Challenges in the Implementation of Evidence-Based Mental Health Practices for Birth-to-Five Year Olds and Their Families

Issue Brief Based on National Think Tank on Evidence-Based Practices in Early Childhood

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CALIFORNIA CENTER
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Authored by:
Karen Moran Finello, Ph.D.
Patsy Hampton, M.R.A.
Marie Kanne Poulsen, Ph.D.

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Overview

A growing emphasis on evidence-based approaches in mental health has lacked a focus on children under the age of five due, in part, to a fairly recent acknowledgement of this population's need for mental health services. To explore the controversies and concerns that exist around adoption and implementation of evidence-based mental health practices with young children, Project ABC, an early childhood system of care project funded by the U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA), conducted a day-long Think Tank in Long Beach, California on February 2, 2011. The Think Tank was focused on issues of evidence-based mental health practices for very young children (birth to five), with a special emphasis on children birth to three. Project ABC organized the Think Tank with co-sponsorship by the WestEd Center for Prevention & Early Intervention and First 5 California. The program was designed to 1) deepen participants' understanding of the complexities of implementing mental health evidence-based practices (EBPs) for infants and very young children and their families, and 2) contribute to the national dialogue about the implementation challenges of evidence-based practices in order to guide practice and policy decisions.

Participants included national leaders in evidence-based practice, researchers, program administrators, state and county agency leaders, clinicians, family members, trainers, EBP developers, policymakers, and funders. This facilitated event provided an opportunity for experts from across the nation to engage in an important dialogue about issues around adoption and implementation of evidence-based mental health practices for very young children and their families. It also afforded participants an opportunity to listen and consider how to apply the work in California and across the U.S. Among some of the important topic areas addressed were:

1) Defining EBPs;

2) The role of culture and family choice in EBP implementation and use;

3) Challenges to implementation of EBPs with very young children and their families;

4) Workforce issues;

5) Barriers to delivery;

6) Policy issues; and

7) Resource allocation.

Introduction

The Growing Influence of Evidence-Based Approaches in Mental Health Service Delivery

Using available research evidence to determine best approaches to treatment has been an important part of the physical health care system for many years; however, it has not been well applied in the behavioral health care system until fairly recently. As demands for more outcome research and accountability have increased, mental health providers have sought treatment practices that meet such demands. At the same time, funding organizations, including insurance groups, have begun to require practitioners to utilize evidence-based programs in order to be reimbursed for services. These factors have led to an explosion of evidence-based approaches encompassing manualized treatment programs and other strategies that have "proven efficacy." However, the majority of evidence-based programs that currently exist in mental health have not focused on very young children, primarily because treatment of this age group has only recently begun to be recognized as important. Consequently, the range and availability of evidence-based programs becomes increasingly restricted as the age of the client served decreases.

In addition, often there is a disconnect between the original intent of the evidence-based practice movement and its application by funding organizations. The push by policymakers to quickly replicate "proven programs" rather than spend years determining what might work (McCall, 2009) has been driven by cost concerns and a lack of full understanding of the key components necessary for adoption and implementation of evidence-based practices. As Bauer (2007) succinctly points out, three essential elements formulate the knowledge and action needed to guide clinical decision-making regarding the concept of EBP and treatment approaches: 1) the best evidence domain; 2) the clinical expertise domain; and 3) the client domain (incorporating unique client preferences, concerns, and expectations).

Advocates of evidence-based approaches did not anticipate the blanket adoption of single evidence-based program models with all clients receiving a similar array of services regardless of their concerns or preferences. However, to date, no alternatives to mandatory adoption of selected EBPs have been offered to the federal government, state decision-makers, or other funders. Such

information, including how to incorporate the needs of families and communities, the element of professional judgment, and the need for engagement in the adoption of evidence-based practices is important in decision-making at all levels and should be readily available as EBPs are considered for adoption.

The science related to certain interventions is increasing; however, that information has not translated well to decision-makers and is not always integrated in ways that are acceptable to clinical providers working in circumscribed arenas. Policymakers, organizational leaders, funders, service providers, and community members must understand exactly what is being proposed and why. It is important to build decision-making frameworks that address the realities of resources, implementation, and fidelity and that include clear and measurable goals and outcomes. Any decision-making framework must articulate its rationale in a simple way; include a participatory process involving families, clinicians, and community members; and ensure that all of the important issues have been considered. The evidence-based frameworks for clinical work also must have sufficient flexibility to meet family and community needs.

This Think Tank focused on both broader issues around evidence-based practices and the specific challenges to adoption and implementation of EBPs with children under the age of five with a special emphasis on the birth-to-three population. It is essential to consider the unique concerns raised by the identification of mental health needs in very young children when viewing evidence-based approaches designed for use with this population. These issues are addressed briefly in the following section.

Unique Issues Important to Evidence-Based Mental Health Practices for Infants, Toddlers, and Preschoolers and Their Families

There is now wide recognition among early childhood development experts that mental health problems can occur in early infancy and that these problems demand community infant-family and early childhood mental health services and supports (New Freedom Commission on Mental Health, 2003). Between 9.5 and 14.2 percent of infants and young children birth to five

experience social, emotional, and behavioral problems that harm their functioning and development (Brauner & Stephens, 2006). Preschoolers are expelled at a rate three times higher than kindergarten to twelfth-grade students (Gilliam, 2005). Young children with family risk factors relating to substance abuse, maternal depression, or domestic violence are two to three times more likely than children without these family risk circumstances to experience problems with aggression, anxiety, depression, and hyperactivity (Whitiker, Orzol, & Kahn 2006).

