

**THE NEED FOR AN EVIDENCE-BASED CULTURE:
LESSONS LEARNED FROM EVIDENCE-BASED PRACTICES IMPLEMENTATION
INITIATIVES**

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Evidence-Based Practices: The Context

Over the last decade, evidence-based practices have emerged as a priority for mental health policy makers and administrators. Prompted by the Surgeon General's Report on Mental Health (1999) which identified mental health interventions with an evidentiary base, evidence-based practices have been promoted by a series of activities at the federal level through SAMHSA's Center for Mental Health Services (CMHS) and at the state level through the activities of state mental health authorities. This activity reflected the logic that interventions that were proven to produce certain outcomes with strong evidence through research should be incorporated into arrays of services being purchased or provided by federal, state and local agencies. The basic challenge was how to translate research into practice: much of the effort was focused on the development of training materials and models to facilitate the uptake of evidence-based practices.

At the federal level, a major initiative was the National Evidence-Based Practice Demonstration Project. Implementation resource kits (or "toolkits") were developed for six adult mental health practices (assertive community treatment, supported employment, integrated treatment for co-occurring mental health and substance abuse, family psychoeducation, illness management and recovery, and medication management). These toolkits consisted of manuals, videotapes, fidelity instruments, and tips for administrators.

Five of these toolkits (medication management was the exception) were tested in eight states and as a result of this initiative, the initial set of toolkits are being revised. Several parallel activities were also funded by SAMHSA's Center for Mental Health Services: an EBP Training and Evaluation initiative in which states were funded to implement and adapt the five toolkits; a joint National Institute of Mental Health-CMHS initiative where small grants were given to states to plan for EBP implementation, and the funding of a Center for Mental Health Quality and Accountability (CMHQA) at the NASMHPD Research Institute, Inc. to advance EBP research, implementation, and dissemination.

The initial thrust of federal activities was focused on adults. A major focus of CMHQA was the promotion of evidence-based practices for children. An initial meeting was convened in 2002 of children's researchers, advocates, administrators, and family members that resulted in a series of conferences and meetings which culminated in an initiative to develop a resource kit related to promoting an "evidence-based culture."

Both the adult and the children's initiatives have not been without controversy. A key concern was that the emphasis on EBPs would impede the development of promising or emerging practices that practitioners, consumers and/or family members considered effective but which did not have a strong basis in research. Federal initiatives and funding would target EBPs and, as a consequence, other programs would get short – or shorter – shrift. The fear was the research would define the system so that only evidence-based practices would be available and other innovative practices for which research had not been conducted would lose ground.

On the adult side, consumers feared that peer support services might be affected; on the children's side, family members, advocates and practitioners feared that wraparound services and the system-of-care philosophy and efforts could potentially be subverted. In response to these fears, responses to EBPs have included: "consumers are the evidence," and the concept of

“practice-based evidence,” that is, the notion that there is a strong case for practices that practitioners, consumers, and family members consider effective even though the actual research base is weak because insufficient research has been conducted.

On both the adult and children’s sides, there is consensus that the science related to the implementation of evidence-based practices in the mental health field is minimal at best. Schoenwald’s (2001) transportability study, Panzano’s (2006) studies related to factors affecting the decision-making related to EBP uptake, and Fixsen and colleagues’ (2005) monumental review of the literature related to implementation in other disciplines are seminal and path-breaking in the mental health field.

Despite these efforts, the likelihood of having a strong evidence base related to EBP implementation in the near future is remote. Sporadic, piecemeal findings will certainly inform and guide implementation efforts but, given the different levels of implementation, the multiplicity of stakeholders, the dynamics of power, funding and politics involved, the lack of a clear understanding of the critical aspects of specific EBPs, and the nuances related to implementation of specific EBPs, research is unlikely to be a source of implementation models. Implementation, for some time, will remain an act informed by science rather than be purely science-based and evidentiary. In the near future, implementation is more likely to be based on “success” stories and implementation models adapted in other fields that appear to work rather than a science of implementation.

To be clear, this is not to negate scientific contribution, just to recognize its paucity. EBPs exist and are being implemented now. The guide to implementation efforts are the lessons learned from other disciplines and the lessons learned – what worked, what did not – from implementation efforts in mental health services themselves. In this sense, this is practice-based evidence for implementation.

