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Spreadsheets, Service Providers, and the Statehouse: Using Data and the Wraparound Process to Reform Systems for Children and Families

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Abstract Evaluation descriptions in the research literature tend to ignore the full context of the community change efforts from which they emerged. In this paper, we describe a range of evaluation studies and data collection activities conducted over the course of one state's effort to reform its child welfare system on behalf of families with children experiencing serious mental health problems. Initial activities included studies of the prevalence of unmet mental health need in children and youth in the state. As these needs were addressed, evaluation activities examined the impact of a pilot wraparound program that became a major part of systems reform. Later efforts included implementation analysis of wraparound programs and assessment of priorities for continued systems reform. As we describe this set of evaluation activities, we discuss how data collection evolved to meet the needs of stakeholders over time and consider lessons learned about the roles of research and information sharing in shaping community change efforts.

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Introduction

Intervention development, implementation, and community practice activities are typically presented in the social science literature as straightforward descriptions of programs, participants, methods, and results (Primavera & Brodsky, 2004). Lost in such formal records, however, is the complete description of the rationale for the activities undertaken, the context for these activities, and the evolution of ideas and effort (Primavera, 2004). When depictions of social planning activities emphasize content over process, critics contend, they are likely to be incomplete guides to future replication and hinder understanding of the "full range of possibilities for concrete action" (Sarason, 2004, p. 275).

The children's mental health field provides a highly relevant example of the challenges inherent in translating results of community-based research studies to systems change. The organizational and systems contexts in which services and supports for children and adolescents with mental health problems are delivered are highly complex and vary greatly across local jurisdictions (Schoenwald & Hoagwood, 2001). In addition, policy and funding contexts of states and counties, the organization of local service systems, and even the culture and climate of service provider agencies will greatly influence how services are delivered (Rosenheck, 2001; Walker, Koroloff, & Schutte, 2003). Yet at the same time, research on effective practices often neglects discussion of these complexities and, perhaps more critically, the processes that may need to be undertaken by and among local stakeholders to negotiate them.



The current paper presents an example of how research, evaluation, and program improvement activities evolved over time and in response to different needs as part of an effort to reform the mental health system for children and families in Nevada. We will begin with a brief discussion of the wraparound process to planning and implementing care for children and families—part of the approach taken in Nevada—and how this approach presents a particularly salient example of community change efforts for this population. The bulk of the paper will then focus on the progression of evaluation and data collection efforts intended to support Nevada's statewide change effort including: (1) assessing statewide need for children's behavioral health services; (2) measuring and improving program implementation; (3) evaluating program impact; and (4) assessing the types of system reform efforts that remain to be addressed.

Background: Wraparound and systems of care

The number of children in the United States with emotional and behavioral disorders is alarmingly high. Estimates suggest that approximately one in five children has a diagnosable disorder and about one in ten has a serious disorder that leads to substantial impairment in functioning at home, school, and/or in the community (Friedman, Katz-Leavy, Manderscheid, & Sondheimer, 1998; National Institute of Mental Health, 2001). The majority of children with serious disorders receive no services at all and the great majority of children who enter treatment terminate prematurely (U.S. Department of Health and Human Services, 1999). Longterm outcomes for children with serious disorders are not encouraging. Problems tend to persist over time and children and youth experience a preponderance of negative functional outcomes, as well as high rates of placement and re-entry into restrictive settings and incarceration (Greenbaum et al., 1998).

The last 20 years have seen a growing awareness of the need to transform systems that serve these children and adolescents. Current systems, in addition to poorly serving populations in need, are fragmented and uncoordinated (USDHHS, 1999). Community-based treatments are often unavailable and there is a continuing over-reliance on hospitalization, residential treatment, and other restrictive placements (New Freedom Commission on Mental Health, 2003). Furthermore, services are often perceived as hostile to parents and other caregivers, discouraging their participation in treatment planning and follow through (Koroloff & Friesen, 1997; Kruzich, Jivanjee, Robinson, & Friesen, 2003). In response to these shortcomings, efforts are underway to build systems of care to serve children with emotional and behavioral disorders (EBD) and their families in their home com-

munities (Stroul & Friedman, 1986). Within systems of care, child- and family-serving agencies (e.g., child welfare, mental health, juvenile justice, substance abuse and dependency) collaborate and coordinate their efforts, providing strengths-based, individualized, and culturally competent care through an array of community-based services and supports. The goal of this transformation is to improve the effectiveness and efficiency of services, producing success for children and families in home, school, and community.

The wraparound process

Paralleling the development of interest in systems of care has been the evolution of *wraparound* as a means of developing and implementing individualized plans of care for children with EBD. Wraparound evolved in response to the same systems shortcomings cited above and its philosophy of service delivery is highly compatible with the systems of care philosophy. While wraparound is certainly not the only mechanism for implementing this philosophy for individual children and families, it has perhaps become the most common one (Stroul, 2002).