Despite significant need, only in recent years have community mental health agencies provided treatment for children under age five, with even fewer services for children under age three. Infant-family and early childhood mental health service delivery requires a paradigm shift from the community mental health model. This shift requires considerable practice modifications in terms of engagement, assessment, diagnosis, treatment models, location of treatment delivery, and provider training. In addition, manualized early childhood mental health treatment programs frequently do not include comprehensive evidence-based infant-family and early childhood practices such as parental engagement; comprehensive family-centered psychological, developmental, and neurobehavioral assessment; diagnostic formulation; and reflection on treatment options. In general, the number of evidence-based mental health practices diminishes as the age of the population decreases. This is a concern as funders and organizations shift to a primary emphasis of evidence-based approaches and funding services.

Considerable research has underscored the impact of nurturing experiences on the infant's developing brain, attachment, and the regulation of behavior and has supported the view that the quality of infant and young child relationships provides the basic foundation for healthy social, emotional, and behavioral development (National Scientific Council on the Developing Child, 2004). Parents, thus, are a critical determinant of child well-being, and mental health services are best provided within the framework of parent-child relationships and the circumstances that influence those relationships. The dyadic nature of early relationships evokes the critical necessity of addressing parental well-being as an essential component of early childhood mental health services (Shonkoff & Phillips, 2000). The infant-family and early childhood mental health philosophy address-

es dyadic treatment within a context of developmental guidance, emotional support, and concrete assistance to the family (Fraiberg, Adelson, & Shapiro, 1975).

In addition, infants and young children are profoundly affected by biological and psychosocial circumstances that frequently require interdisciplinary approaches to address attachment and regulatory issues. The hallmark of an infant-family and early childhood mental health system of care includes the integration of neurobiological, developmental, and relationship perspectives into family-centered, strength-based mental health services (Center on the Developing Child, 2010). The National Center for Childhood Poverty delineates the context that calls for the use of evidence-based strategies as addressing "the child, his/her family and their environment" (Cooper, Masi,& Vick, 2009, p.10). It is within this paradigm shift that evidence-based practices for very young children and their families need to be selected and implemented.

Critical to the provision of mental health services is an understanding of the culture and circumstances of families and communities served. Most evidence-based treatment programs do not adequately address infant-family and early childhood mental health needs when the children and families are dealing with the types of multiple and co-morbid conditions that families from diverse populations frequently experience (Isaacs, Huang, Hernandez, & Echo-Hawk, 2005). If we examine research related to early childhood development and use it as a principle for EBPs, we must address the complexity of family lives, family stressors, and community/neighborhood stressors (toxic stress) in order to work with families and build relationships between young children and their caregivers. Research-based methodologies need to be examined and selected in the context of cultural values and other social factors, such as class, race, ethnicity, and community.

Defining Evidence-Based Practices

Various professional organizations have developed wide-ranging definitions of EBP to meet the needs of specific disciplines. To better meet the needs of the infant-family and early childhood field, we must do more than develop a definition of EBP. In many cases, programs described as "evidence-based" may be either research-validated best practices or field-tested best practices. Further, a program, an activity, or a strategy

may be considered a practice, or a broader view may be taken, defining a practice as an approach. The U.S. Department of Health and Human Services Administration on Children, Youth, and Families provides an excellent chart summarizing the key differences between research-validated best practices, field-tested best practices, and promising practices (http://www.acf.hhs.gov/programs/ocs/ccf/about_ccf/gbk_bp/bp_gbk_ov.html). It is important that organizations examine criteria to determine fit to community needs and also explore options that may exist in promising practice approaches for very young children in light of the limited number of EBPs that exist to meet the mental health concerns of children under age five.

Think Tank participants discussed extensively the range of existing definitions of EBPs (e.g., evidence-based programs, evidence-based therapies, evidence-based approaches, and evidence-based practices) and decided to apply the broad definition of practices as approaches rather than specific programs to encompass a wide range of issues. Thus, the discussion throughout the day was framed around issues of practice, including family-driven implementation, family-driven policies, and culturally sensitive, community-based values incorporated into practices. Throughout this paper, EBP will refer to evidence-based practice unless otherwise specified.

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Definitions of Promising and Best Practices
(http://www.acf.hhs.gov/programs/ocs/ccf/about_ccf/gbk_bp/bp_gbk_ov.html)

Research-Validated Best Practice
A program, activity, or strategy that has the highest degree of proven effectiveness supported by objective and comprehensive research and evaluation.

Field-Tested Best Practice
A program, activity, or strategy that has been shown to work effectively and produce successful outcomes and is supported to some degree by subjective and objective data sources.

Promising Practice
A program, activity, or strategy that has worked within one organization and shows promise during its early stages for becoming a best practice with long-term sustainable impact. A promising practice must have some objective basis for claiming effectiveness and must have the potential for replication among other organizations.

Developing Effective Systems of Service
International literature has identified four interlocking pillars (Davis, 2005) that should be present for an effective system of service:

Evidence-based practices or programs that are triaged to identify those that are efficient and cost-effective and that can be understood in terms of culture, sensitivity, and value.

Personnel who are trained and supported by higher education and bring quality, follow-up, and mentoring that may include universities and community colleges.

Tracking, evaluation, and monitoring that asks:
How was the practice implemented?
What were the outcomes?
Were outcomes documented and disseminated?

Legislation and policy (including regulations and guidelines) to uphold the system one wants to create and to include the infrastructure where the braiding of policy and funding can occur to some extent.

The Think Tank addressed these broad pillars, and specific discussion, including suggestions for change, is included within this issue brief along with supporting information from the literature.