Within this context, this report focuses on lessons learned for implementation efforts in the mental health field, both from experiences on the adult and children’s services perspectives. These lessons learned have been culled from workshops, conferences, site visits, and technical assistance initiatives sponsored by the Center for Mental Health Quality and Accountability (CMHQA) at the NASMHPD Research Institute, Inc.

Levels of Implementation

There are two ways to interpret “levels” of implementation. The first is related to how well an EBP is implemented or the degree to which implementation conforms to the model proven by research to produce intended outcomes. This connotation is related to the concept of “fidelity,” or how true implementation is to the actual model. This level is related to the interaction that a consumer or family member has with the therapist or program.

Another connotation of “level” is organizational. At the level of a recipient of care, the primary level is the interaction between the caregiver or therapist and the recipient of care and treatment. The provider of care is usually embedded in an organization so that the next level is to think of a provider organization implementing the EBP.

A third level is where implementation occurs in multiple organizations under a larger organizational umbrella or jurisdiction, for example, at the state or county level. At this level, the state or county implements EBPs in multiple organizations, each potentially at different stages of organizational readiness.

These levels of implementation are important to distinguish because there are lessons learned for and at each of these different levels.

Implementation: The Actors

Related to the different levels, there are different players and personnel involved. Again, at the first level, there is the adult or child consumer and the therapist or caregiver. The consumer is part of a social matrix which potentially involves family, culture, friends, employers, and teachers. Similarly, the therapist brings his education, training, and organizational role to the interaction. There are lessons related to such an interaction.

The therapist is also embedded in a matrix which involves colleagues, supervisors, administrators, and persons who provide both administrative and clinical support. And finally, administrator's decisions are often circumscribed by policies and funding mandates which can often be constraints or deterrents to implementation.

Clearly, different actors play different roles related to implementation at different levels. But the major purpose depicting these levels and actors is to emphasize the complexity of implementation so that the lessons learned can be placed in this framework. Lessons learned related to implementing an EBP at one level may or may not pertain to lessons learned at another level. The nature of activities related to implementation at the different levels is widely disparate. For sustained uptake of an EBP, each level must be functional and supportive of EBPs. A breakdown at any level undermines and possibly negates the implementation effort.

The fundamental level is the interaction that the child/family member or adult has with the provider of care. For this interaction to be of high quality, support is needed from the organization. And for the organization to operate optimally, the regulations, policy, and funding structures with which the organization is ensconced must also enhance, support, and facilitate the organization's efforts.

Implementation: Lessons Learned

Within this framework, this report identifies critical aspects of lessons learned related to EBP implementation. As each aspect is addressed this report attempts to address the issue from the perspective of the different levels. The lessons learned presented in this report target the objective of sustained implementation of evidence-based practices over time.

Lesson 1: Training and a training infrastructure are essential

While this lesson may be obvious and common-sensical, it is often ignored. Clinicians, administrators, and consumers/family members not only have to be aware of the EBP and its potential for improved outcomes, but also have to understand the steps related to implementation. Often, providers are exposed to minimal training and provided manuals with the expectation that this will result in uptake and implementation of the EBP. A key finding is

that *training alone, even when it is fairly intensive, appears to increase knowledge but has a limited impact on practice* (Torrey, et al., 2005; Fixsen, et al., 2005).

The lessons from SAMHSA's toolkit project were that training materials had to be user-friendly and that ongoing consultation to support implementation efforts was a critical component related to successful implementation. The role of the supervisor in supporting and guiding implementation was also identified. Besides the training materials, regular conference calls among implementers and experts also facilitated the implementation process. This was a general finding across the different toolkits. It is also the experience of implementation efforts such as multisystemic therapy and medication algorithms.

Consumers/family members are also key to this implementation equation. Consumer and family member education achieves three goals: awareness of the EBP, relative advantages and expenditures related to the EBP, and the consumer/family member role in implementation.

A potential barrier to training is the cost involved. Clinicians and providers have to take time off from the provision of direct services which affects revenue streams. In addition, there is the cost of trainers themselves. Quite often, the responsibility for such training is that of the provider organization. For the most part, if the organization is relatively large and well funded, this training responsibility is assumed. For smaller organizations, this poses more of a problem. A significant aspect of this problem is that often purchasers and funders of services will pay for direct services but not cover the cost of a training component. This results in training efforts which are spotty and unsystematic.

