Supporting Wraparound Implementation: Chapter 5e.1

## Measuring Wraparound Fidelity

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During the early years, it is unlikely that the pioneers of wraparound were concerned about "implementation fidelity." Wraparound captured the attention of child- and family-serving systems during an exciting era when the field of children's mental health was being challenged by families, advocates, forward-thinking administrators, and even a few researchers to do things that were fairly radical. For example, actively partner with youth and families and honor their voices in decision-making. Engage their natural supports and create individualized plans based on their specific needs. Build new service arrays that can meet these needs. De-emphasize treatment outside the home and community.

Within this exciting context, individuals in Chicago, Alaska, Vermont, and other places extended these ideas to new extremes in order to maintain their most challenging children and youth in their homes. These leaders found ways to "do whatever it takes" to keep these young people home and started using teams, facilitated by paid wraparound coordinators, to brainstorm more creative plans. To ensure these individualized plans were carried out, they developed networks of community resources (including churches, businesses, and mentoring after-school programs), and flexible funding pools to pay for strategies that were not free or reimbursable. Other innovators created procedures for doing strengths-based assessments that tied strategies in plans to youth and family strengths. Still others focused on how best to engage the family to express their needs and goals, and ways to track progress toward meeting these needs and goals.

Eventually, a set of basic methods began to coalesce



into something people called "wraparound." Referred to by various names (e.g., wraparound services, the wraparound approach, individualized and tailored care, child and family teams), the "model" was not yet fully specified or well-understood, but by the mid-1990s there was nonetheless a loose community of practice nationally and



internationally that shared these ideas, and more and more wraparound programs began to emerge. Dismissed as a fad by some and critiqued by others as not supported by research, wraparound as an idea and as a model has showed great endurance, with the number of wraparound programs seems to be holding steady or even increasing, and over 100,000 youth now estimated to participate in wraparound nationally (see Bruns, Sather, & Stambaugh, 2008, Chapter 3.4 of this *Resource Guide*).

Wraparound has continued to be embraced by communities because its principles make sense to families, and its procedures are supported by basic research (see Walker, 2008a, Chapter 3.1). In addition, wraparound has provided many compelling community success stories (see, for example, Anderson et al., 2003; Kamradt, 2001). As described in other articles in this Resource Guide, wraparound seems to succeed when it is implemented well and when it is implemented for populations for which it is suited. These populations tend to be youth with serious and complex needs for whom intensive, coordinated support helps to keep them in the community, avoiding costly and unnecessary placements, or disruptions in placement.

Unfortunately, however, neither of these conditions is guaranteed to be met. As its popularity has grown, wraparound has often been attempted by only one child-serving system in the absence of partnerships with other systems. In other communities, wraparound is attempted for populations for which a clear "pay-off" and recouping of investments in the intensity of the process does not occur. These experiences can lead to quick de-funding of an existing wraparound initiative, and general dismissal of wraparound as "too expensive." (For more information about setting up and funding wraparound, see articles in Section 5d elsewhere in this *Resource Guide.*)

The other major implementation question that arises with wraparound is whether it is, in fact, being implemented well, or, in other words, "implemented as intended." This is the very definition of implementation *fidelity* (Bond, et al., 2000). The rest of this article will focus on this issue. In doing so, we will consider several questions:

- 1. How do we know we have a "fidelity problem" in wraparound?
- 2. When applied to wraparound, what does "fidelity" mean?
- 3. What are methods to measure fidelity to the wraparound model?
- 4. Does fidelity even matter?

### The Fidelity Problem in Wraparound

Since its inception in 2003, the National Wraparound Initiative (NWI) has functioned somewhat like a wraparound team looking to meet the priority needs of the model itself. In its first meeting, the model's strengths and needs were reviewed. One priority need that was identified was better communication of what "real" wraparound consists of, so that communities could serve families better, and program leaders and policy makers could understand what they needed to do. Another priority need that was identified was better development of the research base on wraparound, so that its benefits could be understood and communicated. Basically, the advisors who gathered at these first meetings were concerned that wraparound was a wonderful idea that was nonetheless at risk of being discredited due to too many poor attempts at implementation and not enough emphasis on documenting its positive impact on the lives of children and families.