Wraparound is a collaborative planning process that includes family members, service providers, and members of the family's natural and community support networks. Guided by a wraparound facilitator, this team engages in a planning process that is intended to be family driven, culturally competent, and strengths based. Working collaboratively, team members create, implement, and monitor a comprehensive, individualized plan of care. The wraparound plan draws on formal services and interventions, as well as community resources and interpersonal support and assistance provided by friends, kin, and other people drawn from the family's social networks (for a more complete description, see Bruns, Burchard, Suter, Leverentz-Brady, & Force, 2004; Burchard, Bruns, & Burchard, 2002 or Burns & Goldman, 1999).

Program evaluation and more formal studies have provided preliminary evidence for the effectiveness of wraparound with children with EBD. These studies report that most children were maintained in their communities and that they experienced a range of positive outcomes including improved behavior, decreased functional impairment, fewer social problems, fewer placement changes, fewer days absent from school, and lower rates of delinquency (Burchard et al., 2002; Kamradt, 2000). On the basis of results such as these, the Surgeon General's report on mental health characterized the available research as providing "emerging evidence" for the effectiveness of wraparound (USDHHS, 1999). More recently, progress has been made in advancing the evidence base on wraparound through development of fidelity measures (Bruns et al., 2004; Nordness & Epstein, 2003) and measures of program and system supports for wraparound



(Walker et al., 2003). Perhaps most important, recent efforts to better specify the wraparound model have led to greater consistency in implementation as well as the initiation of clinical trials (Walker & Bruns, 2006; Walker & Bruns, in press).

As experience with and knowledge about wraparound have grown, it has become clear that implementing and sustaining wraparound is complex and difficult, requiring a re-negotiation of the relationships among providers, consumers, and the community. One set of these challenges arises from the multi-system collaboration required to provide wraparound. These challenges include developing a single comprehensive plan that will define how each agency involved will work with the child and family; funding the wraparound plan, including mechanisms for funding noncategorical services and supports; satisfying mandates of agencies with different missions; and so on. Another set of challenges to wraparound implementation—and systems reform efforts—arises organically out of wraparound's commitment to being strengths based, family-driven, and community based. When families and youth are empowered to define their own needs and then to choose the services and supports that they believe will best meet those needs, the types of services and supports selected may well reflect different priorities from those currently identified by agencybased, professional staff.

Thus wraparound, by its very nature, demands flexibility, collaboration, and ongoing adaptation not just at the level of individual families and wraparound teams but also at the agency and system levels. To meet these challenges, community change efforts must benefit from good information about what is needed and how the change process is proceeding. In addition, successful wraparound implementation requires good communication across the range of stakeholders involved in implementation. Good information and communication are also essential for building a coherent vision and strategy for systems reform on behalf of children and families. In the remainder of this article, we provide a case study to illustrate how such data collection, evaluation, and information sharing occurred during the course of one state's systems change effort.

A story of systems change in Nevada

Nevada is one of the fastest growing states in the nation (Hardcastle, 2003). The state's residents are clustered in two fast-growing population centers: Reno (Washoe County) in the north and Las Vegas (Clark County) in the south, areas that account for over 87% of the state's population. In contrast, the remaining 13% of the state's population reside in 15 expansive, rural and frontier counties. In the two urban centers, the economy is highly dependent on tourism and gaming, creating a population boom that makes it difficult

to keep pace with needed community-based services. In the rural and frontier counties, the economy is more dependent on mining and ranching, both of which experience "boom and bust" cycles that are also highly stressful to residents and create additional strains on the service provider community.

Nevada's rapid population growth has also largely been driven by increases in racial and ethnic minority groups (Hardcastle, 2003). As culturally diverse populations continue to grow, determining appropriate and effective means to bring services to these groups becomes both increasingly important as well as challenging. Adding to this challenge, Nevada faces some of the highest rates of social problems in the country. It deviates from the median for all states on many core indicators related to children and youth well-being such as teen birth rate, high school dropout rate, percent of uninsured children, and percent of students scoring below the basic reading level (Annie E. Casey Foundation, 2004). Currently, Nevada demonstrates the fifth-highest youth suicide rate in the United States (Center for Disease Control, 2003).

Meanwhile, outmoded systems structures exacerbated the challenges to service delivery already facing the state's service providers. At the start of the current story in 1998, Nevada was the only state in the country to have a bifurcated child welfare system in which the two largest counties, Clark and Washoe, conducted investigations and initial child protective services while the state provided foster care and adoption. This often delayed reunification and adoption, thereby jeopardizing outcomes for children and families. However, as will be described below, legislators' response to this administrative barrier to fulfilling the state's basic responsibilities for specific children provided an opportunity for more ambitious and far-reaching change.

