science to service: implementing evidence-based mental health services

a guide for mental health planning + advisory councils

US Department of Health and Human Services
Substance Abuse and Mental Health Services Administration
Center for Mental Health Services
www.samhsa.gov

This guide will help state mental health planning and advisory council members and others advocate for the implementation of evidence-based mental health services to advance the quality of care for persons with mental illnesses.

2005

Substance Abuse and Mental Health Services Administration

The Substance Abuse and Mental Health Services Administration (SAMHSA) within the Department of Health and Human Services is comprised of three Centers that carry out the Agency's mission of improving the quality and availablility of prevention, treatment, and rehabilitation services in order to reduce illness, death, disability, and cost to society resulting from substance abuse and mental illnesses.

The Center for Mental Health Services (CMHS) is the agency of SAMHSA that leads Federal efforts to treat mental illnesses by promoting mental health and by preventing the development or worsening of mental illness when possible. Congress created SAMHSA's CMHS to bring new hope to adults who have serious mental illnesses and to children with serious emotional disorders.

The National Association of Mental Health Planning and Advisory Councils

The state mental health planning and advisory councils have joined together to form the National Association of Mental Health Planning and Advisory Councils (NAMHPAC). Federal law requires the establishment of mental health planning councils to review state applications for block grant funding, to serve as advocates for adults with serious mental illnesses and children with serious emotional disturbances, and to monitor and evaluate state mental health planning systems. Although these activities are mandated, many states do not provide funding to support them. In many cases, this lack of funding combined with council members' often short tenures prevents these organizations from making their full impact on service delivery and consumer empowerment. NAMHPAC provides technical assistance to these organizations in the areas of exemplary practices, organizational development, and information sharing. In addition, NAMHPAC provides a national presence on mental health policy issues on behalf of the state planning and advisory councils.

We hope that each planning and advisory council member will closely read this document and use its information to develop the state plan for year 2005 and beyond. In addition, NAMHPAC will contact members of state councils to encourage them to use these materials, to evaluate how the materials were used, to identify topics for future pamphlets, and to gather suggestions for dissemination of such pamphlets.

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science to service

This publication provides a comprehensive guide to understanding and implementing evidence-based practices (EBPs) in mental health services, which are reshaping and reforming state mental health systems across the country. It offers answers to commonly asked questions and gives concrete examples on how to successfully implement EBPs in your community.

A tidal wave of change is sweeping across mental health systems, challenging the status quo and demanding the implementation of scientifically proven mental health services. This trend has become a social and political movement. The Substance Abuse and Mental Health Administration (SAMHSA) is leading the way toward system transformation, and believes that implementation of EBPs is crucial in its services improvement mission, and that EBPs are a major element in promoting access, accountability and effectiveness within the nation's public mental health system.

Recent publications have propelled evidence-based mental health practices into the spotlight. The 1999 report, *Mental Health: A Report of the Surgeon General*, highlighted the gap between our knowledge of effective mental health services and what is actually practiced in routine mental health settings.[1] These claims were underscored in a 2003 report released by the President's New Freedom Commission on Mental Health, which called for a narrowing of the gap between research and service implementation.[2] The Commission stressed the importance of the advancement of EBPs as a central tool for transforming our nation's mental health system, which it declared is currently "in shambles" and in need of "dramatic reform." To this end SAMHSA has developed toolkits related to the following EBPs: medication management for schizophrenia and bipolar disorder, assertive community treatment, supported employment, integrated

treatment for co-occurring mental health and substance abuse disorders, family psychoeducation and illness self-management (see Appendix A for descriptions of each). A number of services for children have also earned evidence-based status, such as therapeutic foster care, multi-systemic therapy and positive behavioral interventions and supports (see Appendix B for descriptions of each).

A number of factors have led to this greater emphasis on "evidence," such as budget shortfalls that require states to make tough decisions about where mental health dollars should be spent, programs that have been built upon unclear outcomes, and broad-based initiatives that focus on quality and accountability throughout the healthcare field. With the rise of evidence-based mental health, a controversy is emerging over the appropriate use – and the possibility for misuse – of EBPs. At the crux of this controversy lie concerns that policymakers and administrators may use EBPs inappropriately as only a tool to contain cost and, as a result, stifle the growth and use of effective emerging practices, particularly consumer-run services. Of particular concern to consumers is that many of the current EBPs have been developed in the absence of a recovery paradigm. Although the definition of recovery is an evolving concept, the National Consensus Conference on Mental Health Recovery and Mental Health Systems Transformation, convened by SAMHSA, identified 10 fundamental elements of recovery: self-direction, individualized and person-centered care, empowerment, holistic care, non-linear growth (continual growth and occasional setbacks), strength-based models, peer support, respect, responsibility and hope.[3] Consumers are concerned that such elements are not common components of current EBPs, and that consumers were often left out of the design and research phases of EBP development.[4] These, and other concerns, will be addressed in further detail.

As the EBP trend moves state mental health systems toward services and programs that are proven to be effective, planning councils must be informed about current EBPs and the controversy surrounding them, so they can help reshape the system into one that it is recovery-focused and consumer- and family-centered.

What does *evidence-based practice* mean?

Although the term evidence-based practice is the new buzz-word within the mental health field, it's still unclear what these programs really are and what constitutes "evidence" in relation to mental health.

Unfortunately, this question can not be easily answered because one overarching definition does not exist. A commonly accepted explanation by experts is that "evidence-based practices are interventions for which there is scientific evidence consistently showing that they improve client outcomes."[5] Another commonly cited definition originates from the Institute of Medicine and defines EBPs as the "integration of best research evidence with clinical expertise and patient values."[6] In order to understand this concept, the idea of what constitutes "scientific evidence" must be further explored.

Although requirements for scientific evidence do vary, there are four general categories or levels of evidence in the research arena:

- **Randomized clinical trials**. This is the highest standard of evidence. In these studies, randomized groups receiving the intervention are compared to those receiving either no intervention or another intervention with previously demonstrated effectiveness. These studies are conducted under optimal conditions (strictly controlled conditions) and participants are carefully screened and must meet specific qualifications.
- **Quasi-experimental studies**. These studies compare groups receiving the intervention that are not assigned randomly to study groups. Though these studies are not as thorough a test of causation as randomized clinical trials, they often constitute the best available evidence and consistently support a specific EBP.
- **Open clinical trials**. Open clinical trials administer an intervention to a group of people and then measure the intervention's effect, if there is any. These trials lack comparison groups. They generate expert-based clinical observations to determine the effectiveness on an inter-

vention and may be referred to as observational studies. Studies of this type provide a lower level of research evidence. Open clinical trials are generally not considered to provide sufficient scientific evidence for an intervention to be considered evidence-based.

- **Expert consensus**. This is the lowest level of evidence, and should not be considered research evidence. Consensus consists of clinical observations collected as expert opinion.[7] Developing expert consensus typically involves bringing together experts and other stakeholders to review existing evidence, often based on observational studies, supporting a practice and then developing a consensus about guidelines to be used in implementing the practice in a consistent manner.

How do we decide what an evidence-based practice is?

Understanding the differing levels of research is only the first step in determining whether a mental health practice or program is evidence-based. There are further nuances in the types of research to consider and differing models followed in determining evidence-based status.