Summary

When infant-family and early childhood evidence-based treatment models are introduced, implementation becomes exponentially complex due to the nature of the sample and the type of practices required. It is critical to broaden the discussion in early childhood from evidence-based programs to evidence-based practices in order to best meet child, family, and community needs. Serious consideration must be given to the provision of mental health services to children under age five as well as to the selection and implementation of effective and appropriate early childhood evidence-based practices.

Selection of Evidence-Based Practices

A critical question raised by Think Tank participants was "Should all agencies serve all ages with EBPs or specialize and refer, particularly when they are small and unable to provide multiple models?"

Selection is the first phase of effective adoption, implementation, and sustainability of evidence-based practices. Leading experts on implementation such as Fixsen (Fixsen et al., 2005; Fixsen & Blase, 2009) indicate that 90 percent of efforts typically are aimed at selection, with only 10 percent remaining for the initial implementation, ongoing implementation, and adaptability/innovation phases. To maximize the efficacy of EBPs, we must move beyond selection and adoption to a more systematic process involving adequate planning and evaluation of all phases of implementation and the outcomes seen (McCall, 2009). The true heart of successful adoption lies in evaluating the implementation of programs, yet not enough time is spent doing so. Both Fixsen and McCall state that multiple cohorts of participants (at least two or three) are needed to understand, through an implementation process, what needs to be refined in order to achieve higher levels of success. Technology transfer alone is not adequate to assure that agency capacity is built. The organization must be ready to utilize training and technical assistance and be committed to the implementation process fully. It is critical that the entire implementation and evaluation process be fully supported by funders and studied to help avoid pitfalls and improve the procedures contributing to lasting outcomes for very young children and families. As Fixsen (2005) and his colleagues point out, just *choosing* well will not help a community to *implement* well.

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Most evidence-based practices are delivered within an organizational context; therefore, considerable thought should be given to the selection process for that organization. Scientists cannot decide what will work in a particular family. Funders who impose evidence-based practices on their grantees may not be looking at how

- Elements to consider: referral characteristics, location of services, fit to family/child need, costs of implementation
- Barriers may include workforce issues, agency size, costs, organizational supports available
- Planning must include organizational buy-in, community input, provider input
- What are the desired outcomes/changes?

families and communities may be affected. The process for decisions about adopting specific evidence-based practices must be participatory and include community organizations, family members, service providers, researchers, policymakers, funders, and agency leaders who are respected, see all sides, and can translate information into understandable language for all participants. The selection decision criteria should include analyses of factors such as whether the organizations involved are culturally sensitive and competent; if they are hiring qualified clinical staff; if they are able to support the staff through ongoing trainings and reflective supervision; and if they are respecting and using a strength-based family approach.

Just as with treatment for physical health concerns, mental health practitioners and organizational leadership should be aware of which mental health practices contribute to better-demonstrated outcomes for a given population. The best available interventions may not work for everyone, but they should be understood and examined. Clearly, it is important for agencies and communities to properly identify the desired outcomes of any program during the selection process. These should be measurable outcomes that can be obtained in a reasonable fashion. If the design is too complex, adequate information cannot be generated and no one will be satisfied. Therefore, there should be an initial effort to choose one or two measurable objectives and focus on iterative approaches to measure effectiveness in reaching those objectives. Once progress is made, a decision can be made to move on to the next set of measurable objectives. Initially, objectives selected should be concrete and measurable and have enough impact to cause change. Over time, data collection elements may become more complex in order to better capture the complex changes

within families that result from interventions such as changes in caregiver expectations, attributions of the child, changes in child behavior, whether engagement is most effective in a home-based or center-based setting, other family changes seen over time, and provider/ organizational characteristics that promote positive outcomes. Longitudinal research is important to ensure that both baseline information and long-term indicators (i.e., altered brain development and long-term societal impact) are documented. It also is important that hard-to-engage populations with complex issues be included in studies, despite concerns about attrition. This is the only way to ensure that research has incorporated the range of families and challenges that are addressed daily by clinicians in many community organizations. Such strategies also may allow for measurement of promising practices by ensuring that evidence of efficacy with a range of issues is being captured.

Documented effectiveness basically indicates that a program has undergone some degree of evaluation and has been found to have positive effects. The goal of early childhood leadership should be to determine what those effects are and if they are a good match to the needs of the agency adopting the program, which should be a reflection of the needs of the children and families served by that agency. fIt is important to develop wider research applications to determine how flexible adaptation can be before such goals can no longer be met. Research-informed practice is critical to address variations and a continuum of practice. Groark and McCall (2008) call for an analysis of the crucial elements of an EBP that are essential for its use and identification of those elements that can be adapted to local needs. In other words, how can research-based evidence be incorporated into practices that meet unique family and community needs?

Further, it is essential that individuals involved with decision-making about EBPs understand some basic research realities including the fact that exact replication of developed programs always is a myth. Different people interpret and implement the design and personnel themselves may have been critical factors in efficacy of the original program, making it difficult to replicate. Fixsen and his colleagues (2005) point out that replicated programs rarely are as effective as the original due to a variety of factors such as personnel characteristics of the original creators or the fact that elements of the program may have been adapted to better meet child and family needs or to conform to local regulations, beliefs, practices, and resources. Unfortunately such ad-

aptations are not usually examined, based on common beliefs that replicated programs are "proven programs" (McCall, 2009). Rather than talk about "proven programs," we should describe "relatively demonstrated" value. Further, all implementation should determine the specific goals and then address realities of resources, workforce, fidelity, and family/community fit.