Initial steps in the change process

The opportunity to make significant improvements in the behavioral health system for children and families in Nevada arose by bringing together several ongoing efforts in the state. First, the mental health section of the Nevada Division of Child and Family Services (DCFS) was successfully implementing a pilot project in Henderson, Nevada to develop wraparound and a local system of care. Second, based on this success, DCFS was awarded a SAMHSA grant to expand this pilot to all of Clark County (Las Vegas and surrounding area). Third, a federal child welfare review found Nevada in violation of federal standards and several key legislators were intent on ensuring that the state responded to these findings and met its responsibilities for children in the child welfare system. Fourth, the DCFS administrator for southern Nevada supervised both child welfare and mental health and was dedicated to making necessary changes to increase coordination between the two systems to improve services received by families.



In 1998, a federal review found that Nevada had failed to meet the implementation standards of the Adoption and Safe Families Act with the state's bifurcated system identified as a key problem. In 1999, the Nevada Legislature took steps to address this complex issue through Assembly Concurrent Resolution 53 (ACR 53), which appointed an interim Legislative committee to study how best to integrate the state and county child welfare systems. The Committee recommended legislation to transfer most child welfare functions in Clark and Washoe Counties to respective county agencies. In smaller counties, the State of Nevada, DCFS (Division of Child and Family Services) was to retain these functions.

During the course of the ACR 53 study, the Committee held a series of public forums that provided a key opportunity for advocacy for broad reform. Committee members learned through testimony and reports from family members, service providers, and agency officials—often presenting together that there were many issues beyond the bifurcation of the child welfare system that were creating poor outcomes for youth in the child welfare system. Most notably the Legislators heard that youth needed higher quality and better access to mental health programs and services. Between 1991 and 1998, the state had made some progress in improving foster children's access to mental health services by consolidating state-administered foster care programs and stateadministered children's mental health programs into a single agency, the DCFS (Division of Child and Family Services) referred to above. However, advocates and stakeholders described continual and significant problems in access to and coordination of services for children with complex needs.

With the planned restructuring of the child welfare programs and the transfer of all foster care programs to the county, legislators, as well as county and state administrators, were concerned about the coordination between foster care and children's mental health at the local level. Local children's mental health administrators working with advocates and family members seized the opportunity to introduce legislators and county and state administrators to the "systems of care" model as a way to address concerns about maintaining and enhancing local, interagency collaboration/coordination. Committee members were introduced to the problem of meeting the needs of youths with "severe emotional disorders" (SED) and the role of fragmentation across agencies in perpetuating this problem. Committee members were also introduced to the systems of care framework and how it was formulated to address problems such as fragmented, restrictive and overly professionalized childand family-service systems (Stroul & Friedman, 1986). Presented within the context of an administrative restructuring process, legislators and other stakeholders were much more attentive to the concepts and values of systems of care, as well as proposed methods for improving service quality and child and family outcomes.

An additional boost to the state-level reform effort was provided by the injection of expertise from Clark County where a team of external community psychologists had begun to work with local stakeholders to implement a federally supported system of care project for youths with SED. Local officials in Clark County soon recognized that the perspectives of the external experts about potential concrete steps for systems reform would be well-received by the Committee. Presentations from a team from Clark County that included the external experts were thus scheduled into Legislative forums. Proposals from the Clark County team were considered carefully because the external practitioners brought a national perspective on methods for reforming systems of care while local stakeholders were able to provide specific examples of shortcomings in the system. In addition, the County's federal system of care grant brought resources to implement specific reforms in one part of the state. This allowed for further collaboration between Clark County and the Legislative Committee. The fact that County officials were highly invested in assisting statewide reform—which held the promise of aiding their own local system of care development—also provided a boost to this collaborative process.

During this initial period of collaboration, legislators decided they needed a better understanding of the level of mental health services need for children within the child welfare system. This request provided an initial opportunity to inject data collection and analysis into the reform effort. The Clark County system of care project had previously conducted a preliminary needs assessment survey of the child welfare population in anticipation of implementing services to better meet the needs of this population. In order to respond to the legislators' need for information, the consulting team worked with evaluation staff from the Clark County system of care project to utilize these survey results in addition to national data on prevalence of mental health problems in children and adolescents and research on the impact of lack of services. Though conducted without a formal research protocol, estimates (Earnest, 1999) developed through the process described above, were sufficient to establish enough "evidence" of the unmet need for services in the child welfare system and its long-term negative impact, for the Legislature to support a more detailed study of need and to begin proposing specific resources to aid reform efforts. During this stage, information was also gathered on national best practices for meeting identified needs.

In addition to producing the needs assessment data described above, the fledgling local system of care initiative was able to provide the needed resources to link the external consulting team and families with legislators and state and county administrators through informal meetings as well as formal legislative hearings. The consulting team and families were thus able to make the needs assessment data "come



alive" and sell the systems of care model as best practice for meeting the unmet need. In 2001, based on the assessments and the formal and informal testimony of family members and system partners, the Legislature passed Assembly Bill 1, which included an increase of \$6,078,755 annually in funding for mental health services for youth with SED within the child welfare system. This, along with the federally funded system of care project in Clark County, provided the opportunity for the team of external consultants to work with state stakeholders to aid efforts to reform Nevada's children's mental health system.