Understanding Efficacy Versus Effectiveness

The debate over what constitutes an evidence-based practice often centers on whether practices that show efficacy or those that demonstrate effectiveness are more appropriate for deciding if a given approach should constitute an evidence-based practice. In reality, both are essential to the research and development of practices. But this confusing academic jargon has prompted many to ask, "What is the difference between the two?" Research focused on *efficacy* demonstrates whether a treatment or intervention reduces symptoms in several randomized trials. This type of research looks at a narrowly defined group of people with a specific illness, often under ideal conditions, and it incorporates well-defined protocols for interventions.[8]

EXAMPLE: Efficacy studies that examine treatments for schizophrenia often exclude participants who have substance abuse problems or suicidal thoughts and only include individuals who are experiencing their first schizophrenic episode, which ensures they have had no prior exposure to other treatments. Although this type of population is useful in determining the treatment's effect without other confounding variables, it is an unrealistic picture of most who suffer from schizophrenia in the community.[7]

Conversely, if an intervention has demonstrated *effectiveness*, it has proven to create beneficial change in the real-world setting, where the population is broad and diverse.[9] Effectiveness requires that a treatment do more good than harm for the *typical* consumer in ordinary, average settings and circumstances. For example, in comparison to the schizophrenia example above, a large, multi-site study on a treatment program for schizophrenia that examined consumer, provider and organizational characteristics would fall into the effectiveness category. In this case, study participants would not be excluded for co-occurring conditions and would more accurately represent the typical clients that walk into community clinics.

Although traditional academic research holds up randomized clinical trials (RCT) as the gold standard, the call for "effectiveness research" is creating a trend for "practical clinical trials," which choose clinically relevant interventions and compare those using diverse populations of study participants from a variety of practice settings.[10] Efficacy research is critical to demonstrating which treatments have promise and are worthy of investing the large amounts of dollars necessary for widespread effectiveness research. However, the next step to study its effectiveness must be taken to illustrate its real-world application. When choosing and implementing EBPs, it is important to inquire not only about research that has demonstrated its efficacy, but also research that shows its effectiveness and real-life applicability.

Models for Determining Evidence-Based Practices

Regrettably, there is no single standard for determining what qualifies as an evidence-based practice, and no federal agency has a legislative mandate for making such a determination. While these efforts to define "evidence-based practice" are laudable, the differences among definitions put forth by various organizations have led to some confusion over which definition should prevail. Several examples of different organizational definitions of EBPs include:

1. *The American Psychological Association's Clinical Psychology Division (Division 12)* created a List of Empirically Validated Treatments (EVTs) as a guideline for practitioners, educators and policymakers.[11] Division 12 defined an evidence-based treatment as:
   - one that is backed by at least two RCTs; or
   - 10 single-case experimental designs.

2. The federal *Agency for Healthcare Research and Quality (AHRQ)* uses a rating system to simplify the process of ranking EBPs by classifying them under three levels of evidence.[12]
   - *Level A.* Signifies a significant level of research-based evidence for the practice (e.g., several randomized clinical trials comparing practice to alternative practices or no treatment) and some expert consensus
   - *Level B.* Indicates a fair level of evidence for the practice (e.g., quasi-experimental studies) and substantial expert consensus
   - *Level C*. Describes a program that is recommended primarily on expert consensus and for which little or no research evidence exists

3. Another approach to defining EBPs is discussed extensively in a 2001 article published by the *Evaluation Center at Human Services Research Institute (HRSI),* which delineates a number of questions to be asked when performing a "knowledge assessment" to determine the extent to which a body of research for a practice is evidence-based. Some of these criteria include:[13]
   - Number of research studies cited in literature
   - Type of research design used (RCT, clinical trial or others)

- How features of the intervention were translated into measurable variables
- Whether key impact variables and long-term effects were reported
- Reliability and validity of measures used in research
- If the studies report if fidelity to the model was tested (See, *"What is meant by fidelity to the model?"* on page 22)

4. SAMHSA defines EBPs as those that are "well-implemented and well-evaluated programs, meaning they have been evaluated by the *National Registry of Evidence-Based Programs and Practices (NREPP)* according to rigorous standards of research."[14] These programs and practices must score at least a four on their rating system (see box below):

NREPP Rating System: Sixteen rating criteria (including dimensions such as outcome measurement, comparison conditions, design and analysis of data) are rated on a 0 to 4 scale and averaged to get an Evidence Quality Score (EQS). There are five possible program or practice ratings:

- Effective Program or Practice
- Conditionally Effective Program or Practice
- Emerging Program or Practice
- Program or Practice of Interest
- Insufficient Current Support

Source: http://modelprograms.samhsa.gov

States may submit different programs and practices to NREPP to be evaluated. Having a high NREPP rating is desirable as it makes programs more likely to be disseminated, implemented and replicated in other communities. *[Note: NREPP was originally designed for substance abuse programs, but is expanding to cover mental health programs and practices. Current SAMHSA toolkits and EBPs did not go through this process, but future mental health programs and practices will likely be submitted for approval via this mechanism.]*

Who decides what constitutes an evidence-based practice?

Since there are so many organizations involved in evaluating evidence-based practices, maybe the question is not *how* one decides what is evidence-based as much as *who* decides what constitutes evidence. Undoubtedly, individual motives, background and goals influence what is identified as evidence-based. Policymakers, funders, clinicians and consumers all bring to the table their own unique view-points, which is what complicates our ability to come up with a universal definition. For example, funders and policymakers may define effective EBPs as those that are cost- effective, and then limit reimbursement for only those treatments that have a large backing of research. Managed care providers often look to practices that alleviate symptoms quickly and decrease crisis episodes. Clinicians may advocate for practices that give consumers insight into their mental illnesses. Consumers may value programs that are holistically effective, such as those that take care of their needs for housing, employment and a social life. However, consumers may avoid treatments that are scientifically efficacious if they have unpleasant side effects. Because of these dynamics, it is important to have all stakeholders who are affected by practices at the table, so they can offer their own unique perspective and help create a balanced definition of evidence-based.

Evidence-based practices, exemplary practices, best practices, or emerging practices – what's the difference?

Although there is a strong call for better services based on evidence, it is imperative that advocates be aware that evidence-based practices are only a part of the solution to reform our mental health systems. As the groundswell of support for EBPs has grown, a prudent voice of concern is tempering the tendency to hold up EBPs as the holy grail of mental health services.

Advances in the science of treating individuals who have mental illnesses are being made daily, but there is still much we do not know. Clinical trials are an effective research tool for testing outcomes of some practices, but knowledge collected from *practical experience* must also be used to improve mental health systems.

Today, a number of program models are being used in mental health systems that are not considered evidence-based but do produce efficacious outcomes, such as supportive housing in the community, that are valued by the consumers and families in the system. Programs such as wraparound services, jail diversion, and peer support and consumer services appear to be effective and are currently being studied. The President's New Freedom Commission on Mental Health dubbed these practices "emerging practices," and it is likely that with additional research, these programs will be given evidence-based status.

It can be a challenge to keep track of all the new policy jargon in reference to mental health practices. There are three other terms commonly used to refer to practices backed by differing levels of evidence:[15]

1. **Best Practices**. These are the best clinical or administrative practices available at the moment, given a certain situation, the consumer's or family's needs and desires, and resources available. A number of consumer-operated services fall into this category (e.g. WRAP, peer support). There is typically a strong research backing for these practices and they have been replicated in a variety of settings. This is one step down from EBPs and may sometimes be referred to as "exemplary practices."

2. **Promising Practices**. Clinical or administrative practices for which there is considerable evidence or expert consensus and which show promise in achieving client outcomes but are not yet supported by rigorous scientific evidence. NREPP defines these practices as those that score at least a 3.33 on its rating scale.[16] (See *See NREPP Rating System, Page 7*.)