A lesson related to supporting training is to assume this responsibility at the state or multi-organization level. In Ohio, for example, Centers for Excellence were established at different universities to provide technical assistance and support associated with a specific EBP. Several centers have been established, including one for integrated treatment of co-occurring mental health and substance abuse disorders, and one for multisystemic therapy. Similarly, other states such as Maryland, Kansas, and New York have also established training institutes or affiliations with universities to support EBP implementation.

While training by itself may not be sufficient for EBP implementation, it is necessary. Especially given the high turnover rates in community provider organizations, a capacity for ongoing training is important. The challenge often is funding, but many states and provider organizations have used federal Community Mental Health Block Grant funds and state general appropriations to support training efforts.

Lesson 2: Alignment of the perceptions of the rationale and consequences of implementing evidence-based practices is critical

Implementing an EBP involves change, and change is often suspect. Each stakeholder group has reviewed the introduction of EBPs with its own particular lens: adult consumers have considered EBPs as potentially subverting the progress made related to the emergence of "consumer voice," the development of peer support services and the recovery movement; family members and children's advocates have viewed EBPs as undermining the system of care initiative and wraparound services; practitioners have seen EBPs as potentially introducing "cookie-cutter," manualized interventions limiting clinical discretion; administrators fear that EBPs will become an unfunded mandate.

Management of these perceptions is critical to the introduction and the ongoing implementation of EBPs. In a meeting of consumer leaders convened by the NRI Center for Mental Health Quality and Accountability (CMHQA) and the National Mental Health Association, the attendees were clear that they were not against the notion of scientific evidence to define effective practices. Rather, they felt that the process of the emergence of the EBP movement had excluded consumers and that much of the anti-EBP sentiment was largely a response to this political loss of “voice.” In one state, the introduction of the EBP version of family psychoeducation was seen as potentially relegating existing family psychoeducation programs to a lesser, diminished role.

On the children’s side, this issue has its own slant. To a large extent, the EBPs for children that have been more widely disseminated target a small portion of children receiving mental health services. Also, some of the EBPs for children have a proprietary nature and are associated with singular organizational entities. These factors have resulted in a questioning of the relevance of EBPs for children in the broader system.

Two concepts are key to alignment: 1) levels of evidence, and 2) that EBPs are complementary rather than oppositional to or competitive with existing initiatives.

As EBPs have been promoted, they have been identified in this country as synonymous with practices at the highest level of evidence. Given that these constitute a very small subset of services, and as such, serve a small number of the population in need, this has raised questions about the validity and utility of the majority of services that most adults and children needing mental health services currently receive. The response has been to create other labels such as “promising” or “emerging” practices, or “practice-based evidence” to define programs and interventions that define services which do not meet the criteria for EBPs but still have some evidentiary support that they produce positive outcomes. In most cases, the evidentiary support does not exist because research has not been conducted or supported to test interventions to meet the criteria of the highest levels of evidence. That is, these interventions could potentially be proven as EBPs, but the verdict is still not in. If a continuum of evidence was introduced as a concept, then many of the interventions would be recognized as having some evidence, but not the highest level. In many cases, interventions at these lower levels of evidence would be the best information available (and, in that sense, the best “evidence” we have) to produce certain outcomes for certain problems in specific populations.

Also, the definition of EBPs as practices or interventions at the highest level of evidence also creates a sharp divide between EBPs and other interventions. The notion of levels creates a hierarchy but also establishes the need and importance of other practices. This dichotomy between EBPs and other services has also created confusion so that EBPs are viewed as a new approach to invalidating other approaches. For example, in children’s services, EBPs are seen by some as being antithetical to the system of care approach. In reality, a range of services are embedded in system of care, and EBPs extend this range, being applied appropriately where needed. EBPs are complementary and increase the effectiveness of the system of care approach rather than negate it.

Lesson 3: EBPs should be integrated into the existing array of services, and into other management and quality improvement functions

Necessarily, as EBPs are introduced, they are usually separate from other programs and interventions because staff must be trained and supported so that the organization can incorporate the skills and technology needed to provide the practice. Often, this is the nature of the demonstration projects and the start-up phase for any innovation.

The inherent danger is that EBPs remain on a separate track and that this isolation results either in attrition in quality or fidelity or in vulnerability at times of funding cuts or changes in leadership. Once skills are developed, it is important for EBPs to be integrated into the service array so that they are a practice like others which are available to persons for whom they are appropriate. If a small group gets the EBP, but another group needing the EBP gets some other intervention, this duality usually results in an eventual move in the direction of the lowest common denominator, eroding the potential impact of the EBP.