Data collection and evaluation methods used

In addition to expanding services, Nevada's new legislation funded an extensive phase-in period during which resources were appropriated to conduct regional planning, program development, and training. Services provided in the reformed and more fully funded system were to be delivered through the wraparound process, which, as described above, provided a promising method for planning and implementing care for the target population in a manner that reflected the principles of the desired transformation in service delivery. In this section, we will describe the major data collection, evaluation, and quality improvement activities undertaken to support the systems change effort in Nevada. These included four basic activities: (1) more formal assessments of unmet need that were conducted at the outset of the process; (2) pilot studies that evaluated the outcomes and cost benefit of the wraparound service process; (3) formal study of implementation fidelity and quality improvement strategies; and (4) systems-level data collection to support continued improvement of child-serving systems in the state.

Activity 1: Determining the need for mental health services

In responding to Nevada legislators' request for estimates of unmet mental health needs in the child welfare system, the team's goals were to quantify need in a way that would convince legislators to take action, determine how this need could best be met, and project the costs of meeting this need. There were three stages to quantifying the need for mental health services for children and youth in the Nevada child welfare system.

An initial estimate of unmet need

As described briefly above, the initial phase was a "quick and dirty" assessment to document that there was considerable unmet need for mental health services for children and youth and to gain initial buy-in from Committee members and other legislators. To do so, the team worked with a DCFS evaluator

to review case files and administrative data for 1,300 children and youth in the Clark County foster care system. In some cases, the child's case worker was also interviewed. Based on these reviews, each child was categorized as to whether she/he did or did not meet the criteria for SED and whether their mental health needs were being served, underserved, or unserved. Ultimately, 38% of youth whose cases were reviewed were found to meet criteria for SED. Each child's DCFS case worker was then asked to identify the current services the child or youth were receiving. Results documented that 37% of children and youth who met SED criteria were receiving no mental health services (Earnest, 1999).

Given the total population of children and youth in the Nevada child welfare system, the team used these data to estimate that there were 327 children and youth in the foster care system statewide experiencing SED and yet receiving no mental health services. The team presented these data along with research showing the much higher incidence of school failure for youths with mental health problems as well as the higher long-term rates of violence, delinquency, and substance abuse for this population (e.g., Hawkins, Catalano, & Miller, 1992; Ialongo, Poduska, Werthamer, & Kellam, 2001; Kupersmidt & Coie, 1990). Presentations commented on the potential immediate and long term costs to the state of such outcomes as well as continued reliance on long-term residential care. This information convinced the Legislature to fund services for a pilot project and a commitment to ultimately create capacity to meet the needs of unserved or underserved children in the foster care system. The legislatures also commissioned a more comprehensive study of the needs for mental health services across the three regions of the state-Clark County (Las Vegas), Washoe County (Reno), and remaining rural areas.

A more comprehensive assessment of need

To complete the second, more rigorous, assessment of need for children's mental health services across the state, the team screened large samples of children in the child welfare system as well as samples in the public education and juvenile justice systems. These assessments were intended to determine: (1) the number of children with SED not receiving services; (2) the costs to provide these services; (3) the obstacles to providing services to these children; and (4) recommendations for removing those obstacles (Rast, 2003; DCFS, 2002, 2003, 2004; Rast, Reitz, Nix, and Peterson, 2004).

To conduct this broad-based screening, the team used the Child and Adolescent Level of Care Utilization System (CALOCUS; Klaehn, Malley, Vaughan, & Kroeger, 2002), a measure developed to link presenting problems to standardized levels of care. CALOCUS dimensions include risk of harm, functional status, co-morbidity, recovery environment,



Table 1 Results of statewide assessment of mental health needs of Nevada youth in DCFS Custody

Region	Youth with MH needs and served at appropriate level (%)	Youth with MH needs and underserved (%)	Youth with SED and unserved (%)
Washoe County	57.0	42.4	26.0
Clark County	53.3	46.1	19.8
Rural	45.6	54.4	70.6
Statewide total	53.4	46.2	24.2

resiliency and treatment history, and acceptance and engagement. Assessment via the CALOCUS yielded an estimate of the level of care required for each youth which was then compared to the mental health and auxiliary services that a child or adolescent was actually receiving.

Results of this analysis found that, across all three regions studied, 46% of children in DCFS custody had some degree of mental health need but were "underserved"—not receiving services and supports at a level that was equal to their need. Of DCFS children determined to be experiencing SED, more than 24% were receiving no behavioral health services at all. As shown in Table 1, this pattern was particularly problematic in rural areas. Across all three public agencies surveyed, 53% of the children sampled were underserved while approximately 40% with SED were receiving no behavioral health services. The overall conclusion was that unmet need was even higher than estimated in the initial case review assessment.