3. **Emerging Practices**. This term is often used interchangeably with promising practices. The New Freedom Commission defines these practices as treatments and services that are promising yet less thoroughly documented.[17] These often include programs that run on a more local level, have had positive outcomes with people in the community but have not been replicated on a large scale or gathered significant data.

Mental health services research is both time-consuming and expensive. Many program models being used today have not been rigorously evaluated, but that does not mean they are ineffective – these programs simply have not been tested. Mental health systems must maintain a careful balance between using new research and EBPs in their programs and continuing to use the exemplary and emerging services that consumers and family members identify as helpful during the recovery process. Communities may want their emerging practices scientifically evaluated to document their effectiveness, and do not want to discard programs that have improved the quality of their community members' lives. Using the SAMHSA NREPP process may be one approach to document effectiveness of programs emerging at the local level.

What is the controversy over evidence-based practices?

While the theory behind evidence-based practices is sound (do what has been shown to work), the implementation has potential pitfalls. These need to be understood in an effort to avoid inappropriate or ineffective usage of EBPs.

The Use of EBPs in Policymaking

Although evidence-based practices offer a host of benefits—not the least of which is promoting the efficient use of resources—they have their limitations. Most important, if EBPs are used to the exclusion of other treatments, such as the exemplary practices referred to previously, they may limit consumer choice and hinder access to the best care. There is also the potential for policymakers to misuse EBPs as a mechanism to control costs, which could lead to the elimina-

tion of established, successful programs that do not fall under the EBP umbrella.

In a recent trend, several states have introduced or are considering introducing legislation that mandates the use of EBPs or restricts insurance coverage for treatments that are not backed by "sufficient evidence." But without a clear definition of "sufficient evidence," such a policy could prevent the use of effective treatments and practices. In addition, in order for EBPs to flourish, they must continually evolve with new innovations. Legislating the use of EBPs may stifle this evolution as legislation is, by its very nature, static. There is a real fear that if EBPs lack the flexibility to change with the times and progress, they may become obsolete.

The "One Size Fits All" Fallacy

There is rarely a one-size-fits-all solution to any issue. Evidence-based practices may not be appropriate or effective for all people who have mental illnesses or in all settings. When reviewing research and outcomes for EBPs, it is important to understand the specific outcomes and populations for which the practice has demonstrated effectiveness. EBPs may have different outcomes for consumers who are not well-represented in studies. For example, assertive community treatment (ACT) was developed primarily for people with severe and persistent mental illness and has been proven effective for helping this population to stay out of the hospital, but it is unclear how useful ACT is for people who have less severe mental illnesses. In order to deliver effective care, practitioners need room to exercise their clinical judgment when proposing a treatment plan as no two individuals are exactly alike or respond the same to treatment.[18]

EBPs and Cultural Competency

The evidence-based practice movement is working to increase its cultural competency, but mental health research has too often excluded diverse populations. The U.S. Surgeon General's supplemental *2001 report on Mental Health: Culture, Race and Ethnicity* highlighted the huge gap between research and practice for racial and ethnic minorities.[19] Between 1986 and 2001, nearly 10,000

participants had been included in randomized clinical trials designed to evaluate evidence-based treatments for bipolar disorder, major depression, schizophrenia and attention deficit/hyperactivity disorder. However, for almost half of these participants, no ethnic information was provided; and for an additional 7 percent, participants were classified as "non-white" with no breakdown by minority group. The report cited that of all the evidence-based treatments researched, "very few minorities were included and not a single study analyzed the efficacy of the treatment by ethnicity of race." Such discrepancies are now being addressed following the 2000 passage of the Minority Health Disparities Research and Education Act, which gives NIH increased programmatic and budget authority over research on minority health issues and disparities.

With the new awareness of treatment inadequacies for minorities, a push came from advocates, practitioners and policymakers for culturally competent services. Cultural competency refers to the delivery of services that are responsive to the cultural concerns of racial and ethnic minority groups, including their language, histories, traditions, beliefs and values.[20] A key component to cultural competency is the ideology that the system be responsible for making programs and practices that are effective for culturally diverse clientele, who may be less likely to seek care than their Caucasian counterparts in addition to those people seeking treatment. While research on the impact of culturally competent services is in its beginning stages, data from consumer and family self-reports and studies demonstrate that tailoring services to meet the specific needs of a group improves outcomes and increases the likelihood of utilization.

Our nation needs a culturally competent mental healthcare system that is sensitive and responsive to ethnic, cultural and religious differences.[21] As such, cultural competence must be integrated into all EBPs. Once again, research involving ethnically diverse populations for current EBPs is still needed. What research has been conducted has typically yielded positive results.[22] When considering the appropriateness of an EBP, it is important to consider the diversity of the population

in which it demonstrated effective. For example, some EBPs, such as supported employment, may be somewhat easily adapted to different cultures and ethnicities, provided the appropriate linguistic supports are made available. However, EBPs such as family psychoeducation may have different meanings and effects in different cultures as the definition and roles of the family vary significantly from culture to culture.[23] In fact, there have been some negative research findings for family psychoeducation outcomes among Hispanic-Americans families that should serve as a warning against blanket implementation of EBPs regardless of culture. In addition to cultural meanings of family, family intervention must take into account differences in the meanings associated with age, sex and state of the life cycle. The following are some points to consider when implementing EBPs:[24]

Cultural Competency Considerations for Evidence-Based Practices:

- Implement cultural competency procedures and activities before or during the implementation of evidence-based practices
- Assess the acceptability of the evidence-based practices to the cultures of the service environment
- Adapt the practices, if appropriate, to the cultural groups in service (ensure linguistic services are available for the non-English speaking)
- Appraise fidelity to the evidence-based practices within the framework of cultural adaptation
- Appraise the outcomes of the evidence-based practices in terms of culture-specific outcomes

Incorporating Consumer Values

With the emergence of the evidence-based practice paradigm, consumers have expressed concern over their lack of involvement in the process. Historically, consumers have had little input into what is deemed an EBP. At this point consumer participation has largely been limited to the role of volunteer subject in research studies and as the beneficiary of newly implemented EBP services. However, this is contrary

to the President's New Freedom Commission call for consumers to be involved at all levels of the process in the creation and implementation on EBPs.

One persistent concern is that the EBP movement has not adequately incorporated promising practices developed by consumers. Consumers believe that consumer-led practices, such as peer support, have a strong base of evidence and are an excellent means to address the workforce shortage that is so often a barrier in access to care. Consumers need to be recognized as allies, and partnerships should be expanded to include consumer-run practices, particularly in the area of research. To make this a reality, consumers need to be trained to research promising practices. In addition, research institutions should require that research be published in layperson language, so the general public can understand and utilize the information.[25]

When EBPs first emerged, the notion of a recovery-focused system was a fledgling concept; therefore, many EBPs do not adequately integrate a recovery-based paradigm. A core set of values must be integrated into an evidence-based system of care that is more responsive to the needs of mental health consumers and their families. SAMHSA has partnered with a number of other agencies and expert panelists to come up with an overarching definition of mental health recovery.