When first envisioning the integration of a new evidence-based practice into an organization, a strategic plan or logic model can be used (Terzian & Moore, 2010). Additionally, the organization needs to decide on the practical mechanisms of how information will be shared and services provided. An area to consider is the dosage of treatment and whether there is an opportunity to triage to provide services for certain populations. The planning should include background on the community and a variety of cultural backgrounds should be represented in the planning process (Isaacs et al., 2005; Blase & Fixsen, 2003). Guidelines need to be created within communities for selection of appropriate intervention practices. A diagnosis should not be the reason to treat with a specified model; rather the combination of clinician judgment; family needs and preferences; and known treatments should lead to the choice of treatment model.

> Planning should include creating new operating policies and procedures, securing funding for the changes, and arranging physical logistics.

In summary, a community or organization needs to choose the infant-family and early childhood evidence-based mental health practices that best meet the needs of the families they serve and that are a "good fit" to achieve the mission of the program (Metz, 2007). Multiple circles of influence should be considered, including the values and culture of each family, the existing resources and programs in the community, and the qualifications and skills of the workforce (Chintz & Briggs, 2009). Change is not easy and requires deliberate and comprehensive planning to have a chance to succeed (Fixsen et al., 2005). Organizations must ensure that implementation of this EBP is feasible for them in that they have the funding and workforce capacity. Planning should include creating new operating policies and procedures, securing funding for the changes, and arranging physical logistics.

Personnel Considerations in the Selection of Evidence-Based Practices

"Child-parent psychotherapy is a complex treatment that calls for expertise in multiple areas including trauma theory and infant mental health. In our Los Angeles dissemination efforts in general we see more rapid uptake of the model among clinicians who have a strong background in infant mental health, in particular among those who have previously conducted dyadic and family treatments. However, other clinicians who have both the motivation and the institutional support to fill gaps in learning have made incredible strides in their ability to learn the model."

— Chandra Ghosh Ippen, PhD, Associate Research Director, Child Trauma Research Program, University of California, San Francisco

Evidence-based practices rely upon research-based evidence "integrated with professional wisdom, clinical expertise, and professional and client values" (McCall, 2009, p. 7). How do we ensure that professional wisdom is adequately addressed when EBPs are adopted and during their full implementation/adaptation period? How do we ensure that the full costs of the selected EBP have been considered?

Personnel issues are critical to examine since much of the success of implementing any EBP depends upon the expertise of the professionals involved. Selection of EBPs focused on children under the age of five requires a careful examination of competencies and qualifications within the available workforce. Professionals providing treatment and interventions must have basic knowledge in key areas such as those outlined in the *California Training Guidelines and Personnel Competencies for Infant-Family and Early Childhood Mental Health, Revised* (California Center for Infant-Family and Early Childhood Mental Health, 2009; http://www.ecmhtraining-ca.org for details). Knowledge domains included in the *Guidelines* are parenting, caregiving, family functioning, and parent-child relationships; infant, toddler, and preschool development; biological and psychosocial factors impacting outcomes; risk and resiliency; observation, screening and assessment; diagnosis and intervention; interdisciplinary collaboration; and ethics. The depth of required knowledge in these domains depends on the role of the professional and the type of intervention to be provided. In other words, professionals involved with the promotion of infant

and early childhood mental health will have a different level of professional preparation than will those involved with dyadic treatment.

It is generally agreed that EBPs demand different levels of clinical expertise, judgment, and adaptation. Clearly a beginning practitioner should not be expected to move immediately to the most complex type of treatment program but should first develop a solid grounding in more straightforward interventions. Some manualized treatment programs, including Incredible Years (http://www.incredibleyears.com) or Parents as Teachers (http://www.parentsasteachers.org), may offer training to teachers, early intervention specialists, and other allied health providers, while treatment practices such as Child-Parent Psychotherapy (http://www.childtrauma.ucsf.edu/) rely upon mental health backgrounds requiring greater clinical skills and judgment. The latter demands an advanced level mental health practitioner with a solid understanding of trauma and its impact on development.

During the Think Tank, participants strategized about how to develop core competencies for mental health practitioners and to assist clinicians with devel-

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oping more advance intervention strategies. First, the professional must develop core competencies. Next the professional would build upon core competencies in order to develop basic intervention strategies and skill sets with common elements across a variety of EBPs. A later step in professional preparation would be development of specialized skills required by specific evidence-based programs.

In selecting EBPs for use within an organization, it is critical to examine personnel qualifications and characteristics and their fit with the proposed practices. The effective use of resources involves matching the requirements of the EBP to the experience and interests of the clinicians and the internal resources of the agency available to support ongoing infrastructure costs. These necessary resources include, at a minimum, examination of the existing skills in current staff, plans for the re-training of personnel to fit the mandates of the EBPs being adopted, plans for ongoing training to deal with staff attrition, personnel available to provide ongoing reflective supervision, and other basic infrastructure costs such as materials required, space configurations (e.g., building one-way mirrors for observations), and reduced caseload requirements to deal with training and supervision needs. The goal of EBP implementation with very young children should be the provision of the highest quality services possible, even if this requires reducing the number of young children and families served.

Implementation

"Our experiences in Los Angeles have taught us about the importance of flexibility in the adoption and implementation of EBPs for very young children. I believe that it is very important to evaluate the implementation process and make any changes that are needed to best serve families, the community and agency professionals working to provide high quality services. It is important to ask what we did well and what we did poorly and to be willing to make changes when they are in the best interest of young children."

— Marvin J. Southard, DSW, Director, Los Angeles County Department of Mental Health

Implementation begins with the recognition that there is a need to do something differently. Fixsen and his colleagues (2007) identified key questions to consider when beginning the implementation process. These include:

- What new innovative practices already exist that might help solve that problem?