Assessing the causes of unmet mental health needs

After the CALOCUS assessment of mental health needs of youth in Nevada was completed, a series of focus groups and a survey with families and providers was used to determine the specific challenges to meeting the mental health needs of children and youth served by public systems in the state. Family members; parent support workers and family advocates; and staff from regular education, special education, mental health, juvenile justice, health, and substance abuse were surveyed and participated in focus groups. The effort resulted in a number of important findings (DCFS, 2002, 2003, 2004):

- Families and providers reported long waiting times and lack of flexibility from the managed care and public system providers. Interviews with staff and families documented waiting lists of 10 weeks and longer for programs. Family members were given the impression that services were not available or accessible.
- Most parents and family members—as well as child welfare staff—who needed resources to support children in

- their care were not accessing needed services. In addition, family members who needed treatment for their own mental health disorders were generally not able to access services. Respondents felt that if children and their families were able to receive services and supports before entering public systems, many children would not require involvement with child welfare or juvenile justice.
- 3. Early intervention services in the state were poorly developed and difficult to access. Focus group participants cited this as a possible reason for the high number of children in the child welfare and juvenile justice systems and for these children having such high rates of service needs.
- 4. Existing services and supports were not provided at times or in locations accessible for many children and families. Results also indicated that individualization of services based on culture did not occur and that the lack of bilingual and culturally diverse providers limited access for many Hispanic children and families.
- 5. Results of surveys and focus groups pointed to an overuse of residential and other restrictive services to address mental health needs. Utilization data showed that 86% of the funding for children's mental health in the state was being spent on high-cost residential care for less than 5% of children in need of services.

These results were viewed as highly influential. Based on these findings and consistent advocacy from stakeholder groups, the Committee proposed legislation to support a system of care and the beginnings of the infrastructure to support it. Legislation set initial priorities to develop intensive community-based services for children and youth in the child welfare system. Assembly Bill 1 also created three children's Mental Health Consortia, communitybased interagency teams charged with formally assessing the need for children's mental health services across all childserving agencies and recommending improvements in practices. These Consortia also provided an additional, ongoing forum for injection of both qualitative and quantitative data on needs and outcomes into evaluation efforts. In future sessions, the Nevada Legislature approved developing greater community-based service capacity for youth in the juvenile justice system.

Activity 2: Documenting effectiveness

To meet the needs of the children and youth with SED in the foster care system who were receiving inadequate or no services, the Nevada Legislature funded development of a wraparound care management process capable of serving 327 children based on the assessments of unmet need described above. Project WIN (Wraparound in Nevada) was established to use the wraparound process to engage families and natural supports in a strengths-based process to



plan and implement services and supports in accordance with the model described earlier in this paper. Nevada formally embraced the principles of wraparound based on its alignment with systems of care philosophy, popularity with family members and advocates, and encouraging outcomes from other systems (Burchard et al., 2002; Rast & Bruns, 2003). Nonetheless, the state demanded documentation of the efficacy and cost impact of the process as implemented in Nevada.

Thus an initial evaluation was done for 65 children in a pilot phase of wraparound implementation. The pilot included 33 youth enrolled in the wraparound process as administered by trained wraparound facilitators and 32 receiving traditional case work by DCFS case workers and mental health services. The pilot study compared the impact of these two approaches on child and family outcomes as well as differences in costs. The WIN pilot was done in four areas of the state (Reno, Carson City, and North and West Las Vegas). Eight youth were selected from three of these regions and nine from the North Las Vegas region to receive wraparound. From each of these areas, eight additional youth were selected to serve as comparisons and received traditional services. Comparison group youth were selected by matching on age, sex, race, current residential placement, and severity of mental health problems. Data were collected on child symptoms and diagnosis; child social functioning; substance use; school attendance and performance; level of restrictiveness of residential setting; and stability of the child's living arrangements. Data on outcomes were gathered at entry to services, and at 3, 6, 12 and 18 months after entry.

Results of pilot evaluation

A primary goal of WIN was to find stable living environments in the least restrictive setting possible for youth with intensive needs. Results of the pilot evaluation found that after 18 months, 27 of the 33 youth (approximately 82%) who received wraparound moved to less restrictive environments, compared to only 12 of the 32 comparison group youth (approximately 38%). In addition, seven of the 32 comparison group youth (approximately 22%) moved to more restrictive placements, compared to only two who received wraparound (6%). Finally, family members were identified to provide care for 11 of the 33 youth in the wraparound group compared to only six in the comparison group. This was especially encouraging given that the majority of these youth had been in state custody for more than three years and their permanency plans had been for long-term foster care prior to initiation of the wraparound process.