> *Mental health recovery is a journey of healing and transformation for a person with a mental disability to be able to live a meaningful life in communities of his or her choice while striving to achieve full potential or "personhood."*[26]

It was determined that recovery is a multi-faceted concept based on 10 fundamental elements and guiding principles such as self-direction and individualized, person-centered care (See page 2 for the full list). These principles need to guide the development and implementation of EBPs in order to be successfully recovery-oriented. In summary, consumers want to ensure evidence-based mental health care encompasses the following components:[27]

- **Recovery Paradigm**. Recovery from mental illness, as defined above, should be a main focus of the service.
- **Consumer and family focus**. Services help consumers and families obtain the goals they have identified and involve them as integral members of the treatment team.
- **Cultural competency**. Programs are sensitive to the cultural values of the specific populations they serve, and to linguistic, racial or ethnic diversity.
- **Outcomes based**. Services are focused on meaningful outcomes based on the recovery paradigm that can be measured.

What are the challenges to implementing evidence-based practices in our public mental health systems?

Unfortunately, implementing evidence into practice is rarely something that happens smoothly. Once an intervention has demonstrated sufficient efficacy and effectiveness, implementation of the practice still presents challenges. In 1999, two reports were released documenting this difficulty. The Institute of Medicine study (IOM) *Crossing the Quality Chasm: A New Health System for the 21st Century* and the landmark publication *Mental Health: A Report of the Surgeon General* both emphasize the gulf that exists between what science tells us about state-of-the-art interventions and what is practiced in most settings. The IOM report states that it can take up to 20 years for new knowledge from randomized clinical trials to be incorporated into practice, due to a variety of barriers. Understanding these barriers is the first step in overcoming them.

Preparing a system or a community for change is a difficult and time-consuming process. Efforts around the implementation of evidence-based practices are more than just experiments to try new treatment methods. These activities are an attempt to revolutionize service systems, refocus priorities, and improve the services provided to consumers and their

families. It is not surprising that major barriers often impede these changes or bar them from occurring. Groups that implement EBPs must be aware of potential obstacles and work to make necessary administrative, policy or clinical changes from the very beginning of the process. Some examples of barriers that must be addressed include:

Policy Barriers

Changes may be needed in organizational structure, funding streams, regulations, and/or licensing that could otherwise prevent success of the program. In addition, the relative advantages may be unclear to stakeholders, and innovative services may be perceived as a threat to the existing organizational structure and hierarchy.

One specific policy barrier may be the financing of services through Medicaid, Medicare and other private payers. At present, many programs utilize a fee-for-service structure that is often not conducive to many evidence-based practices that take novel approaches to care such as flexible case management, non-face-to-face contact and in-home visits. Medicaid also typically does not pay for packaged services, also known as "bundled services," such as those found in many EBPs like assertive community treatment. State Medicaid programs vary substantially on what services are covered, and in most states mental health authorities have limited power over how services are reimbursed or administered. Therefore, broad coalitions must be developed that include various agencies and policymakers who have authority over the larger programs and funding streams. Significant state budget shortfalls add an additional hurdle to acquiring funding.

Program Barriers

A lack of clear models, administrative guidelines or outcome measures may negatively affect the implementation of the service. For example, certain practices may be adopted as an evidence-based practice, but an organization may not allow adequate time for training providers. Appropriate materials and training must be available to ensure program success. Similarly, a clinic's hours of operation may have to be modi-

fied to most effectively provide other EBPs. A supported employment program, for example, may need to offer evening hours in order to support consumers who are working in jobs during the day.

Clinical Barriers

Mental health is facing a substantial workforce shortage, which will make implementing new programs a challenge. Even when an adequate workforce is available, implementing a new program can test providers who are not familiar with the new practice. Licensing, training and skill development for providers must be addressed from the very beginning of the implementation process. The training and staff education should be built into the program as a long-term or continuous effort to ensure quality. Organizational strategies that provide incentives for providers to learn and use new skills and practices, along with creating an organizational culture that values the new practices, can be crucial in ensuring the successful implementation of evidence-based practices.[28] This is especially important as some providers may resist change. It is common for providers to feel as though their methods of care are being criticized when they are asked to change them. Skeptical attitudes and hurt pride are very real barriers to overcome that can be aided with a cultural shift, and strong leadership and encouragement.

Technology Barriers

Mental health systems are experiencing an overall short supply of time and technology. That contributes to difficulties in synthesizing evidence from research, developing clinical practice guidelines and disseminating these guidelines to practitioners. The IOM report discussed above calls for the development of support tools and measures that assist providers in applying evidence, making decisions and assessing quality-of-care areas. New technologies may also need to be adopted and implemented, such as reminder systems and drug dosing systems. Internet-based technologies can also help to overcome barriers. The President's New Freedom Commission calls for the use of technology and telehealth to improve access and coordination of mental health care, especially for rural and other underserved populations. From

using e-mail to send reminders to clients, to teleconferencing for consultations, technology can be integrated in providing EBPs. Keeping electronic records can enhance communication, aid in tracking outcomes and speed up the dissemination of information.

What are the elements needed for success?

Now that we know the barriers to implementation, it will be helpful to review the factors that can facilitate successful implementation of evidence-based practices. If services are developed based on a data-driven needs assessment of what the local system can and will support, the practice is more likely to flourish. This is particularly true if the EBP is diverting services from a more costly and restrictive method of care to one that is community-based and cost-effective. A data needs assessment must also be driven by "real world" data that examines clinical- and cost-effectiveness.

Although more research is needed around strategies for implementing EBPs in public mental health systems, literature reviews on the transfer of research into practice (known as "technology transfer") identify six key strategies to creating successful program implementation:

1. **Interpersonal contact**. To introduce an evidence-based program in a new setting, there needs to be direct contact between the community adopting the program and the developers of the practice or others who are knowledgeable about the practice.

2. **Planning and conceptual foresight**. A strategic plan for how to implement must be thoughtfully developed and include the discussion of possible implementation problems and how they will be addressed. This plan is essential to ensure success throughout the implementation process.

3. **Outside consultation**. A trained consultant can provide assistance in designing the implementation process efficiently and can offer useful objectivity on the success of the process, costs, and any possible problems or roadblocks.

4. **User-oriented transformation information**. The documented evidence and recommendations for implementing the practice must be available to everyone involved in the implementation effort (especially potential clients). This information must be presented so that it can be readily understood, and is focused on the documented outcomes and how the practice should be replicated.
5. **Individual and organizational championship**. Chances for successful implementation are greater if influential policymakers and community leaders express enthusiasm for its adoption and are involved in the process.
6. **Potential user involvement**. Stakeholders (consumers, family members, advocates and policy leaders) must be involved in planning to provide suggestions for how to proceed effectively and to create a sense of ownership of the new practice (this helps decrease resistance to change).

Importance of Consensus Building

Building a consensus of support for the evidence-based practice being proposed will enhance the odds of successful implementation. Involving all stakeholders at each level of development and implementation is critical to obtaining support and creating the necessary environment for success. Bringing consumers to the table early in the process will bolster consumer support and relevance to the population being served. Mobilizing providers, funders and policymakers who are passionate and willing to expand the boundaries of conventional services will also facilitate implementation. In order to achieve success, stakeholders must be united, buy into the concept of EBPs and take on leadership roles. In addition, formalizing stakeholders' roles in the decision-making process will encourage consensus building.[30] Understanding the motivation of each stakeholder group can be the first step toward opening doors to partnerships and collaborations:[31]

- **Funders**. Most states and local governments are facing fiscal crises that dictate scarce resources be maximized.