Research that was being conducted supported these concerns. As detailed in other articles in this Resource Guide (e.g., Bruns, 2008, Chapter 3.2), studies of wraparound implementation were revealing that many programs that called themselves "wraparound" did not even have plans of care with goals, let alone a strengths-based approach or natural supports on teams. In addition, researchers at Portland State's Research and Training Center were demonstrating just how important community and system supports were to wraparound (Walker, Koroloff, & Schutte, 2003). These studies showed that even when a community understands wraparound and attempts to do it in a way that reflects its core principles, actually doing high quality wraparound is tremendously difficult. The list of challenges is extensive and includes the following:

- Implementing wraparound requires providers who are well-versed in its value system. Yet most higher education programs do not teach family-driven, community-based principles and strategies.
- Wraparound requires intensive and ongoing training, supervision, and administrative support. Yet many wraparound programs do not provide such supports to the staff that are asked to implement the process.
- Implementing wraparound requires adoption of new ways of funding and organizing services, such as the availability of flexible funds for teams, strong collaborative relations, and single plans across multiple agencies. Yet wraparound initiatives remain vexed by agencies that operate in isolation and traditional reimbursement procedures.

Thus, the "fidelity problem" in wraparound, as was described around the turn of the millennium, could be summed up in this way:

1. Wraparound had evolved through the efforts of many innovators, not a single developer. Thus, no one "invented" wraparound, and there was no clear source document that

said what a new wraparound community should do to implement it.

- 2. Doing wraparound means implementing a youth- and family-level intervention that is individualized to each youth or family as well as a system-level intervention (e.g., around collaboration, fiscal arrangements, and so forth). Needless to say, this is a very complicated model, difficult to describe and even harder to pull off.
- Research—as well as stories from frustrated families and providers—describing poor implementation was becoming more and more common.

Thus, in 2003, family members and family leaders, pioneers in wraparound implementation and training, national researchers, and others, agreed that a necessary first step was to develop some materials presenting the fundamentals of the wraparound model. Having taken this first step, it was reasoned, wraparound could be more clearly communicated to families and to the field. Such descriptions could also provide a template for provider staff to understand the required practice guidelines. The materials in this *Resource Guide* represent a major result of these efforts.

Having defined what it means to implement wraparound "as intended," additional steps could be taken to further address the fidelity problem. For example, tools could be created to support high quality implementation. As the field of human service delivery focuses more on implementation, it has become increasingly common to use results of rating scales, checklists, logs, or clinical records to inform areas in which service delivery is not adequately conforming to a program model (Bond, et al., 2000; Fixsen et al., 2005). In addition, with an understanding of what "fidelity" means in wraparound, better research could be conducted on the model. For example, in research using wraparound groups and comparison groups, fidelity measures are necessary to examine the differences in implementation for the different groups. Without such information, interpretation of between-group differences can be difficult or impossible. Using fidelity measures also can help with research that aims to identify critical ingredients of program models, as well as help to

synthesize findings from multiple research studies (Bond et al., 2000; Moncher & Prinz, 1991).

### Defining What "Fidelity" Means in Wraparound

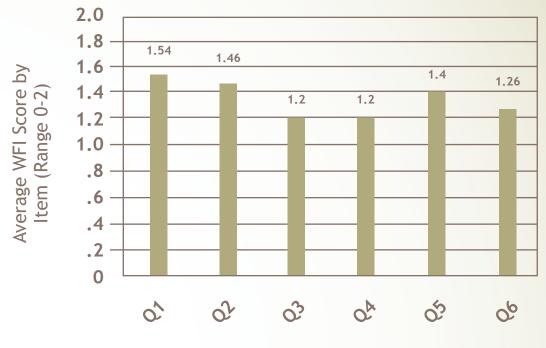
Before developing fidelity or implementation measures, it was obviously necessary to first define what it means to do high quality wraparound. Initial guidance in this area was provided by training manuals (e.g., VanDenBerg & Grealish, 1998) as well as a description of the core elements and practice principles of wraparound, defined in 1998 and published in a federally-funded monograph (Burns & Goldman, 1999). Elements presented in these documents provided frameworks of minimum expectations for labeling a process "wraparound," and guidance for the first fidelity measures for wraparound (Bruns, Burchard, Suter, & Force, 2004). Among the more widely used measures were the Wraparound Fidelity Index (WFI; Bruns et al., 2004), which collected data via interviews with parents, youth, and wraparound facilitators; and the Wraparound Observation Form (WOF; Epstein et al., 1998), which measured adherence to wraparound principles as observed during team meetings.