A second critical outcome measure assessed in the pilot study was the functional impact of mental health problems on children and youth. The evaluation used the Child and Adolescent Functional Assessment Scale (CAFAS; Hodges,

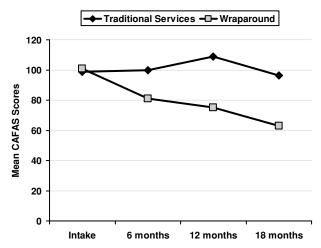


Fig. 1 Mean scores over tim on the Child and Adolescent Functional Assessment Scale (CAFAS) for the Traditional Services and Wraparound groups

1997), on which lower scores represent lesser impact and seriousness of mental illness. As shown in Fig. 1, results from the pilot study found that mean CAFAS scores for youth in the wraparound and traditional services groups demonstrated similar scores at intake but that after six months, scores for the wraparound group had decreased significantly in comparison to the traditional services group.

In addition to residential and functional outcomes, results of the pilot study showed positive outcomes for the wraparound cohort on school performance variables such as attendance, disciplinary actions, and grade point averages. Anecdotal reports from facilitators and DCFS staff suggested that as family bonds improved and broad-based child and family needs were met, youth became less distracted and more motivated to succeed in school. Overall, pilot data, combined with family stories and recommendations from the local mental health consortia, led to expansion of WIN to youth in the juvenile justice system. In addition, after revenue shortfalls in Nevada reduced funding levels from levels originally proposed to serve 327 youth to 223, reports about outcomes from the pilot were one important factor in restoring funding. In 2004, funding was increased to support services for over 500 youth statewide.

Activity 3: Supporting quality improvements

In addition to impact evaluation, the initial pilot demonstrated the importance of achieving a high-quality wraparound process and led to development of a quality management system. During the WIN pilot, the 33 youth in the wraparound group were assigned to one of four wraparound facilitators (one in each region) who were trained in the wraparound process by the community practitioners working in the state. Each of these wraparound facilitators also received hands-on coaching as they learned



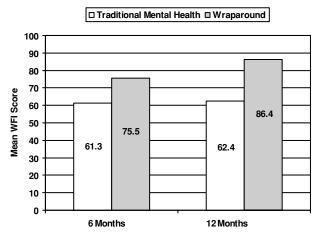


Fig. 2 Mean scores on the Wraparound Fidelity Index (WFI) for the Traditional Services and Wraparound groups at 6 and 12 months post-entry

and implemented the process. During the course of service delivery, the Wraparound Fidelity Index, version 3.0 (WFI; Bruns et al., 2004; Suter, Burchard, Bruns, Force, & Mehrtens, 2002) was administered. The WFI is a multi-informant interview that measures adherence to the principles of wraparound for an individual child and team. Brief interviews with the primary caregiver, youth, and wraparound facilitator ultimately yield scores that can be combined across all respondents and converted into a 100-point scale with higher scores indicating better adherence.

To assess fidelity for the wraparound group and confirm that service processes differed meaningfully across the two groups, the WFI was administered every six months after entry to services for youth in both groups. As shown in Fig. 2, after six months, service processes were found to conform more closely to wraparound principles in the wraparound group than the comparison group. This result was expected. However, WFI scores in the wraparound groups were also found to vary widely across facilitators. Mean scores for three facilitators ranged from 65.3 to 76.8, while the fourth facilitator, who had provided wraparound in another system for several years prior to coming to Nevada, achieved a mean score of 87.4. Further analyses showed that youth served by the fourth facilitator demonstrated significantly better outcomes than did youth served by the three facilitators who achieved lower fidelity scores (Rast et al., 2004). Such association between fidelity and outcomes had also been recently found in other studies (e.g., Bruns, Suter, Force, & Burchard, 2005).

The variation in fidelity and demonstration of relationship of this variable to outcomes inspired consideration of how to achieve greater wraparound fidelity in the WIN Project. In response, a more intensive, four-phase quality improvement process was implemented for wraparound facilitators. In the first phase, training on wraparound fundamentals and the program's policies and procedures was undertaken. In the second phase, on-the-job training and in-vivo coaching provided much more intensive support to staff. This process also involved certification that required demonstration of minimum levels of fluency across multiple skill sets specific to the wraparound process model. In the third phase, ongoing quality improvement was provided to support staff growth from minimum required levels of performance to high fidelity. Finally, a follow-up phase was implemented in which spot checks and booster sessions were provided to staff. In addition to the four-phase process for facilitators, specific training and coaching was provided to supervisors based on the assumption that the supervisor has significant impact on the performance of the staff providing wraparound.

The evolution of the intensive quality assurance process described above was inspired largely by the national consultants' observation that staff training alone was an inadequate method to achieve a high-quality wraparound process. These observations were reinforced by findings from the WIN pilot and other studies showing the difficulty in achieving wraparound fidelity (e.g., Bruns et al., 2004, Walker et al., 2003). In addition, fidelity results from the WIN pilot were effective in advocating to agency officials and staff for more intensive quality assurance mechanisms. As shown in Fig. 2, mean fidelity scores on the WFI rose significantly by the 12th month of the WIN pilot in correspondence with the implementation of the more intensive quality assurance process.