Funders are more likely to fund programs with a strong backing of evidence. Implementation of EBPs may allow for funds to be redirected from ineffective services to those with documented and substantiated outcomes. The nature of EBPs allows funders to closely associate the expenditures with outcomes and deliverables as constant monitoring and assessment are integral components of EBPs. *Caution: Although it is important to invest in programs that work and to restructure or remove those that do not, it is imperative that EBPs are not used solely as a means to contain costs or at the expense of community and statewide programs that show promise and provide critical services but do not yet have the research backing.*

- **Consumers and Families**. As a consumer of mental health services or a family member of a consumer, it is reasonable to expect access to effective services with a track record of success. EBPs provide this assurance. In addition, many of the established EBPs are based on an intersystem model, which attempts to address the all too common problem of service fragmentation.
- **Providers**. The priority for providers should be to deliver quality services to their consumers and to be on the cutting edge of progress. Implementing EBPs into their practices allows them to increase their array of services. Providers are also beginning to realize that funding sources are requiring evidence-based and best practices and many providers are shifting to an outcome-based focus, if for no other reason.
- **Policymakers**. EBPs are consistent with good public health practices – they enhance treatment options, link public serving systems together and meet the common goals of multiple systems. They are also aligned with policymakers' desire for outcome-based care. EBPs strengthen the relationship to research and evaluation activities, and make gathering outcome data more feasible.

Helpful Web-Based Resources for Consensus Building:

The Massachusetts Institute of Technology: *Short Guide to Consensus Building*
web.mit.edu/publicdisputes/practice/cbh_ch1.html

The William and Flora Hewlett Foundation: *State-Level Consensus Building*
www.hewlett.org/Archives/ConflictResolution/ConsensusBuilding/stateConsensus.htm

How do we plan and budget for evidence-based practice implementation?

A number of resources are available to assist with strategic planning and budgeting in the implementation of evidence-based practices. The National Association of State Mental Health Program Director's (NASMHPD) Research Institute provides a list of recommendations for acquiring funding.[32] They recommend that planners identify which services Medicaid will provide and how the state plan can be revised to cover additional services. NASMHPD also stresses the importance of utilizing fiscal incentives for EBP implementation and linking funding to fidelity. This will aid in gaining the support of policymakers and funders. *Caution: Funders and policymakers must be careful when linking funding to fidelity. Funding should be linked to the practice of fidelity measurement and not necessarily the degree to which the program is precisely following all components of the specific EBP. Certain populations, such as rural and/or other ethnically and culturally diverse populations, may need to tailor programs and practices to fit the needs of the people. This is in line with SAMHSA's call for cultural competency. However, it is especially important for those states tailoring the EBPs to measure fidelity and outcomes to document the changes and the effects on diverse populations.*

Demonstrating cost-effectiveness and positive outcomes will also enhance the program funding viability. To do this, planners must provide easy-to-read, understandable research studies to funders. For example, in one study, Lehman,

Dixon, Hoch and colleagues, did an economic analysis of homeless people who have severe mental illness and found that Assertive Community Treatment (ACT) was cost-effective for increasing time spent in stable community housing.[33] ACT has been criticized as one of the more expensive EBPs, but it was found to be no more expensive than the usual care provided to the homeless with regard to sustaining stable community housing – and it saved money on inpatient services and emergency room care. Latimer reiterates these results in his review of literature for the economic impacts of ACT, and found the biggest saving in inpatient hospitalization.[34] Highlighting these and similar studies to policymakers and funders, will help get new programs funded.

In addition, a short-term and long-term financial plan must be in place. There will be initial start-up costs that need to be financed, such as those for training and transition services. Explicit funding is also needed for sustainability planning. Below is a resource that outlines how to effectively plan and budget for success:

A Helpful Web-based Resource for Planning and Budgeting Evidence-Based Practices:

Browskowski, A., Thompson, C., Barton, B. (2004, September) *Planning and budgeting evidence-based practices for mental health and substance abuse disorders*. NASMHPD Research Institute: Washington, DC. http://ebp.networkofcare.net/uploads/Budgeting_Planning_6202133.pdf

What is meant by "fidelity to the model"?

An often debated issue surrounding evidence-based practices is the importance of "fidelity to the model." Fidelity of implementation refers to adherence to specific programmatic standards or principles. For example, when implementing a program such as assertive community treatment, certain components would need to be measured to assess fidelity, including caseload (staff to client ratio), frequency of con-

tact, and the presence of a psychiatrist on staff. Fidelity issues need to be addressed when implementing an EBP, namely, how fidelity will be insured and providers trained and held accountable for correct implementation of the EBP.

Program evaluations have shown that when implementing EBPs, the more similar the implemented practice is to the model (i.e., the greater the fidelity of the practice) the better the outcomes that are obtained.[35] Fidelity measurement must be ongoing and in a process of constant refinement of measures to ensure a practical focus on key elements. This process allows monitoring of the program's strengths and weaknesses, evaluation of trends and outliers as well as data to demonstrate utility.[36] Fidelity measurement is especially important in programs or practices that have been altered to suit the geographic, ethnic or cultural needs of those being served. While exact implementation may not be possible, providers need to document the changes being made, and rigorously measure the outcomes and effects of these changes.

Independent evaluators using multiple sources of information produce the most valid ratings, but self ratings can be useful if the measures are as objective as possible. SAMHSA has developed scales for its six endorsed EBPs. Each measurement has 15 to 30 items that assess critical components of the EBP in question. In addition to fidelity's link with more successful outcomes, future funding is often linked to the amount of fidelity demonstrated and program outcomes. This illustrates why fidelity of EBP implementation must not be ignored.

Fidelity scales and protocols for SAMHSA's six published scales:

http://ebp.networkofcare.net/uploads/fidelityscales_6513943.htm

Additional Fidelity Resource:
McGrew, J. H., Bond, G. R., Dietzen, L., Salyers, M. (1994). Measuring the Fidelity of Implementation of a Mental Health Program Model. *Journal of Consulting and Clinical Psychology*, 62(4), 670-78.

What is meant by "continuous quality improvement"?

Along with monitoring fidelity to the program model, evidence-based practices must also be continuously monitored to identify and evaluate outcomes. This also allows for adaptations to be made to the program as necessary to improve those outcomes. Strategies for collecting data must be addressed from the very beginning of program implementation, and should be incorporated into the planning and program design. When implementing an EBP in a service system, specific attention must be paid to data collection so that the program can be accurately evaluated for fidelity and outcomes. In doing so, the program can be modified as necessary to provide the best possible service to consumers.

What are the current evidence-based practices?

While there are a number of practices that have been backed by evidence the ones commonly referred to as *evidence-based practices* are typically those identified by SAMHSA. The following is a summary of the current EBPs highlighted by SAMHSA.

Evidence-Based Practices for Adults

SAMHSA's Center for Mental Health Services and the Robert Wood Johnson Foundation are currently funding a multi-phase research initiative on evidence-based practices for mental health.

Through this project, they have developed six tool kits that contain standardized guidelines and training materials intended to assist states and programs in implementing EBPs they have chosen. Toolkits have been developed for the following EBPs:

- Medication management for schizophrenia and bipolar disorder
- Assertive community treatment
- Supported employment

- Integrated treatment for co-occurring mental and substance use disorders
- Family psychoeducation
- Illness self-management

Each toolkit has materials tailored to five specific audiences:

- State-level administrators
- Program directors
- Clinicians
- Consumers
- Family members

The toolkits focus on the implementation process and are organized in these five categories to help identify the roles of everyone involved, including consumers, family members and other stakeholders who are essential participants in the implementation process. A multi-state evaluation of the materials has been conducted, and toolkits were refined and finalized and are available for national dissemination. In 2001, NASMHPD began tracking the implementation of EBPs, and as of 2002, at least 47 states were implementing one or more of the EBPs listed above using the SAMHSA toolkits.[37]

For more information about these toolkits, including how to order copies, see the "Resources" section at the back of this booklet.

