bruns 2015; Bruns et al. 2013), it is a concern that one-third of states may be implementing intensive wraparound care coordination without actively evaluating whether positive youth, family, system, and/or cost outcomes.

Interestingly, fewer states now rely on terms other than "wraparound" to describe their integrated care models for youths with SEBD. This reverses a trend from 1997 to 2007 wherein the majority states used other terms. It is possible that the increased specificity with which wraparound has now been defined at system operations and practice levels has allowed a reversal of this trend, to the point that the majority of states now consistently refer to these programs under the term "wraparound." It could also be that the growth of the research base on wraparound—and its inclusion on more EBP inventories (Bruns et al. 2014)—has led more states to use the term.

Research has illuminated the importance of the state-level fiscal and policy context in supporting implementation of EBPs (Bruns and Hoagwood 2008; Bruns et al. 2016) and our team's experience providing state-level technical assistance and training (Walker and Matarese 2011) has also witnessed the tremendous influence of these policies and investments on practice and outcomes. Not surprisingly, this study found that states with centralized statewide implementation served more youths and had more child-serving systems involved in the wraparound effort. Importantly, these states were also far more likely to have written standards, use innovative fiscal strategies such as blended or braided funding, measure fidelity and outcomes, have a statewide workforce development strategy, and invest state-level resources to workforce development. They were also more likely to provide parent and youth peer-to-peer support.

In keeping with this finding, the joint memo to states issued by SAMHSA and CMS highlight the importance of proactive and comprehensive state-level efforts to support programing at the local level for youth with SEBD, including use of wraparound, investment in parent to parent peer support, and development of a comprehensive array of research-based treatment services. Resources are now available to the field that provide examples of how states are achieving such state-level supports (Center for Health Care Strategies 2012).

The current study found that 61 % of all states have a centralized, statewide wraparound care coordination effort. Not surprisingly, this is similar to the rate of states that blend or braid funds from different agencies. Results of open-ended survey items found that the three largest challenges cited by respondents were cross-agency collaboration, barriers posed by regional or state leadership, and difficulties sustaining funding. This represents a shift

from 2007, when the majority of challenges cited by respondents were related to measuring and achieving fidelity at a practice level. Thus, by many indicators and measures, a clear challenge for the field now is to find ways to support more states to attend to their fiscal and policy development efforts.

Limitations

A primary limitation of the current study is its reliance on report from only one or two representatives from each state or territory. Although we purposefully chose to survey individuals who should be intimately knowledgeable about the child-serving systems in the state (an SMHA children's director or state wraparound trainer or other expert), many responses (especially from states without a centralized wraparound strategy) were likely to be estimates rather than based on reliable data sources, and thus possibly subject to bias. In addition, it is important to note that in states with two respondents, discrepant results were found for several states that needed to be resolved, highlighting this concern. Although this is a typical approach to gathering data for which consistent and objective sources across states are not available, findings should be considered estimates and interpreted with caution.

Second, although we relied primarily on children's services leads from state mental health agencies due to their lead role in most wraparound initiatives, other systems also lead integrated care programs for youth with complex needs. Thus, respondents may not have been fully informed about all relevant care coordination initiatives when responding to NRI-administered surveys, or about localized efforts or pilot projects.

Finally, the current study aimed to examine national trends, and thus we present aggregate results across all states. While beyond the scope of the current study, future analyses should examine patterns of individual state trends and predictors of these variations.

Conclusion

Based on responses from this survey, wraparound is now available in nearly every U.S. state. We estimate that approximately 75,000 youth and their families participate in wraparound across approximately 678 unique wrap-around initiatives, and over half of U.S. states have a centralized approach to overseeing and resourcing this approach to care coordination. Though this census may suggest a robust national movement to better coordinate care via a consistent service model, at this rate, only about 1 % of youth with SEBD receive this type of intensive community based support. As documented in previous

studies (Bruns et al. 2016; Bruns et al. 2011) have documented that other intensive community based EBPs are accessed at even lower rates.

Although all youths with SEBD do not require wrap-around, this low penetration rate is another indicator of the continuing crisis in children's community behavioral health, especially when considering that 2–3 times as many children and youth are served in costly and largely ineffective residential treatment facilities annually (Bruns et al. 2014). While research shows that the wraparound practice model as implemented in "real world" settings may often be fraught with challenges (Bruns 2015; Bruns et al. 2014), its evidence base is largely positive, especially for its promise to reduce reliance on out of community placements.

Meanwhile, system-level approaches to better organizing care for youth with SEBD continue to mature. As supported by the results of this study—and the increasingly consistent provision of federal support, guidance, and encouragement—it is clearly time for states to take advantage of evidence-informed strategies and federal mechanisms that encourage greater coordination of care, fiscal integration, and effective service delivery for youth with the most complex needs and their families.

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