Position Statement 12: Evidence-Based Healthcare

Policy

Mental Health America (MHA) is dedicated to accelerating the application of scientific and practical knowledge to help in the recovery of people with mental health and substance use conditions. This focus on evidence-based healthcare spans the development, exposition, evaluation, replication, translation, dissemination and implementation of knowledge about mental health and substance use disorders and their treatment and includes all forms of knowledge, from randomized clinical trials through clinical practice and consumer insights. This process follows up on clinical studies with Patient Centered Outcomes Research (further described below), which compares different interventions to prevent, diagnose, treat and monitor health conditions focusing on the comparative effectiveness of the intervention or service in diverse real-life settings.

Effective access to reliable evidence is vital to the development of an informed decision-making partnership between consumers and providers. Evidence-based healthcare should balance scientific knowledge, clinical expertise and experience, and consumer and family experience and values to inform healthcare delivery and decision-making. To ensure this balance, processes for evaluating and translating relevant evidence in a form accessible to consumers, families, and the general public and for applying such findings to practice and policy should be transparent and driven by consumer and family perspectives and values. This will take work, and MHA pledges to aid in translating and disseminating the needed information and to seek partnerships to that end.[(1)]

Promising practices. At the crux of the controversy about the application of evidence-based practices is the concern that policymakers and insurance administrators may use lack of expensive randomized clinical trial evidence as a rationale for denying reimbursement for desirable services in order to contain cost. Such policies risk stifling the growth and use of effective "best," "emerging" or "promising" (hereinafter "promising") practices, particularly peer-to-peer services. Of particular concern to consumers and families is that many of the current evidence-based practices cited in this position statement reflect the approaches of earlier eras, and focusing on these practices to the exclusion of others could impede further innovation - particularly for peer-delivered services that lack the profit potential to make randomized trials economically feasible.

While cost is an inevitable consideration in reimbursement decisions, it is of paramount importance to honor **consumer needs** for expedited access to other treatments when evidence-based treatments are not tolerated or prove ineffective or insufficient. In addition, MHA favors subsidizing and encouraging research into promising but not yet proven treatments. MHA urges that all manufacturers' and patent owners' experimental evidence be fully disclosed to consumers to make that access fully informed. This is of greatest importance with promising practices that are not yet established as evidence-based. As with all other treatment decisions, potential harms

must be weighed against potential benefits in the decision to use or forego promising practices. Additional care is appropriate when potential harms are not yet fully established.

MHA supports efforts like the National Registry of Evidence-Based Programs and Practices **(NREPP)** to create a centralized clearinghouse for evidenced-based practices with transparent criteria for evaluating and approving such practices. It is vital that such a clearinghouse use flexible criteria for what constitutes acceptable evidence, including randomized clinical trials, quasi-experimental studies and observational studies. It is also vital that the evaluation criteria be driven by the goal of recovery for persons affected by mental illnesses and addictions.

Patient Centered Outcomes Research. Traditional academic research regards randomized controlled trials as the gold standard for making causal inferences. Randomized controlled trials are valuable and appropriate in getting to firm scientific conclusions about effectiveness and safety, but we must employ a broader range of methods if we are to address the range of challenges encountered in treating mental health and substance use conditions. Other methods, like open-label trials (in which both the researchers and participants know which treatment is being administered, such as studies of peer services and exercise), observational and quasi-experimental methods can be used to study more clinically relevant interventions and populations and measure more consumer-relevant outcomes, using diverse populations of study participants from a variety of practice settings.[(2)]

Of greatest importance, investments must be made in longitudinal research that demonstrates the effectiveness of treatments in real-world settings that account for the breadth of experience and the diversity of the larger population. This is the ultimate level of evidentiary support, referred to in this policy (and in the federal Affordable Care Act) as Patient Centered Outcomes Research. To that end, consumer and family input and involvement should drive both research design and evaluation so that the evolving evidence base represents the values, goals and priority health outcomes they seek. Then, research findings should be published in lay language so that consumers and families can understand and use the information in their healthcare decision-making.[(3)]

Cultural and linguistic competency is an essential element of evidence-based healthcare. The unique cultural perspectives and outcomes relevant to diverse populations need to be incorporated at all levels of evidence development and implementation.