Critical aspects to support the incorporation of the EBP into business as usual are integration into the information system and with quality management. From an information systems perspective, appropriate data elements for the EBP are needed and outcome reports for persons receiving the EBP can inform clinical and administrative decisions.

For EBPs, tracking whether they are being provided in a manner that is true to the model which research proved to be effective – whether there is “fidelity” to the model – is a critical component of EBP implementation. While it is critical, it is also staff intensive and expensive. So many organizations and programs give fidelity minimal attention. This generally results in a gradual erosion of fidelity to the model.

Hawaii’s system for children is a model for the incorporation of EBPs into the larger array of services and interventions. A broad based stakeholder group reviews the literature on a regular basis and proposes interventions for incorporation into a service matrix; the service matrix identifies the problems and populations for which the EBP research has been validated; outcomes tracking and feedback are key components; and only when expected outcomes are not being achieved does the monitoring of fidelity get triggered. This does not preclude training and programmatic independence for specific EBPs; it does create the expectation that science will inform practice, not in a piecemeal but in a systematic, systemic fashion.

Lesson 4: Financing of EBP implementation must be clearly identified

Many EBP initiatives are started as the result of grants or demonstration projects and then erode or evaporate as funding sources are no longer available. Identifying sources of funding for the EBP is a task both at the provider organization and state levels. Creative management at the organization and state levels can result in the creation of new funds or in the diversion of funds from programs that are not producing expected outcomes to EBPs. For example, one state over time was able to direct its budget for day treatment programs to supported employment programs.

Billing codes for the EBP need to be developed so that providers can recognize how they can be reimbursed for the services. This is often not an issue during the demonstration project phase, but must be addressed if the EBP is to be sustained over time. Often, federal funding sources such as Medicaid will allow reimbursement for EBPs or components of EBPs. At the policy

level, however, these regulations are permissive rather than automatic. Medicaid is a federal-state partnership and for an EBP to be covered by Medicaid, it must be in the state plan. This again is an issue of alignment across the different levels of EBP implementation.

Lesson 5: Leadership is key to successful EBP implementation

As the previous lessons indicate, the implementation of EBPs in a sustained way requires the alignment of perceptions, resources, and clinical and management practices. Leadership at different levels is key to making this happen.

The chief executive officer (CEO) is a key player in moving EBP initiatives forward. The CEO must be the carrier of the message that EBPs are a high priority and that their introduction is the beginning of a new era for the organization, involving change and adjustment to current ways of delivering services and conducting business. The CEO is the key “marketer” of EBPs within the organization. At the same time, clinical and program leadership must also be visibly aligned and supportive of this direction. Supervisors need the requisite training and it is critical that consumer, family member and advocate leadership are informed and participate in decision-making related to the change process.

Barriers will arise. Resistance to change should be expected, and is part of the process of introducing innovation. Recently, change management tools used in the corporate world are being introduced to mental health systems to facilitate EBP implementation. Perhaps the most critical role for leadership at different levels is the creation of realistic expectations. The more alignment there is of such expectations, the more likely that EBPs will be successfully implemented.

Lesson 6: It takes an evidence-based culture to implement an evidence-based practice in a sustained way over time

As these lessons suggest, EBPs are not implemented by just providing training to practitioners. Practitioners need adequate administrative and implementation supports; organizational functions need to be modified; change must be managed; regulations, funding mechanisms, and policies must be reviewed and adjusted. Ultimately, the introduction of EBPs reflects a commitment to state-of-the-art quality care, and to assure that this objective is met, the different lessons reflected in this report need to be considered and addressed.

This broad systemic adjustment to facilitate EBP implementation is what is being referred to here as an “evidence-based culture.” Essentially, an evidence-based culture provides a context for successful EBP implementation by emphasizing an outcomes-based, data-based, consumer and family member-responsive, quality orientation. An “evidence-based culture” promotes the notion that EBPs are implemented with fidelity but also allows for adaptations (in a context where outcomes are monitored) and other practices that are considered promising or emergent. An important aspect of an “evidence-based culture” is that it not only uses science to promote practice but also provides a context in which new knowledge is generated to inform science. The ongoing implementation of EBPs and the development of new EBPs and promising practices are contingent on the development of such a culture.

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