- What changes will be needed in the provider organization to allow full and effective use of the new practice?

- What changes must be made in partner organizations including federal, state, and local bureaucracies to make full and effective use of the new practice?

- What are the costs of start-up and ongoing support?

- What data systems must be in place to monitor intended changes in consumer outcomes and organizational and bureaucratic supports?

A salient issue in the implementation of evidence-based practice is that a commitment to the selection of rigorously researched mental health treatment practices is but the initial step along the "science-to-service" continuum. Fixsen et al. (2005) define implementation as "a specified set of activities designed to put into practice an activity or program" (p. 5). Walrath, Blase, and Kanary (2008) further differentiate implementation, explaining paper implementation and process implementation versus performance implementation. Typi-cally, both paper and process implementation are the most widely used implementation processes in many organizations, following initial selection of EBPs. High levels of resources are typically committed to these types of implementation with little sustained effect. Paper implementation usually involves the creation of organizational policies and procedures designed to be followed and documented but with little effect on clinical outcomes. Process implementation also is common, with clinicians required to attend trainings about an evidence-based program and how to use new procedures and language reflecting the program, but again, leading to little or no positive beneficial changes in clinical practices. It is no surprise, then, that researchers are calling for the addition of performance implementation designed to ensure a process that actually results in changes in desired clinical outcomes over time (Walrath et al., 2008).

Successful implementation requires the stage to be set within the community and within agencies to adopt infant-family and early childhood evidence-based mental health practices. As Blase et al. (2009, p. 14) note, "implementation involves installing the infrastructure and processes needed to initiate and sustain effective services over time and across practitioners." Therefore, critical implementation elements involve targeted parent involvement, practitioner selection, training, coaching, performance evaluation, program evaluation, administrative supports, resource allocation, and policy. Groark and McCall (2005) provide an excellent overview of the general characteristics of effective programs including program characteristics, personnel characteristics, and participant characteristics. They note the im-

portance of "reasonable enthusiasm" in implementation by clinicians who did not create the programs themselves. McCall (2009) points out that organizations and policymakers should not assume that replication will lead to outcomes that are comparable to those seen in the original model because of personnel characteristics and participant characteristics that may have been critical to program efficacy and local adjustments that may alter efficacy. Clearly, early mental health demands the combination of adoption of effective intervention practices coupled with effective implementation. However, in order to begin thinking about successful implementation, we must ask whether clinicians have the expertise to effectively implement practices and whether organizations have the needed leadership and adaptive and technical skills required for implementation. Fixsen noted during the Think Tank that only about 20 percent of people and organizations are ready for change, but the other 80 percent cannot be abandoned. If only 20 percent of people and organizations are ready for change, how then can individuals and agencies be prepared for these new ways of work?

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Education, practice, and time are required for clinicians and agencies to become proficient and at ease with any new practice. There is an initial phase of implementation that encompasses basic training, modifications to the agency environment, adoption of new supervision models, and adaptation of client families to new processes. Following the initial phase, there is a lengthy period during which an agency continues to adapt to required procedures of evidence-based practices. During this phase, retraining is required to deal with clinician/staff attrition; research procedures should be established to evaluate ongoing change and efficacy of practices; new approaches to family engagement may be utilized; and a range of organizational supports are required to support the materials costs, training costs, supervision, and to overcome barriers that become apparent as the newness dissipates.

Implementation measures should be aligned with organizational and practice levels and should include measures for new procedures and operating structures that are utilized to directly support the adoption of the EBP. Agencies have a responsibility to monitor the fidelity of treatment and outcomes of clients. There is a concomitant need to support therapists and supervisors who are adapting to changes of a new evidenced-based approach. A significant implementation challenge is to provide for the multiple indirect (i.e., not billable) activities required in many EBPs. Practitioners and supervisors need continued reduced caseloads in order to be given the time to problem-solve and adapt to using the particular evidenced-based program and its related responsibilities. In addition to staff support, continuous monitoring and evaluation is necessary to ensure the practice continues to be implemented as intended. "Implementation for impact" should be the goal for all programs implementing an evidence-based practice (Metz, Blase, & Bowie, 2007). Effective evaluation requires designated personnel to collect and enter the data and develop a plan for how the data will be used and who will use it. The evaluation plan should demonstrate a design for a feedback loop to inform continuous improvement as well as a structure for determining how and if outcomes are met. Organizations need to be intentional about the data they need and how to most efficiently collect and use it to create and sustain change.

The second part of implementation is the innovation/adaptation phase. Typically, at least several years of implementation are required to evaluate program challenges and successes. Specific modifications may be necessary due to changing demographics, clinician attrition, changing organizational needs, and priorities. Data gathered during the mid-stages of implementation may be useful in determining what is working and what is problematic. Families should be involved as part of advisory groups to provide feedback and direction to the evolving practices. Consultation with developers is needed as adaptations are considered and piloted.

Fixsen and Blase (2009) point out that implementation is not a linear process; instead, factors within each stage impact other factors and other stages in a complex manner. The authors provide an example of an organization being forced to move from full implementation back to initial implementation because of staff attrition. Further, they describe the limited capacity of most program developers to deliver their programs on the wide scale needed for ramping up beyond the local

level. Many of the developers of EBPs are clinician-researchers who hold significant responsibilities for direct services within their own organizations. Consequently they have limited time available to meet simultaneous requests for initial training and ongoing coaching of hundreds of clinicians in organizations across the country. High quality "train the trainer" models are needed for all EBPs.