SAMHSA Evidence-Based Practice Toolkits

http://www.mentalhealth.samhsa.gov/cmhs/communitysupport/toolkits/default.asp

The National Association of Mental Health Planning and Advisory Councils (NAMHPAC) has brochures available on vaious EBPs, and these can be found at www.namhpac.org.

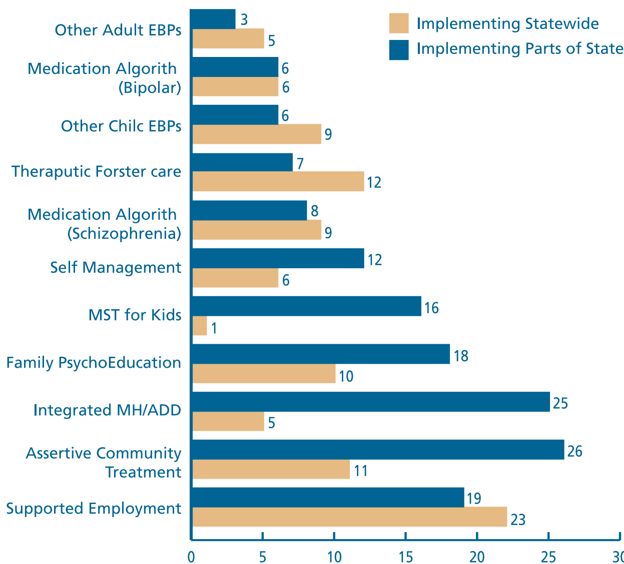
EBPs and promising practices in treating children and adolescents are also being developed. These treatments increase the effectiveness of services provided within systems of care, and often involve coordinating service delivery among a

number of child-serving agencies. Three of the most researched evidence-based practices for children are therapeutic foster care, multi-systemic therapy, and positive behavioral interventions and supports.

How many states are implementing evidence-based practices?

A survey conducted in 2003 of state mental health departments delivered promising news that states are beginning to implement evidence-based programs in mental health systems. The charts below depict the number of states involved in the implementation of evidence-based practices.[38]

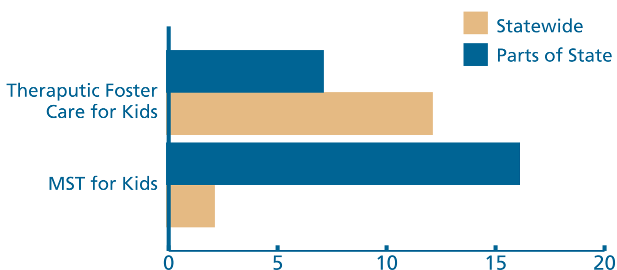
Number of States Implementing EBPs FY 2003:



A note of caution: The names of model programs are often used colloquially to refer to programs that address the same goals as the model program, even if a given program is not following the complete principles or organizational structure of the model program. The extent to which the programs

reported in this survey have been implemented with fidelity to the evidence-based models of the same name is unclear. In fact, many states reported implementing the practices without assessing model fidelity.

Implementation of Evidence-Based Practices for Children FY 2003:



What is the role of the Planning Council?

Mental health planning councils are tasked with three critical responsibilities: (1) reviewing and advising upon the state mental health block grant plan, (2) advocating for adults who have serious mental illness and children who have severe emotional disturbances as well as their families, and (3) monitoring and evaluating the mental health system within the respective state. The council's role in the development and implementation of evidence-based practices weaves through all three of these mandates.

Educating and Structuring Your Council for EBP Implementation

Before the council can take action around evidence-based practices, it must be properly educated. Here are some helpful hints when beginning an EBP campaign:

- Establish a subcommittee or task force to focus on the issue of evidence-based mental health services and further identify the needs of consumers and families in the state, and how such programs can meet those needs.
- Gather the resources listed in this document and distribute them to planning council members.

- Conduct an online search of other state mental health planning councils' Web sites to learn what other councils are doing around EBPs and reach out to network with these planning councils. The National Association of Mental Health Planning and Advisory Council (NAMHPAC) staff can also assist in council-to-council networking through its database and listserv.
- Request state mental health planning staff to report on efforts to implement EBPs, and on plans for measuring quality and outcomes of these programs.
- Host a planning meeting and invite NAMHPAC trainers to conduct an onsite technical assistance visit to council members and stakeholders on EBPs that focuses on the foundational issues discussed in this publication, newly emerging trends and research. Access to national experts may also be available through the technical assistance process.

Reviewing the Block Grant

As a means of measuring cost effectiveness, CMHS has included "the number of EBPs provided by the State" and "the number of persons receiving EBP's"in the National Outcomes Measures requested in the Block Grant plan. The state is requested to set projected targets for future years for these two measures. As a part of the review process, planning councils may want to consider cross-walking the Block Grant plan with the recommendations of the President's New Freedom Commission, specifically with an eye toward EBPs that are currently being implemented. Some components of this process may include any of the following:

- Review allocation of the Block Grant funds in the state, and determine the extent to which funds are being used to support implementation and delivery of EBPs. If dollars are not being used to support EBPs, councils can issue recommendations that encourage at least a portion of funds to be used to support EBPs.
- In states where EBP implementation is not statewide for one or more services, council members can advocate for expanding it on a statewide basis to improve access for people who have mental illness.

- If a separate state plan exists, councils may also want to review this document with respect to EBPs.

The council is an ideal place to promote the EBP agenda forward as its consumer and family member focus can ensure consumer input into the process.

Advocacy

With the consumer and family voice, council members are in the position to advocate for evidence-based practices that truly are consumer-driven and reflect the recovery-oriented viewpoint. Below are some key areas in which the council can conduct advocacy work pertaining to EBPs:

- Advocate for consumer and family member involvement at all stages of the planning process and during the development and implementation of EBPs.
- Advocate for research on promising practices in your state and submit these practices to NREPP (see *Models for Determining Evidence-Based Practices* on page 7) for evaluation of their evidence-based status.
- Advocate for policy changes in the way services are funded so that flexible funding streams will be available to support evidence-based initiatives.
- Work with your state mental health authority and your state Medicaid program to identify opportunities for implementing evidence-based programs and for changing the state's Medicaid plan to fund EBPs.
- Educate state legislators about the advantages and limitations of implementing evidence-based practices.
- Participate in stakeholder consensus building activities geared toward determining EBP(s) the state will implement.

Monitoring and Evaluating

Councils are called upon to monitor and evaluate state mental health systems. Under their watchful eyes, members can ensure that evidence-based practices are developed and implemented in a manner consistent with the desires of those receiving the services. For example, planning councils

can be involved in the following monitoring and evaluating activities:

- Work with your local universities to identify EBPs, gather and interpret information about specific programs of interest, and evaluate the effectiveness of exemplary state programs that have not yet been scientifically tested.
- Ensure that current EBPs being used in your state are assessed for adherence to established models of fidelity for the specific EBP.
- Ensure that current EBPs are implemented with quality improvement procedures in place. Make sure that information from quality assurance measures is used to continuously refine the program.
- Stay informed about mental health services research and EBP guidelines. *The Appraisal of Guidelines for Research and Evaluation (AGREE)*[39] and resources from the *Critical Appraisal Skills Program (CASP)*[40] can help you ask the right questions about programs that are recommended to you. Refer to *Appendix C* of this publication for a list of helpful questions to ask when deciding what EBPs to implement.
- Ensure that EBPs are culturally and linguistically appropriate for the population of your state. This means that they have been researched and validated for use on the population, adjustments to the EBP have been made to better suit the population, promising practices research is designed with input from the diverse populations targeted, and monitoring and evaluation involves members of the targeted population in all its diversity.