Activity 4: Determining system infrastructure reforms needed to support quality services

As Nevada moved forward to reform the mental health system for children, it became apparent that the infrastructure to support the reformed system needed to be strengthened. Evaluation and quality assurance activities—focused primarily on the implementation of the wraparound process for specific children and their families—were revealing service implementation problems that could not be remedied merely through intensified training and coaching of service providers and wraparound facilitators. The establishment of Mental Health Consortia also provided forums for description of barriers to quality practice. In keeping with research and theory about the supports necessary for high-quality implementation of complex service processes (e.g., Walker et al., 2003), it became apparent that service expansion may have been initiated without adequate consideration of funding and policy changes needed to support desired system changes. As a result, the team helped DCFS and the state Legislature to evaluate the adequacy of the existing system to support such service expansion and to meet



goals of the reform effort. This system and infrastructure assessment was done through a three-stage process.

First, two legislative committees and the three Mental Health Consortia held public hearings to identify the priority areas of need related to infrastructure from consumers, providers, community representatives, and local and national content experts. The topics that related to system organization and characteristics of the policy and funding context were then sorted into 11 content areas. Second, these content areas were organized using an instrument called the Community Team Assessment of State Support (Rast, 2003). Assessments were then completed by a sample of regional Consortia members including agency representatives, family members, and providers. In the third step, stakeholders completed two standardized measures of the organizational and system supports for wraparound (Walker et al., 2003). Results were then analyzed and combined with results of public hearings and other assessments to identify priority areas for system and infrastructure development. The top 10 priority areas are presented in Table 2, along with mean ratings for each from the assessment process.

Results of the assessments helped to confirm that services in the state continued to be fragmented, difficult to access, and often inadequate. Despite major shifts in policy and priorities, and the adoption of family-friendly and proactive principles for guiding systems of care in the state, it was clear that systems development had not kept pace with service needs or service growth. Results of the broad-based systems assessment described above aided development of an infrastructure development plan intended to aid the Mental Health Consortia by funding a number of activities including:

- 1. Reforming a state advisory committee to promote more collaborative governance;
- 2. Developing an integrated cross-system vision and plan for behavioral health services;
- Expanding system assessment to include assessment of financing and implementation of evidence-based services;
- Increasing statewide capacity for family member partnership and leadership;
- 5. Increasing development of capacity to provide culturally proficient services and supports for children and families;
- 6. Improving interagency coordination mechanisms;
- 7. Developing an expanded focus on evidence-based practices at all levels;
- Implementing a workforce development plan that included a focus on evidence-based services, effective supervision, and strengths-based professional development plans;

- Developing integrated financing including Medicaid redesign; and
- 10. Implementing an integrated statewide performance management system.

Nevada recently used the results of the above systems assessment and its resulting implications for action as the foundation of its successful application for a state infrastructure grant (SIG) from the U.S. Substance Abuse and Mental Health Services Administration. Despite the significant work left to be done, receipt of this major federal grant can be viewed as the most recent among many successes in Nevada. Over the past ten years, the amount of public funding for children's behavioral health services in Nevada has increased from \$6.4 to over \$35 million. In addition, Nevada has initiated several large-scale projects to create systems of behavioral health services ranging from the federal grant that developed Neighborhood Care Centers in Clark County (that first brought together the team described in this paper) to several state-funded initiatives to implement wraparound across the child welfare, juvenile justice, and public school systems.

Implications for community practice

Kelly et al. (2004) described community action research as an ongoing process that focuses on collaboratively developing an understanding about necessary action steps within a community over time. In other words, when an evaluation effort involves multiple stakeholders working together through many stages of a change effort, research and data collection activities have the potential to directly impact not only decisions made but the next questions to be considered and steps to be taken. In keeping with this frame, we have attempted to present the evolution of the learning needs of stakeholders in Nevada's transformation effort, along with the results of evaluation efforts intended to meet those needs and inform action. In doing so, we uncover a primary implication of taking such a historical and fully contextualized approach to presenting a community practice example; namely, that it resists reductive claims of success or progress and forces community change agents to consider their work as longterm and inextricably interconnected to other systems.

In Nevada, legislators, agency officials, providers, and family members used data collection efforts to quantify need and advocate for service expansion. The initial assessment activities uncovered not only the need for behavioral health services but also the needs of families and how well current services met the values of the emerging system of care. Stakeholders then experienced success in bringing the wraparound effort to the state and demonstrated increasingly solid support for implementation because of the positive impact on



Table 2 Top areas for system infrastructure development, with associated mean respondent ratings

Area of system development need	Mean rating: Current performance	Mean rating: Priority for action for action
For a common shared vision and integrated plan for behavioral health services for children and families	0.82	1.89
For early identification and easy access to services before problems become severe		1.84
For a public engagement to reduce stigma and build public support for behavioral wellness		1.82
To develop and support an integrated continuum of science based services and supports		1.8
For consistent and useful data to assess the impact of services and supports		1.78
For flexible fiscal policies that promote individualized services and supports		1.77
To support increased family-centered service coordination through the wraparound process		1.76
For integrated responsibility to meet the needs for children and families at the local level	0.77	1.75
To recruit staff and providers to meet the needs of the children and families	0.81	1.71
For ongoing interagency problem solving at the local and state system level		1.67