Thus, there was clear precedence for and obvious interest in using the wraparound elements or principles as a basis for assessing fidelity. One of the first activities of the advisors of the NWI was to more clearly define these principles at the child and family level. This was done in order to aid in their clarity, make them more useful in training staff and setting expectations, and more amenable to measuring whether they were happening in practice. (For a description of the principles of wraparound, see Bruns et al., 2008, Chapter 2.1 of this *Resource Guide*.)

To take this philosophical description of wraparound further, and provide greater clarity on what wraparound consists of, the NWI also conducted a research- and consensus-based process to define the basic activities of wraparound. Unlike the wraparound principles, such a description of the "practice model" for wraparound had never been created for wide dissemination, and thus was seen as a critical need to help explicate what it means to implement the wraparound process for a youth and/or family. The basic activities of wraparound were defined by reviewing dozens of source documents, including manuals, articles, monographs, and training materials. A core group of prominent trainers (such as Pat Miles, John VanDenBerg, John Franz, and others) and program directors contributed to the process and reviewed initial drafts, which were then submitted to the NWI advisors for review and comment. The procedure ultimately organized 31 basic types of activities into four phases of implementation that are now adopted by many programs and initiatives: Engagement, Planning, Implementation, and Transition (see Walker & Bruns, 2006).

The final piece of the wraparound program model was provided by the monograph developed by Walker, Koroloff, & Schutte (2003) that explicated the conditions that are necessary at the program and system level to support high-guality wraparound implementation (See Figure 1). As described in this monograph, key people in a wraparound initiative may be well-versed in the principles of wraparound and may even be trained and coached to implement it very well. But without a hospitable environment for implementing the model, attempts to maintain adherence to the principles and implement the activities will be very difficult. Ultimately, six key types of supports were identified, again, through a combination of research by Walker and colleagues and collective work by NWI advisors: Community Partnership, Collaborative Action, Fiscal Policies and Sustainability, Access to Needed Supports & Services, Human Resource Development & Support, and Accountability (see Walker, 2008b, Chapter 5a.1 in this Resource Guide).

In sum, answering the question "What is wraparound fidelity?" is fittingly complex for a model as complex as wraparound. First off, researchers on human service implementation typically define fidelity as "the degree to which programs are implemented as intended by the program developers" (Dusenbury, Brannigan, Falco, & Hansen, 2003). But wraparound was not invented by any one developer or team of developers. So the first bit of complexity was presented by the need for some consensus on what wraparound practice consists of. Second, since the model started as a philosophy, its philosophical principles necessarily constitute at least some of what is considered wraparound fidelity. Third, wraparound requires



### Figure 1. Sample Report from the Wraparound Fidelity Index

**Question Number** 

Parent/Caregiver Responses by Item			
Q1. Were you given time to talk about your fami- ly's strengths, beliefs, and traditions?	True - 10;	Partly True - 3;	Not True - 2
Q2. Did your facilitator fully explain wraparound & the choices you could make?	True - 9;	Partly True - 4;	Not True - 2
Q3. Did you have a chance to tell your wraparound facilitator what has worked in the past for your child and family?	True - 7;	Partly True - 4;	Not True - 4
Q4. Did you select the people who would be on your wraparound team?	True - 7;	Partly True - 4;	Not True - 4
Q5. Is it difficult to get team members to meet- ings when they are needed?	True - 9;	Partly True - 3;	Not True - 3
Q6. Did you go through a process of identifying what leads to crises for your family?	True - 8;	Partly True - 3;	Not True - 4