The development of EBPs is a continuous and renewing process that requires vigilance, active and meaningful engagement of consumers and family members, and an adherence to the fundamental concepts of recovery. This requires programs, practices and services that are not compromised due to environment, political or funding issues and that have the ability to evolve to meet the changing needs of consumers and families with mental illnesses. By understand-

ing the process of EBP development and implementation as well as the nuances involved in navigating the potential pitfalls, consumers, family members, policymakers and providers can partner to transform the mental health system into one that truly enables consumers to live and thrive in the community.

Additional Information

These organizations may be useful contacts for more information about evidence-based practices in mental health:

Substance Abuse and Mental Health Services Administration Center for Mental Health Services
1 Choke Cherry Road
Rockville, MD
Phone: (800) 789-2647
TDD: (866) 889-2647
www.samhsa.gov
SAMHSA's National Mental Health Information Center
www.mentalhealth.org

National Association of State Mental Health Program Directors Research Institute
66 Canal Center Plaza, Suite 302
Alexandria, VA 22314
Phone: (703) 739-9333
Fax: (703) 548-9517
www.nasmhpd.org/nri

Agency for Healthcare Research and Quality
2101 E. Jefferson Street, Suite 501
Rockville, MD 20852
Phone: (301) 594-1364
www.ahrq.gov

American Psychological Association
750 First Street, NE
Washington, DC 20002-4242
Phone: (800) 374-2721
Fax: (202) 336-5510
www.apa.org

National Mental Health Association
2001 N. Beauregard Street, 12th Floor
Alexandria, Virginia 22311
(800) 969-NMHA (6642)
Fax: (703) 684-5968
www.nmha.org

New Hampshire-Dartmouth Psychiatric Research Center
105 Pleasant Street
Concord, NH 03301
Phone: (603) 271-5747
Fax: (603) 271-5265
www.dartmouth.edu/dms/psychrc/

National Alliance for the Mentally Ill
Center on Practice and Research
Colonial Place Three
2107 Wilson Boulevard, Suite 300
Arlington, VA 22201
Phone: (703) 524-7600
www.nami.org

American Psychiatric Association
1400 K Street, NW
Washington, DC 20005
Phone: (888) 357-7924
Fax: (202) 682-6850
www.psych.org
(Go to "Clinical Resources" then to "Practice Guidelines" for useful information)

The Evaluation Center @ HSRI
2269 Massachusetts Avenue
Cambridge, MA 02140
Phone: (617) 876-0426
www.tecathsri.org

Appendix A:

Descriptions of Evidence-Based Practices for Adults

Medication management refers to a systematic use of medications in the treatment of schizophrenia and bipolar disorders, and is also known as Medication Management Approaches in Psychiatry (MedMAP). Medication is often a central component to the treatment of these disorders but has historically been administered in a less than systematic manner. People who have schizophrenia are frequently over- or under-medicated, which hinders their potential for recovery. The components of MedMAP address the problems that lead to this inadequate use of medications, such as poor documentation; inability of patients to recall their medication histories; and practitioners' use of different prescribing practices in terms of selection, dosing and trial duration of medications. The basic elements of MedMAP are (1) a systemic approach to administering medications, (2) careful measurement of medication outcomes and altering the medication course when desired results are not being achieved, (3) documentation of medication choices to guide future treatment decisions and (4) active consumer-involvement in the decision-making process.

Assertive community treatment was designed as a means to provide a full-range of services within a community-setting to people who have severe mental illnesses such as schizophrenia, bipolar, depression or schizo-affective disorder. The primary goal of this treatment is to prevent hospitalization and give the person a life not dominated by their mental illness. The treatment was born out of necessity as practitioners observed people who have mental illnesses constantly being readmitted to the hospital after having been stabilized and discharged. Fragmentation of care and the inability to access the level of services necessary were leading this pattern. The solution was to bring the inpatient level of care out into the community with a multi-disciplinary team that

provided assistance in a number of areas including daily activities, family life, health, medication support, housing assistance, financial management, entitlements, substance abuse treatment and counseling. The key to its success is a low staff to consumer ratio (each team handles about 10 consumers), provision of services where they are needed (in the community), uninterrupted care as someone from the team is always available, and time-unlimited support. Treatment is individualized, provided directly by the team members, flexible and tailored to each person's needs and vision for recovery.

Supported employment is a program that aids consumers in finding competitive jobs (defined as at least minimum wage jobs open to the general public) that are well suited to their interests and abilities. This program originated from the recognition that work is an important component of the recovery process. Supported employment is based upon six principles which include: (1) eligibility is based on consumer choice (no one is excluded), (2) employment is integrated with treatment for continuity, (3) competitive employment is the goal, (4) job search starts soon after a consumer expresses interest in working (there are no prerequisites such as training classes or intermediate work experience), (5) follow-along supports are continuous, and (6) consumer preferences are important. Employment specialists work alongside consumers to ensure these six principles are met. The specialist works closely with the managers and other members of a consumer's treatment team to achieve the goal of stable, suitable employment.

Integrated treatment for co-occurring mental and substance use disorders is a treatment model in which the same treatment team provides both mental health and substance abuse treatment for those with dual disorders (simultaneously occurring substance abuse and mental illness). Integrated treatment improves chances for meaningful recovery. Within this model, consumers receive case management, outreach and other much-needed services such as housing and supported employment. Counseling services are tailored to those who have dual disorders and include assessment,

motivational treatment and substance abuse counseling. Family members are also educated about the mental illness and substance abuse, and are given support as well. Those with dual disorders are in a high-risk group and vulnerable to a host of corollary problems such as relapse, troubled finances, homelessness and health crises, which is why integrated treatment is so critical to successful outcomes.

Family psychoeducation is a practice that forges partnerships between families, consumers and practitioners, who come together to support recovery. Families are given information about the illness and develop coping skills for handling the problems mental illness brings about. This practice has several phases. The first phase involves family members in introductory sessions where they meet with a practitioner and explore the warning signs of illness, the family's reactions to symptoms and behaviors, and feeling of loss and grief, and set goals for the future. The second phase is an educational workshop in which families come together to learn about the microbiology of the illness, normal reactions, managing stress and safety measures. The final component is problem-solving sessions in which the consumer and families meet every two weeks for the first few months to learn to deal with problems in a pragmatic, structured way. This component of treatment can last up to two years if such support is needed from the family. The overarching goal of family psychoeducation is to create an environment of hope and improved coping, and a sense of collaboration between consumers, families and practitioners.

Illness self-management is a psychiatric rehabilitative evidence-based practice that is designed to empower people who have serious mental illnesses to understand and manage their illness effectively. During a series of weekly sessions, mental health practitioners aid consumers in developing their own tailored strategies for coping with their illness, constructing their own goals for recovery and playing an integral role in decision-making about their treatment. Nine topic areas are covered in the program: teaching recovery strategies, practical facts about mental illness, the stress-vulnerability model and treatment strategies, building social

support, reducing relapses, using medications effectively, coping with stress, coping with problems and symptoms, and getting your needs met in the mental health system. Practitioners use a variety of techniques to accomplish these goals, such as cognitive-behavioral, educational and motivational strategies. Research has demonstrated that this type of program produces excellent benefits. Typically, consumers will experience a reduction in symptoms and relapses, use their medications more effectively, increase their illness knowledge and repertoire of coping skills, and make progress toward their individualized goals of recovery.