Background

The boundaries of scientific research are constantly being stretched, revealing new understandings and options for treating many chronic illnesses, including mental health and substance use disorders. Yet even as emerging science gives us information about how and why mental illnesses and addictions affect individuals, and about genetic biomarkers that may better guide treatment choices, it also reveals the absence of universally effective treatments and practices. Newer studies often erode old findings, due in part to the bias toward publication of positive results and in part to the absence of full disclosure.[(4)] The result is that negative findings

show up after an intervention or service has come into common practice. In particular, pharmaceutical use by the general population commonly reveals side effects that were not adequately evaluated in the preapproval clinical trials.

In addition, the Institute of Medicine estimates that it takes nearly two decades for new knowledge to translate into effective practice and policy that can influence treatment choices for an individual.[(5)]

Prominent reports from the Surgeon General,[(6)] the President's New Freedom Commission on Mental Health[(7)] and the Institute of Medicine[(8)] all underscore the importance of narrowing the gap between research and implementation of evidence-based practices. Consequently, government agencies, private-sector health plans, academic research centers and other stakeholders are dedicating enormous resources to evaluating current science and practice, disseminating information about promising practices, and guiding the implementation and replication of such evidence-based approaches to healthcare.[(9)]

Patient Centered Outcomes Research and PCORI. The 2010 Affordable Care Act authorized the development of an independent, non-profit organization to drive the development, synthesis and use of research. The Patient Centered Outcomes Research Institute (PCORI) is governed by a 21-member Board of Governors, and is tasked with helping patients, clinicians, purchasers and policy makers make better informed health care decisions. PCORI will commission research that is responsive to the values and interests of patients and will provide patients and their caregivers with reliable, evidence-based information for the health care choices they face.[(10)]

Evidence-based Practices

SAMHSA, the Substance Abuse and Mental Health Services Administration of the U.S. Department of Health and Human Services, has undertaken to recognize evidence-based practices[(11)] and to translate some of them into toolkits for consumers, families and the general public. As of 2011, SAMHSA has, through various means, recognized eleven practices as evidence-based and one practice as promising for the treatment of mental health and substance use conditions,[(12)] has written toolkits ("KITs," based on "Knowledge Informing Transformation") describing seven of them,[13)] and is preparing an additional five toolkits,[(14)] as detailed below:

- *Assertive Community Treatment* (ACT or PACT) refers to 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 by assuring regular therapeutic contact and regular use of medication. A multi-disciplinary team provides 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 high staff to consumer ratio (at least one to 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. A SAMHSA toolkit has been developed for this practice.[(15)]

- *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. 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 that these six principles are met. A SAMHSA toolkit has been developed for this practice.[(16)]
- *Integrated Treatment for Co-occurring 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.[(17)] A SAMHSA toolkit has been developed for this practice.[(18)]
- *Family Psychoeducation* is a practice that forges partnerships between families, consumers and practitioners, who come together to support recovery. Families are given information about mental health and substance use conditions and develop coping skills. This practice has several phases. (1) 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. (2) 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. (3) 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. A SAMHSA toolkit has been developed for this practice.[(19)]
- *Illness Management and Recovery* (IMR) 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: (1) teaching recovery strategies, (2) practical facts about mental illness, (3) the stress-vulnerability model and treatment strategies, (4) building social support, (5) reducing relapses, (6) using medications effectively, (7) coping with stress, (8) coping with problems and symptoms, and (9) 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. A SAMHSA toolkit has been developed for this practice.[20]