Sample report from the Wraparound Fidelity Index, showing results from six items from the Engagement Phase of the WFI. The scores represent the responses of 15 caregivers and parents who completed WFI interviews in one community.

both family-level as well as program- and systemlevel effort to implement well; meaning that adherence to its practice model should also consist of measurement of *both* whether its core activities are being completed as well as whether necessary support conditions are in place. Finally, to be true to its principles, any wraparound fidelity measurement approach should allow for the individualization of the model for families as well as communities. All these factors make assessment of wraparound fidelity fairly complicated.

### Measuring Adherence to the Wraparound Model

As described in the previous section, measuring whether wraparound is being implemented "as intended" will require, at a minimum, assessing (1) adherence to the principles of wraparound, (2) whether the basic activities of facilitating a wraparound process are occurring, and (3) supports at the organizational and system level. As such, the NWI has focused a good deal of its effort on presenting descriptions of these three concepts. Like any wraparound team, there has been debate and compromise among NWI advisors about the best way to present these descriptions. But there is also some consensus that these three basic descriptions get at the basics, while still allowing for individualization. Having created these documents on wraparound, the next question is: How do we measure its integrity?

Measuring treatment fidelity can take many forms. Some methods (e.g., counting pills through electronic monitoring of medication containers) will not be appropriate to psychosocial models such as wraparound. But most approaches used in the human services world are candidates, including:

- Reviewing manuals and program descriptions,
- Reviewing staffing and budget data,
- Reviewing case file data on treatment plans and meeting notes,
- Compiling data from management information systems data on procedure or reimbursement codes,
- Observing service processes,

- Staff completing checklists of activities conducted, and
- Interviewing the individuals involved, including youth, family, and provider.

Early attempts to measure fidelity to the wraparound process primarily rested within programs' quality assurance procedures (Bruns et al., 2004). For example, supervisors trained in the wraparound approach met with wraparound care coordinators to assess the fidelity of their performance per the wraparound principles and to problem solve around difficulties. Programs also conducted open-ended interviews with providers, youth, and families to determine whether services delivered were drawing upon child and family strengths, utilizing non-professional services and supports in the community, being responsive to family's opinions, preferences, and stated needs, and so forth.

Later, rating-scale surveys, including initial versions of the WFI, became more common. Youth and families were queried about their satisfaction with services in general and specific providers and some asked parents and youth whether

services adhered to wraparound basic principles, such as whether they felt providers listened to them, or whether they perceived their services would be provided "no matter what" (Rosen, Heckman, Carro, & Burchard, 1994). As described above, measures that allow for recording of the adherence to wrapprinciples around during the course of team meetings were developed, as were methods to review documentation found in case files (such as wraparound plans, crisis plans,

Without a hospitable environment for implementing the model, attempts to maintain adherence to the principles and implement the activities will be very difficult.



and meeting notes). Finally, since publication of the monograph by Walker et al. (2003), measures of organizational and community support have been developed that ask community stakeholders to rate the degree of development of the critical implementation supports for wraparound presented above. (For more on the Community Supports for Wraparound Inventory, see Walker, 2008b, Chapter 5a.1 in this Resource Guide).

There are subtle

variations in methodology across these tools, usually depending on how the information is intended to be used. For example, the Wraparound Integrity Tool assesses wraparound fidelity as part of Illinois's statewide evaluation of school-based wraparound. The WIT is intended to contribute to a repository of data on the guality and effectiveness of services for students with intensive needs, as well as drive decision-making on behalf of individual students and teams. As such, the 47 items of the WIT are completed by the by the wraparound facilitator and team members (including student and family when applicable) collectively. The data that is generated is intended to be used both for high-level evaluation as well as to facilitate problem-solving around improving the process for that particular student and team.