The more often an evidence-based practice is used, the more likely it is that the validity of each component will decrease and result in imprecise practices. Therefore, we must ask: What set of principles is likely to lead to program effectiveness? Furthermore, what level of flexibility is acceptable? How can a program be created that fits with the family, provider, and community environment and be implemented within reasonable principles? If all components are not specified, is the practice truly evidence-based? The issue of fidelity becomes critical when program adaptations are made without documentation or consultation with the original program developers. As McCall (2009) notes, monitoring implementation beyond its initial stages may help to determine both fidelity of replication and whether the outcomes achieved are as effective as the original program.

> How can a program be created that fits with the family, provider, and community environment and be implemented within reasonable principles?

Additionally, there is a potential tension that exists in regard to fidelity adherence to particular evidenced-based programs. This involves the tenets of the Institute of Medicine (2001) and the American Psychological Association (2005), which indicate that the incorporation of research must not be in lieu of clinical expertise and consumer values/choices. When the referring problem is presented within a context of multiple child and family stressors, clinical judgment, combined with parent voice, is needed to set priorities, choose and adapt the evidence-based program, and identify ancillary services and supports. Two issues are particularly important to infant-family and early childhood mental health: 1) within an agency, there are licensed therapists with a diverse range of academic and clinical preparation, and 2) practitioner selection must be made in relationship to the practitio-

> We need to build community capacity (McCall, 2009); identify critical elements that should not be changed when EBPs are adapted within local settings (Grossman, 2009; McCabe, 2009); and be prepared for costs beyond the initial training of clinicians on new approaches. Continuous monitoring and evaluation are necessary to ensure program success.

ner's baseline expertise in the field of infant-family and early childhood mental health. California and Michigan have developed infant-family mental health training guidelines and an endorsement process that ensure the underlying expertise needed to give context to any particular evidence-based program.

A clear difference exists between science and implementation. What matters for implementation is the clarity with which a program is described and the extent to which core interventions are "operationalized"— meaning that they are teachable, learnable, and "evaluable." It is important to understand the realities of implementation, including the fact that documenting and replicating every element (e.g., staff experience, caseloads, types of homes visited, driving distance between them, rural or urban settings) is all but impossible. According to Fixsen and Blase (2005), usability requires about 50 attempts to implement a practice in an organization in order to learn how to support that approach in real community settings as opposed to the single approaches to implementation seen in typical randomized control trials.

How can evidence-based practices move from developers to the community in ways that fill the research-to-practice gap and still maintain community values? Currently, most agencies are attempting to implement evidence-based practices with non-evidence-based procedures. The practitioner is expected to adopt evidence-based practices and balance key elements crucial to the success of the program— a set of principles likely to lead to program effectiveness. Feasibility must include descriptions of critical service elements along with the processes entailed, workforce requirements, and costs (McCall, 2009). In other words, it is essential to go be-

yond simple "replication" of programs to examine the implementation processes seen within local communities. Such examination would allow early childhood leadership to provide policymakers and funders with richer descriptions of both general and specific characteristics that exist in programs that have succeeded in meeting clinical objectives, along with a theory of change that could aid in understanding why programs work (or do not work) within selected communities (McCall, 2009). In order to improve the research-to-practice gap, Fixsen, McCall, and others call for the development of communities of practice, comprised of both clinicians and researchers, and the infusion of front-line expertise and experience.

We need to build community capacity (McCall, 2009); identify critical elements that should not be changed when EBPs are adapted within local settings (Grossman, 2009; McCabe, 2009); and be prepared for costs beyond the initial training of clinicians on new approaches. Continuous monitoring and evaluation are necessary to ensure program success.

Barriers to Delivery and Challenges to Implementation with Very Young Children and Their Families

The challenges of implementing EBPs are compounded when addressing the needs of infants and young children and their families. Infant-family and early childhood mental health focuses on relationships, requiring that practitioners address the vulnerabilities of all family members. Currently there is a dearth of evidence-based mental health practices designed to address child neurobehavioral and developmental status, the vulnerabilities of each family member, and the complexities of family and community life. Circumstances that need to be addressed are glaringly absent from many evidence-based treatment programs. Interdisciplinary/interagency perspectives are needed, yet there may be difficulties in both establishing such collaborations and receiving reimbursement for them in many communities. The complexity of family needs may require triaging of services and the infusion of multidisciplinary perspectives that may be critical in prioritizing multiple needs within families.

The following questions should be addressed:

- Can we better identify very young children and families needing the most intensive levels of services, including those that are most draining for clinicians?

- How can families of very young children with mental health needs be triaged, especially in tough economic times?

- How can we work with families to prioritize responses to multiple needs?

- How can interagency collaborations reduce existing barriers in service delivery?

An additional issue is the role of culture in the lives of families and communities. Cultural and familial expectations of infant and very young child behavior are extremely varied and complex. This calls for a heightened sensitivity by professionals to the cultural values, expectations, and preferences of the families served, all of which may impinge on the fidelity demands of a manualized treatment program. Many cultural competence experts believe that an over-reliance on evidence-based programs may lessen attention to cultural issues and exclude effective traditional healing practices (Isaacs, Huang, Hernandez, & Echo-Hawk, 2005). Walrath, Sheehan, Holden, Hernandez, and Blau (2006) have underscored the need for further investigation of the factors that influence the implementation of culturally sensitive evidence-based treatments.

Workforce Issues

During the Think Tank, three premises found in training literature were identified:

- High-quality training is an effective approach to identified solutions,

- Individuals being trained need to work in an environment where they can implement that training. If caseloads are too high and if the agency setting is not stable, training is not effective, and

- Supervision, monitoring, and mentoring are vital. Without supervisory support for complex work with very young children and their families, training is not effective.