Note. Ratings of current performance range from 2: met, 1: partially met, 0: not met; Ratings of priority for action range from 2: high, 1: moderate, 0: low.

youth and families. At the same time, these efforts revealed the complexity of implementing wraparound and frustration about the inadequacy of the existing service system infrastructure to support transformation to such a novel service delivery mechanism. As highlighted by the results of the needs assessment described in the last section, system change remains very much a work in progress in Nevada. Thus, stakeholders' commitment to continual use of data to inform community change demonstrates that success in one area can often reveal other challenges and the complexity of the change agenda.

Though these implications from Nevada are broadly illustrative of how data collection and evaluation can inform community practice, they are particularly relevant to systems change efforts within children's mental health. In this case, initial needs assessments reflected national and other states' studies of the level of unmet need (e.g., Costello et al., 1996; Hurlburt et al., 2004). Though results paralleled other studies, it was important to demonstrate this need in a way that could mobilize the local change effort and set the level of funding for service expansion. In addition, by incorporating a more qualitative element, the assessment also helped define the values for service delivery. This helped set the tone for the overall change effort in Nevada which ultimately became as much about changing the way in which services were provided as it was about service expansion.

It is worthwhile to note that much of the progress that was achieved in both these areas was the result of the opportunity provided by the Legislative Committee which was originally convened as a response to a poor federal review and need for administrative reform. The Legislative Committee meetings were critical as a method to present data on both unmet needs of children, youth, and families, as well as the positive outcomes ultimately achieved by the statewide WIN pilot project. It is also important to note how data were

selected and presented. In the beginning the evaluation team listened to the needs of youth, families, and key stakeholders and identified ways to quantify these needs. At the same time, the team listened to the needs of Legislative Committee members. While the needs of the former focused on supports and community-based services to help children succeed, the latter focused on cost benefit and federal child welfare outcomes. It was important that both data and families' stories addressed these issues in a clear and relatively straightforward manner. This made the data more "useful" for decision making.

Ultimately, over four years, Legislators, county and state administrators, families, and other important stakeholders were exposed to evaluation data that were also presented in tandem with testimony from family members and/or providers. Such a method was far more effective than the written reports produced by the statewide pilot project or the local system of care initiative. The ongoing exposure of data to a broad range of stakeholders was effective in engaging them as allies and advocates for system change. They actively lobbied on behalf of sustaining the initiative and in 2003 it was funded by the Legislature without debate.

The Nevada story provides another informative illustration for children's mental health in that stakeholders in Nevada learned that achieving wraparound fidelity is a complex business that goes beyond program-level quality monitoring and assurance structures. The benefits of wraparound as a type of community practice are significant in that the practice aims to improve outcomes by considering children and families in their real-life settings, seeks to strengthen families' ties to community, and seeks to improve a community's capacity to care for its most challenged families. However, such goals are much more ambitious and complex than is typically expected of an intervention for youth and families. Achieving such goals requires development of significant program- and system-level supports across many



systems and contexts as demonstrated by the extensive array of system infrastructure development needs listed above and in Table 2. Despite the challenges inherent in adopting the wraparound model to planning and implementing services, the benefits can be significant and extend beyond those experienced by individual children and families: Nevada's 2004 federal Child and Family Services Review noted the promise of using the wraparound process to help meet the needs of children in the system (USDHHS, 2004).

Finally, given the complex and dynamic nature of change processes, it is worth noting that achieving significant change in Nevada required substantial, multiple, and simultaneous "top-down" as well as "bottom up" efforts. An opportunity for state-level reform was required as well as implementation of local systems of care from which lessons learned and tangible resources could be applied. Clark County officials, providers, and family members recognized that in order to achieve local system change, their voices and resources needed to be brought to bear in state-level data collection and lobbying efforts. This included personal visits to specific Legislators, alliances with whom would ultimately be critical. Meanwhile, presentations to committees and other stakeholder groups had to be tailored such that there were human faces describing needs as well as assessment data and success stories.

Conclusion

Overall, Nevada's data-driven transformation effort provides an impressive example of community practice for several reasons. First, the state's stakeholders have been willing to work together to confront problems with child- and family-serving systems in systematic fashion, starting with the question of unmet need and progressing through issues related to intervention development, quality assurance, and development of system-level infrastructure. Second, even when it pointed to a daunting agenda of remaining tasks, the state has strived to use data and evaluation to inform its efforts. Finally, the story from Nevada provides a highly illustrative example of utilization-focused evaluation (Patton, 1997). In this story of systems change, maintaining standards of empirical rigor was an important consideration but evaluation protocols were designed first and foremost to inform decision making. As such, data collection was continually aligned with the transformation effort itself, one important narrative among many in this ongoing story of community change on behalf of children and families.

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