The measures of the Wraparound Fidelity Assessment System (WFAS) are somewhat different in that they are intended to be used to conduct an external assessment of fidelity to the principles, phases, and activities of the wraparound process as described by the NWI. To serve this purpose, measures of the WFAS (which include the WFI interviews, team observation, document review, and the CSWI) are administered by individuals who are not directly involved in services with the family. Like the WIT and most fidelity instruments, the measures of the WFAS are intended to serve both quality assurance and research and evaluation purposes. A brief description of each of the tools of the WFAS is presented below. (More can be found on the measures at www.wrapinfo.org, or the website for the Wraparound Evaluation and Research Team: http://depts.washington.edu/ wrapeval.)

Wraparound Fidelity Index, version 4. The Wraparound Fidelity Index, version 4 (WFI-4) is a set of four interviews that measures the nature of the wraparound process that an individual family receives. The WFI-4 is completed through brief, confidential telephone or face-to-face interviews with four types of respondents, in order to gain a complete picture of wraparound implementation: caregivers or parents, youth (11 years of age or older), wraparound facilitators, and team members. A demographic form is also part of the WFI-4. The WFI-4 interviews are organized by the four phases of the wraparound process. In addition, the 40 items of the WFI interview are keyed to the 10 principles of the wraparound process, with 4 items dedicated to each principle. In this way, the WFI-4 interviews are intended to assess both adherence to the basic wraparound practice model as well as fidelity to the principles of wraparound.

WFI data can be used to assess the overall fidelity of an organization or wraparound initiative. Data can also be analyzed by phase, principle, or item to help a program or supervisor make midcourse corrections. (See Figure 2, next page.) The Wraparound Evaluation and Research Team (WERT) is currently developing an on-line data entry and report generation system to help programs use the measure in these ways.

Team Observation Measure. The Team Observation Measure (TOM) assesses adherence to standards of high-quality wraparound during team meeting sessions. It was originally developed to be used by external evaluators, but has also been used by supervisors to help support coaching and supervision of wraparound staff. The TOM consists of 20 items, with two items dedicated to each of the 10 principles of wraparound. Each item consists of 3-5 indicators of high-quality wraparound practice as expressed during a child and family team meeting. Working alone or in pairs, trained Figure 2. Effective Wraparound Teams Require Support at the Organizational and System Levels



raters indicate whether or not each indicator was in evidence during the wraparound team meeting session. These ratings are translated into a score for each item as well as a total fidelity score for the session overall.

**Document Review Measure.** The Document Review Measure (DRM) is a 30-item instrument that is used to assess wraparound fidelity through review of documentation typically used in wraparound implementation. The DRM is used by a trained evaluator who uses the tool to rate conformance to the principles of wraparound in materials such as the child and family's wraparound plan, crisis and safety plans, transition plan, and meeting notes. Like the other WFAS fidelity tools, items on the DRM link to the 10 principles of the wraparound process, and result in scores for individual items, the 10 principles of wraparound, and a total score for the instrument overall. As of this writing, the DRM has been pilot tested and is being revised.

*Community Supports for Wraparound Inventory.* As described above, and elsewhere in this *Resource Guide*, the CSWI is a research and quality improvement tool intended to measure how well a local system supports the implementation of the wraparound process. The CSWI is based on the framework of Necessary Conditions described by Walker, Koroloff and Schutte (2003), and presents 42 community or system variables that ideally are in place in communities that aim to implement the wraparound process. The CSWI is somewhat unique from the other WFAS instruments in that it assesses the system context for wraparound as opposed to the fidelity to the practice model for an individual child and family.

The CSWI results in a quantified assessment of community supports for wraparound across multiple domains, so that researchers can determine the impact of these conditions on fidelity and outcomes of the wraparound process. It also presents the level of support across the six domains listed above (e.g., finance, collaboration, and accountability) so that evaluators and stakeholders can understand the full context for wraparound implementation as part of their local evaluation projects. Third, items and domains are structured so that local groups can assess local supports for wraparound, respond to areas of strength and weakness, and monitor improvements over time. (For more on the CSWI, see Walker, 2008b, Chapter 5a.1 in this *Resource Guide*.)