With family-driven care, assembling a trained workforce with the requisite competencies and understanding of infant-family and early childhood mental health presents significant challenges. Families in treatment may primarily feel panic or shame and may sense that practitioners view them as an impediment to treatment, rather than a partner. Providers must begin by looking at family strengths and realize that clinicians are partnering with the family, not "saving" them. However,

it is also important to be realistic about family deficits and needs, particularly when working with infants and toddlers, birth to three. Clinicians need to be skilled at evaluating the full range of strengths and challenges seen within family lives and in discussing potential intervention modalities available.

Funding constraints affect training options and can create significant barriers to establishing and maintaining a high quality infant-family mental health work force. New programs often require a fast rollout and providers may not be trained in ways that meet programmatic needs. Trainers often must work with agencies that are not organizationally ready to implement complex practices or that may send clinicians who, also, are not sufficiently prepared. Infant-family mental health is a complex field, and the prerequisite core knowledge needed to implement many evidence-based practices is not usually included in pre-professional training programs. Although collaborations with universities and other training institutions are ideal, they often are impractical when evidence-based practices must be implemented quickly in community agencies. Consequently, plans must be made for training within both universities and community organizations.

A crucial consideration is how to design such training at both pre-professional and practice levels. Innovative activities are being created that consider different ways of incorporating EBP into clinical practice. The idea of distilling programs to isolate effective practices for clinical training is discussed in the characteristics of effective programs approach (McCall, 2009) and Dunst et al.'s (2002) characteristic and consequences approach in early intervention. For both approaches, identifying core practices of an effective program is key. The focus is, thus, replicating and tailoring each identified key practice to the organization and community. The Pathways Mapping Initiative (PMI), created by Schorr (2003), offers another alternative to integrate research with clinical knowledge from known field experts and provides a method for communities to analyze and choose practices appropriate to their needs.

Because of the complexity involved in training clinicians across many different EBPs (resulting from different requirements within different protocols, different training and supervision approaches, etc.), calls have been made for a common element approach and this was discussed at the Think Tank. The common elements seen in successful evidence-based programs (e.g., modeling, use of tangible rewards, caregiver involve-

ment) could be developed into a basic program upon which pre-professionals could be trained. Such an approach might reduce some of the concerns in the professional community around manualized treatment plans that exist in evidence-based programs. The use of common elements also may allow for the selection and use of elements based on both clinical judgment and client need and fit. Chorpita and his colleagues (Chorpita, Daleiden, & Weisz, 2005; Chorpita, Becker, & Daleiden, 2007) have discussed the benefits and limitations of such an approach. The advantage of a common elements approach, according to Chorpita et al., is the utility in guiding treatment decisions and allowing for alternate analyses of both treatment and implementation processes. However, they exert a cautionary note, pointing to some potential misconceptions around common elements such as the fact that no single common element exists across every successful approach for a problem and that common elements cannot be used in place of manualized treatments within programs because clinicians are strongly discouraged from mixing and matching such elements by program developers. Thus, although the development of a common elements approach for infant-family and early childhood mental health services may be a useful consideration, it should be approached carefully.

Bauer (2007) has expressed skepticism about any type of "evidence-based practice course" for pre-professionals since multiple skills are required by clinicians to allow them to incorporate research and clinical treatment in their pre-professional training. As Bauer points out, clinicians need to have baseline skills and it is not realistic to attempt to teach 10 different EBP models at a pre-service level. Researchers need to work with university professors who provide clinical training to analyze early childhood EBPs and map out broader principles of evidence-based practices that are required for best practice and will allow clinicians to adapt in the field. Bauer echoes Fraser and Greenhalgh's (2001) belief that it is better to educate for capability rather than competency.

On the whole, the mental health system, its policy-makers, and its funders must commit to creating and sustaining a trained workforce. Continual training, connections to universities, and a mandatory reflective supervision and mentoring component are necessary to achieve this goal. With rigid adoption of a mandated menu of pre-selected evidence-based programs, a concern is that agencies serving children under age

three (and particularly agencies that are very small and have limited staffing) may not be able to continue to provide services to this specialized age group. They may be forced to close their doors entirely or to shift to serving older children to limit the number (and associated costs) of evidence-based practices being utilized by a few clinicians within their organization. More resources/networks must be developed to fully support implementation of evidence-based practices in infant-family and early childhood mental health.

Administrative Supports

Administrative supports considered critical to successful implementation of programs include provision of adequate staff time for implementation and training; reduced caseload requirements during the phase in and training period (e.g., reductions in billing requirements within the agency); availability of appropriate materials, equipment, and facilities (e.g., one way mirrors); release time for training and reflective supervision;

> Funding for infrastructure is essential to successful implementation and sustainability of any EBP. This includes hiring a strong director, providing appropriate reflective supervision, having a data system, and evaluating changes throughout implementation.

and adequate resources to handle additional required data collection. Program directors and administrators must understand the type of specialty expertise required for successful implementation of specific mental health EBPs designed for children under five in order to recruit new staff, select appropriate existing staff for EBP trainings focused on infant-family mental health, provide consultation and coaching as needed, evaluate staff performance with attention to all components of the complex work they are doing, and provide the resources needed both for initial implementation and for ongoing program success.

Changing work routines and habits is difficult and requires time, support, and being able to practice new skills in a safe environment (Metz, 2007). All staff should be offered reflective supervision, and supervisors also must be supported as they implement these time-intensive yet critical duties while still maintaining their other duties. Reflective supervision must be provided to assist practitioners with responses to changes and to offer guidance in adhering to the model with fidelity, while documenting adaptations required to meet family culture, needs, and values.