Appendix B:

Descriptions of Evidence-Based Practices for Children and Adolescents

Therapeutic foster care is an EBP for children and adolescents who have a history of chronic antisocial behavior, delinquency or emotional disturbance. In addition, children and adolescents with complex physical health problems may be placed in therapeutic foster care (also known as multidimensional treatment foster care, treatment-foster family care, and family-based treatment). This type of care is provided as an alternative to hospitalization, incarceration, or different types of group or residential homes.[42]

Foster families are carefully trained to provide a structured environment for these children where they can learn social and emotional skills, such as emotional self-awareness, anger management and conflict resolution. Participants stay with these families for several months; in certain programs, participants are separated from their usual peer environment and closely supervised in school, at home, and in the community. One of the ultimate goals is often to reunite the family once functioning is improved, which is often accomplished through psychological therapy for participants and members of their biological families.

Multi-Systemic Therapy (MST) is an evidence-based practice that targets juvenile offenders and views treatment as "occurring across a complex network of interconnected systems that embrace individual, family, and extrafamilial (peers, schools, neighborhoods) factors."[43] Intervention may occur in one or more of these systems.

MST uses a variety of treatment techniques, including cognitive and behavioral approaches to treatment. Services are delivered in the community, often in settings such as schools or homes. The technique is intensive in nature, usually requires several hours of intervention per week, and seeks to actively involve the family in treatment.

The MST treatment model adopts an individualized set of protective and risk factors in the treatment plan for each child, seeking to identify and minimize risk factors while maximizing protective factors. A variety of pragmatic interventions at the family and systems level that affect these risk and protective factors have been shown through a body of research to be effective in reducing delinquent behavior.[44] MST programs may also help to improve parenting skills at the family level, or may focus on improving communication between parents and teachers.

Positive behavioral interventions and supports (PBIS) is another evidence-based practice being used with children and adolescents, which uses the principles and techniques of behavioral analysis to produce behavioral change. These techniques were initially developed to treat people with severely aggressive or self-injurious behaviors.[45] It has evolved into a behaviorally based intervention process that can be used to target individuals as well as entire school communities.[46, 47]

Parent-child interaction therapy (PCIT) is a type of behavioral treatment for young children. Typically, the treatment involves having a parent interact with their child, while a PCIT-trained therapist in another room whispers instructions for improving communication and interaction with the child into an earphone that the parent wears. Coaching and role-playing are also used. The program was designed to improve the behavior of children who have temper tantrums, difficulty in school, challenging authority figures, swearing and defiance.[48]

Appendix C:

Questions to Consider Before Implementing an Evidence-Based Practice[49]

It is essential to evaluate the *quality* and *applicability* of programs and practices to help determine which evidence-based program to implement. The following is a useful set of questions to ask when tackling this challenge:

1. What evidence is available to support the use of this EBP in a real-world setting?
2. What process was used to decide to study the EBP in question versus the alternatives?
3. What was the study's design and implementation, and what defined its positive outcome?
4. How many studies were conducted on this EBP, and what was the total outcome of *all* the studies?
5. Is the EBP based on both efficacy and effectiveness studies?
6. For what groups of consumers was the EBP found to be effective? (It is important to assess the similarities between the target group intended to be served and the participants in the studies to ensure applicability.)
7. Have any issues related to differential responses due to cultural, ethnic and/or gender difference been addressed? If not, how will the impact of using the EBP "off label" be assessed, and how will consumer choice and safety be ensured?

Once the quality of the EBP is assessed, it is important to consider the following questions, which take into consideration the *external influences* that factor into the implementation of the practice:

1. What are the resources, initial costs and any long-term savings associated with implementing this EBP?

2. What affects would policy changes have on providers (e.g., limits on practice options, ability to use alternative approaches, reimbursement rates).

3. How would implementing this EBP enhance consumer choice? How would it limit consumer choice?

5. What benefits and/or services would be cut or altered if this EBP were implemented?

6. What is the procedure for making the public aware of both the process of considering the use of an EBP, and notification and education regarding the decision to use an EBP?

Answering these questions lays a strong foundation for decision-making and planning around implementation.

Resources

These documents formed the basis of this publication and can provide more information on evidence-based programs and current efforts to promote these services in mental health systems.

1 *Mental Health: A Report of the Surgeon General.* (1999). Office of the Surgeon General. Public Health Service, Department of Health and Human Services. Retrieved from www.surgeongeneral.gov.

2 *Achieving the promise: Transforming mental health care in America.* The President's New Freedom Commission on Mental Health, DHHS publication SMA-03-3832, 2003

3 National Consensus Conference on Mental Health Recovery and Mental Health Systems Transformation (December 16-17, 2004). *Consensus Statement on Mental Health Recovery*. Unpublished draft manuscript.

4 Miller, J., & Thompson, S. (December, 2004) *Findings of a Focus Group of Consumers on Evidence-Based Practices Challenges and Opportunities: Final Report.* Unpublished manuscript. NASMHPD Research Institute.

5 Drake, R. E., Goldman, H. H., Leff, S., Lehman, A. F., Dixon, L., Mueser, K., & Torrey, W. C. (2001). Implementing evidence-based practices in routine mental health settings. *Psychiatric Services*, 52, 179-182.

6 *Crossing the Quality Chasm: A New Health System for the 21st Century.* Institute of Medicine, Committee on Quality of Health Care in America, National Academy Press, ISBN 0-309-07280-8, Washington DC, March 2001.

7 Drake, R. E. et al. *(see endnote 5)*

8 *Bridging Science and Service, A Report by the National Advisory Mental Health Council's Clinical Treatment and Services Research Workgroup,* National Institute of Mental Health, NIH publication 99-4353, 1999
http://www.nimh.nih.gov/research/bridge.htm.

9 Ibid

10 Tanenbaum, S. J. (2005). Evidence-based practice as mental health policy: Three controversies and a caveat. *Health Affairs*, 24, 163-173.

11 Dissemination Subcommittee on the Committee of Science and Practice (updated 2005). *A Guide to Beneficial Psychotherapy: Empirically Supported Treatments*. American Psychological Association, Division 12, Society of Clinical Psychology. Retrieved from http://www.apa.org/divisions/div12/rev_est/index.html

12 *Achieving the Promise: Transforming Mental Healthcare In America (see endnote 2)*

13 Leff, H. S., Mulkern, V., Drake, R. E., Allen, E., & Chow, R. (2001). Knowledge Assessment: A missing link between knowledge development and application. *Human Services Research Institute*. Retrieved from http://www.tecathsri.org/pub_pickup/other/kapaper.pdf.

14 SAMHSA's National Registry of Evidence-Based Programs and Practices (NREPP), Retrieved May 3, 2005. www.modelprograms.samhsa.gov

15 Crowel, R., & Morgan, O. (2005). *The Challenge of Evidence Based Practices*. Unpublished manuscript.

16 SAMHSA's National Registry of Evidence-Based Programs and Practices (NREPP) *(see endnote 14)*

17 *Achieving the Promise: Transforming Mental Healthcare In America (see endnote 2)*

18 *Crossing the Quality Chasm: A New Health System for the 21st Century (see endnote 6)*

19 U.S. Department of Health and Human Services (2001). *Mental Health: Culture, Race, and Ethnicity – A Supplement to Mental Health: A Report of the Surgeon General*. Rockville, MD. Department of Health and Human Services, Public Health Service, Office of the Surgeon General.

20 Ibid

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