**Psychometrics.** The measures of the WFAS all have basic psychometric data that support their reliability, but the measure that has been best tested is the WFI. Different versions of the WFI have demonstrated adequate test-retest reliability, internal consistency, and inter-rater reliability (Bruns et al., 2006). Validity studies have found that fidelity scores correlate with the ratings of an external wraparound expert, while other studies have found significant associations with child and family outcomes (Bruns et al., 2005) as well as the level of community and system supports for wraparound (Bruns, Leverentz-Brady, & Suter, 2006). Recent studies using the WFI-4 have shown that total scores have been found to discriminate between wraparound and non-wraparound programs, and to show higher scores for sites with more extensive quality assurance plans (e.g., training, coaching, and directive supervision) than for sites without these supports. Studies are currently underway to determine the validity of the TOM and DRM.

# Why Should We Be So Concerned about Wraparound Fidelity?

The new emphasis on measuring quality of implementation is hardly restricted to the wraparound process. Until the last decade, the program evaluation field focused almost exclusively on whether or not programs worked (Rosenblatt & Woolridge, 2003). But in recent years, there has been a realization that "evidence-based practices" that have been shown by research to work in one setting often do not translate into success somewhere else (Weisz, Donenberg, Han, & Weiss, 1995). What happens? Caseloads are allowed to rise and models get diluted. Core principles (such as engaging natural supports or letting families take the lead in planning) are de-emphasized in supervision. Training and professional development budgets get cut, and staff persons are not consistently taught how to do the work "as intended."

As the issue of implementation has grown more important, research has borne out the hypothesized relationship between treatment fidelity and improved client outcomes. Within adult mental health, fidelity to assertive community treatment (McHugo, et al., 1999) and integrated dual disorders protocols (Drake, et al., 2001) have been found to be associated with outcomes. Within children's mental health services, this relationship has been found for multisystemic therapy (Henggeler, et al., 2002), school mental health programs (Greenberg, et al., 1999), and many other models. Meanwhile, in wraparound, research has shown that individual families' WFI data helps predict their outcomes (Bruns et al., 2005), that the fidelity with which staff implement wraparound is associated with outcomes for the children they serve (Bruns, Rast, et al., 2006), and that system supports are indeed related to implementation fidelity as assessed by the WFI.

Added to this body of research are the real concerns of families and their advocates. One parent from Kansas expressed that "they were promised wraparound and got the runaround." And, as described in the beginning of this article, it was not that long ago that key pioneers of the wraparound model were afraid wraparound was going to soon be dismissed, since it was ill-defined and researchers were finding poor outcomes (often in the absence of good implementation). With all these arguments, the case for understanding and supporting wraparound fidelity is not hard to make. Nor is it hard to support the cause of reliable and valid fidelity measurement-after all, as the old saying goes, "what gets measured gets done."

### Conclusion: A New Fidelity Problem in Wraparound?

In sum, there are a lot of points in favor of defining, supporting, and measuring wraparound integrity. Doing these things is viewed as a critical step in advancing the research base on wraparound, and establishing evidence on its effectiveness. Collecting and feeding back performance and outcomes data is critical to ongoing improvement of human services (Fixsen et al., 2005). Family members and youth can collect quality and fidelity data and play a role in reviewing and interpreting the results, providing them with a clear and active partnership role. Finally, though they are far from perfect, fidelity measures for wraparound have advanced considerably, and feature better supports to train data collectors and facilitate data entry and reporting than in previous vears.

Along with the promise, however, comes potential trade-offs. The wealth of new methods to measure wraparound quality can be overwhelming to small programs and initiatives, and investing in fidelity data collection can lead some to make sacrifices elsewhere, such as in outcomes monitoring or even investments in the service system. Moreover, many jurisdictions have swallowed the "fidelity" argument whole and have attempted to write requirements for fidelity into provider contracts and standards. This can only be done very carefully - such requirements must be backed with resources for objectively collecting data as well as a clear data use plan. Such an approach must also be done in a way that encourages a climate of collaboration and quality improvement rather than punitiveness.