Repeatedly, throughout the Think Tank and in the literature (Grossman, 2009; McCabe, 2009; McCall, 2009; Groark & McCall, 2005; Fixsen et al., 2005), the strong message comes across that funding for infrastructure is essential to successful implementation and sustainability of any EBP. This includes hiring a strong director, providing appropriate reflective supervision, having a data system, and evaluating changes throughout implementation.

Policy and Resource Allocation

Myriad discrete funding streams for early childhood programs exist that do not acknowledge how inextricably linked most developmental lines are. "Braided" funding and pooled resources to support early child development more meaningfully could provide more return on the dollar and streamlined services to young children and their families. California, Pennsylvania, Washington, and other states provide numerous examples of pooled funding that could be studied and applied to mental health (Brudvik et al., 2008; Washington State Department of Early Learning, 2010; and Stedron, n.d.). Active advocacy is necessary to ensure funds for the youngest children who typically do not enter through the traditional doors for mental health services. Case management triage often is necessary to keep families from needing more intensive services and should be included in funding allocations.

To some extent, accepting money from any revenue stream means accepting the controls placed upon those funds. Not enough money exists to do everything necessary. Advocates need to reach policymakers with messages about desired change, what they want

to achieve, and how they plan to get there. The state of Washington recently performed a rigorous cost-benefit analysis that led policymakers to decisions about effective, cost-beneficial practices, as well as what practices *not* to invest in (Aos et al., 2001). Similar analyses should be developed for infant-family and early childhood mental health services.

The Affordable Care Act will bring new opportunities for infant-family and early childhood mental health collaboration with other organizations and disciplines. This could include early identification of young children needing mental health services and supports, streamlined access to services, cross-training of behavioral and physical health care specialists, and early childhood mental health consultation in primary care settings. It is important that early childhood mental health professionals be strategically involved in implementation of these changes at all levels. Planning now for full implementation in 2014 will ensure that agencies are prepared to evaluate or re-evaluate the effectiveness of EBPs within the context of health care reform.

Recommendations/Future Directions

The Think Tank provided a unique opportunity for researchers, practitioners, family members, and policymakers to convene and dialogue about EBPs. In the last several years, policymakers and funders have increasingly been making decisions based on the premise that replicating "proven" programs is the accountable, research-based, and outcome-driven option. The Think Tank participants discussed more comprehensive approaches and processes needed to implement EBPs and outlined ideas and questions to further the use of EBPs in the infant-family and early childhood mental health field. The recommendations made by Think Tank participants are framed within definitions of EBPs, workforce implications, family, community, and cultural concerns, resource allocation, and policy implications.

Definitions of Evidence-Based Practices

- In infant-family and early childhood mental health, EBP is best defined as evidence-based practices rather than specific programs or manualized approaches.

- The development of advanced evidence-based practices in infant-family mental health should be built upon a solid base of core competencies and critical intervention strategies, all focused on the complexities of development in birth-to-five year olds.

Workforce Implications

- Resources should be pooled for infant-family and early childhood mental health training to create interdisciplinary training institutes and the caseloads of clinicians should be reduced so that they can attend these institutes and apply the new skills in their work settings.

- More opportunities for web-based support for training should be created, especially in locations where a sufficient number of trainers are not available.

- All agencies implementing evidence-based practices for children birth to five should be required to provide ongoing reflective practice supervision and evaluated in terms of its efficacy.

Family, Community, and Cultural Concerns

- Community-based advisory boards should be comprised of families, clinicians, researchers, policymakers, funders, and organizational leadership to reach well-informed, educated decisions about services and implementation prior to adoption of EBPs and throughout the implementation process.

- Parents should be given the opportunity to become familiar with evidence-based options in order to make informed decisions about treatment for their young children. The availability of multiple evidence-based practices can empower families and professionals alike to choose the approach that best fits individual circumstances.

- Broadening the types of providers is necessary to meet the large number of mental health challenges in young children. This should include peer-parent support, use of cultural brokers in communities, etc., with specific strategies to professionalize this workforce.

Resource Allocations

- It is critical for funders to encourage and provide funding to study the changes that organizations make to adapt infant-family and early childhood EBPs to local needs. It also is important to study the effectiveness of such variation of the EBP.

- Funding allowances for agency infrastructure must be included as a critical piece of implementation.

- There must be more funding for longitudinal research and inclusion of complex communities (despite high attrition) to continue to evaluate evidence-based practices on very young children and their families over time. Community psychologists and developmental and longitudinal researchers should be involved in the design of such research, analyses of EBP implementation, and strategic plans for future work.

- A limited number of EBPs designed for children under age three currently exist, creating limited options for both programs providing services and for family choice. More efforts must be made to evaluate promising practices that have potential to become research validated EBPs.

Policy Implications

- Federal and state initiatives should align new programs to support early childhood development in a more holistic and meaningful way. Changes to regulations need to be made in order to enable braiding of funding and pooling of resources especially to sustain evidence-base practices in small organizations and to provide for the full range of services needed by families of very young children.

- It is important to allow time for the full implementation of all processes to make the best decisions about meaningful outcomes for very young children and their families within the community context.

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CALIFORNIA CENTER
for Infant-Family and Early Childhood Mental Health

California Center for Infant-Family and Early Childhood Mental Health

1107 9th Street, Fourth Floor, Sacramento, CA 95814

(916) 492-4000

http://www.ecmhtraining-ca.org