Finally, some have critiqued the emphasis on wraparound fidelity at a more fundamental level. Wraparound is a complex process, much less amenable to standardization than, for example, a 12-session parent training course, or a cognitive behavioral intervention for anxiety. In addition, it is individualized to each youth and family. As such, fidelity measurement is necessarily less precise because there is a greater range of activities in which each family may take part. Attempts to make measurement of wraparound implementation more precise (or to standardize the process to make it more amenable to consistent training and supervision) makes it vulnerable to losing something considered critical to wraparound - the idea that communities and teams may need to color way outside the lines to do "whatever it takes" to support a youth and his or her family.

Ultimately, this is the balancing act facing those of us who have been engaged in the process of defining wraparound and developing implementation measures. We must recognize that both poor quality and over-specification are dangers to the wraparound philosophy. To interact with this tension, the NWI has attempted to create a skeleton of a practice model that can be "fleshed out" through local adaptation and innovation (Walker & Bruns, 2006). The items of the WFAS instruments are based on this model, and focus on basic wraparound principles and non-negotiable activities that are central to the wraparound logic model. Through continued research and experience, we will endeavor to find the right balance that leads to the best outcomes for children and families.

### References

- Anderson, J. A., Wright, E. R., Kooreman, H. E., et al. (2003). The Dawn Project: A model for responding to the needs of young people with emotional and behavioral disabilities and their families. *Community Mental Health Journal*, 39, 63-74.
- Bond, G.R., Evans, L., Salyers, M., Williams, J., & Hea-Won, K. (2000). Measurement of fidelity in psychiatric rehabilitation. *Mental Health Services Research*, 2, 75-87.
- Bruns, E.J. (2008). The research base and wraparound. In Bruns, E.J. & Walker, J.S. (Eds.), *The resource guide to wraparound*. Portland, OR: National Wraparound Initiative, Research and Training Center for Family Support and Children's Mental Health.
- Bruns, E. J., Burchard, J. D., Suter, J. C., & Force,
  M. D. (2005). Measuring fidelity within community treatments for children and families.
  In M. H. Epstein, K. Kutash & A. J. Duchnowski (Eds.), *Outcomes for children and youth with emotional and behavioral disorders and their families* (pp. 175-197). Austin: Pro-ed.

Bruns, E. J., Burchard, J. D., Suter, J. C.,

Leverentz-Brady, K., & Force, M. M. (2004). Assessing fidelity to a community-based treatment for youth: The Wraparound Fidelity Index. Journal of Emotional and Behavioral Disorders, 12, 79-89.

- Bruns, E.J., Rast, J., Walker, J.S., Peterson, C.R., & Bosworth, J. (2006). Spreadsheets, service providers, and the statehouse: Using data and the wraparound process to reform systems for children and families. *American Journal of Community Psychology, 38*, 201-212.
- Bruns, E.J., Sather, A. & Stambaugh, L.F. (2008). National trends in implementing wraparound: Results from the state wraparound survey, 2007. In Bruns, E.J. & Walker, J.S. (Eds.), *The resource guide to wraparound*. Portland, OR: National Wraparound Initiative, Research and Training Center for Family Support and Children's Mental Health.
- Bruns, E.J., Suter, J.S., Force, M.D., & Burchard, J.D. (2005). Adherence to wraparound principles and association with outcomes. *Journal of Child and Family Studies*, *14*, 521-534.
- Bruns, E.J., Suter, J.S, & Leverentz-Brady, K. (2006). Relations between program and system variables and fidelity to the wraparound process for children and families. *Psychiatric Services*, 57, 1586-1593.
- Bruns, E.J., Walker, J., Adams, J., Miles, P., Osher, T.W., Rast, J., VanDenBerg, J. & National Wraparound Initiative Advisory Group (2008).
  Ten principles of the wraparound process. In Bruns, E.J. & Walker, J.S. (Eds.), *The resource guide to wraparound*. Portland, OR: National Wraparound Initiative, Research and Training Center for Family Support and Children's Mental Health.
- Burns, B.J., & Goldman, S. K. (Eds.). (1999). Systems of care: Promising practices in children's mental health, 1998 series: Volume IV. Promising practices in wraparound for children with severe emotional disorders and their families. Washington, DC: Center for Effective Collaboration and Practice, American Institutes for Research.
- Drake, R.E., Goldman, H.H., Leff, H.S., Lehman, A.F., Dixon, L., Mueser, K., Torrey, W.C. (2001). Implementing evidence-based practices in

routine mental health settings. Psychiatric Services, 52, 179-182.

- Dusenbury, L., Brannigan, R., Falco, M., & Hansen,
  W. (2003). A review of research on fidelity of implementation: Implications for drug abuse prevention in school settings. *Health Education Research*, 18, 237-256.
- Epstein, M., Jayanthi, M., McKelvey, J., Frankenberry, E., Hary, R., Potter, K., & Dennis, K. (1998). Reliability of the Wraparound Observation Form: An instrument to measure the Wraparound process. Journal of Child and Family Studies, 7, 161-170.
- Greenberg, M.T., Domitrovich, C.E., Graczyk,
  P., & Zins, J. (2001). A conceptual model of implementation for school-based preventive interventions: Implications for research, practice, and policy. State College, PA: Prevention Research Center for the Promotion of Human Development, College of Health and Human Development, Pennsylvania State University.
- Kamradt B. Wraparound Milwaukee: Aiding youth with mental health needs. *Juvenile Justice* 2000; 7:14-23.
- McHugo, G. J., Drake, R. E., Teague, G. B., & Xie, H. (1999). The relationship between model fidelity and client outcomes in the New Hampshire Dual Disorders Study. *Psychiatric Servic*es, 50, 818-824.
- Moncher, F.J., & Prinz, R.J. (1991). Treatment fidelity in outcome studies. *Clinical Psychology Review*, 11, 247-266
- Rosen, L., Heckman, M., Carro, M., & Burchard, J. (1994). Satisfaction, involvement and unconditional care: The perceptions of children and adolescents receiving wraparound services. *Journal of Child and Family Studies*, 3, 55-67.Walker 2008d CSWI
- Rosenblatt, A., & Woodbridge, M. (2003). Deconstructing research on systems of care for youth with EBD: Frameworks for policy research. Journal of Emotional and Behavioral Disorders, 11, 27-38.
- VanDenBerg, J.E., & Grealish, M.E. (1998). The Wraparound process training manual. Pittsburgh, PA: The Community Partnerships Group.

- Walker, J.S. (2008a). How, and why, does wraparound work: A theory of change. In Bruns, E.J. & Walker, J.S. (Eds.), *The resource guide to wraparound*. Portland, OR: National Wraparound Initiative, Research and Training Center for Family Support and Children's Mental Health.
- Walker, J.S. (2008b). Supporting wraparound implementation: Overview. In Bruns, E.J. & Walker, J.S. (Eds.), *The Resource Guide to Wraparound*. Portland, OR: National Wraparound Initiative, Research and Training Center for Family Support and Children's Mental Health.
- Walker, J. S., & Bruns, E. J. (2006). Building on practice-based evidence: Using expert perspectives to define the wraparound process. *Psychiatric Services*, *57*, 1597-1585.
- Walker, J. S., Bruns, E. J., Rast, J., VanDenBerg, J., D., Osher, T. W., Koroloff, N., et al. (2004).
  Phases and activities of the wraparound process. In Bruns, E.J. & Walker, J.S. (Eds.), *The Resource Guide to Wraparound*. Portland, OR: National Wraparound Initiative, Research and Training Center for Family Support and Children's Mental Health.
- Walker, J. S., Koroloff, N., & Schutte, K. (2003). Implementing high-quality collaborative Individualized Service/Support Planning: Necessary conditions. Portland OR: Research and

Training Center on Family Support and Children's Mental Health.

Weisz, J. R., Donenberg, G. R., Han, S. S., & Weiss,
B. (1995). Bridging the gap between laboratory and clinic in child and adolescent psychotherapy. *Journal of Consulting and Clinical Psychology*, 63, 688-701.

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port and Children's Mental Health.