- *Permanent Supportive Housing* is a program to provide housing distinct from social supports for people with mental health and substance use disorders. A SAMHSA toolkit has been developed for this practice,[21] which defines Permanently Supportive Housing as follows: (1) Tenants have a lease [or sublease] in their name, and, therefore, they have full rights of tenancy under landlord-tenant law, including control over their living space and protection against eviction. (2) Leases do not have any provisions that would not be found in leases held by someone who does not have a psychiatric disability. (3) In particular, participation in services is voluntary and tenants cannot be evicted for rejecting services. Although Permanent Supportive Housing is designed for people who need support services, person's Permanent Supportive Housing home is just that, not a treatment setting, as has been common in many residential facilities operated by mental health systems. (4) House rules, if any, are similar to those found in housing for people who do not have psychiatric disabilities and do not restrict visitors or otherwise interfere with a life in the community. (5) Housing is not time-limited, and the lease is renewable at tenants' and owners' option until abandonment or eviction. (6) Before moving into Permanent Supportive Housing, tenants are asked about their housing preferences and are offered the same range of choices as are available to others at their income level in the same housing market. As stated in (3) above, tenants have choices in the support services that they receive. (7) Housing is affordable, with tenants paying no more than 30 percent of their income toward rent and utilities, with the balance available for discretionary spending. (8) Housing is integrated. Tenants have the opportunity to interact with neighbors who do not have psychiatric disabilities. (9) As stated in (3) above, tenants have choices in the support services that they receive. They are asked about their choices and can choose from a range of services, and different tenants receive different types of services based on their needs and preferences (10) As needs change over time, tenants can receive more intensive or less intensive support services without losing their homes. This flexibility stands in sharp contrast to the residential treatment programs and transitional housing traditionally offered by mental health systems. (11) The support services that are provided promote recovery and are designed to help tenants choose, get, and keep their housing. (12) The provision of housing and the provision of support services are distinct. In residential treatment programs, staff often provides support services and handles housing functions such as the application, move-in, rent collection, rule enforcement, and eviction. In Permanent Supportive Housing, housing and support services are handled separately to avoid all possibility of coercion.
- *Medication Treatment, Evaluation and Management* (MedTEAM) refers to systematic use of medications. Medication Treatment, Evaluation and Management is an evidence-based approach for offering medication management to people with serious mental illnesses. Four factors are involved in providing evidence-based medication management: (1) people who prescribe medications (prescribers) must know the best current evidence from systematic research; (2) they must integrate that information with their own clinical expertise; (3) prescribers must be aware of consumers' experience and be able to integrate that experience into medication decisions; and (4) medication management should be based on active consumer participation, mutual communication, and shared decisionmaking. A SAMHSA toolkit has been developed for this practice.[22]

- *Consumer-operated Services* are endorsed by SAMHSA, but the evidence base is still weak. SAMHSA is developing a toolkit based on the currently available evidence. However, consumer-operated services are very broad in their missions, and the toolkit will not cover all of them. More study will be required to validate other promising peer-to-peer programs.
- *Treatment of Depression in Older Adults* requires different interventions than those used for younger people. MHA has identified a dearth of documented evidence-based practices that are helpful in addressing mental health and substance use problems of older people. The one exception is the use of community-based, multidisciplinary mobile geriatric teams.[(23)] SAMHSA is developing a toolkit for this practice, but its breadth is unknown.
- *Interventions for Disruptive Behavior Disorders in Children* are needed in both school and home settings. Although MHA has endorsed School-wide Positive Behavior Support in Schools (SWPBS),[(24)] the breadth of the evidence-based practices supported by SAMHSA for disruptive behavior disorders is unknown. SWPBS is based on the assumption that when faculty and staff in a school actively teach and acknowledge expected behavior, the proportion of students with serious behavior problems will be reduced and the school's overall climate will improve. Strategies such as behavioral coaching, behavioral rehearsal and role play, daily goal setting, and self-monitoring can be helpful in teaching students to manage their own behavior and emotions more effectively. SAMHSA is developing a toolkit for this practice.
- *Mental Health Promotion* has been shown to increase social connectedness. It builds social capital, promotes community well-being, overcomes social isolation, increases social connectedness and addresses social exclusion. Evidence-based practices include: (1) community building and regeneration programs, (2) school-based programs for mental health and well-being, (3) structured opportunities for civic participation, (4) workplace mental health promotion, (5) social support, such as home-visiting and parenting programs, (6) volunteering, (7) community arts programs, (8) physical activity/exercise, and (9) Media and social marketing campaigns that challenge stigma.[(25)] SAMHSA is developing a toolkit for this practice.
- *Supported Education* has emerged as promising practice in psychosocial rehabilitation for consumers with serious mental illnesses, but proven evidence-based practices for supported education models are very limited. Supported education programs and research have not been subjected to the rigorous, consistent and repeated methodology of supported employment. However, effective outcomes and significant findings in program attendance, enrollment in postsecondary education, self-esteem, peer support and reduced healthcare costs make supported education a promising practice for the treatment and rehabilitation of adults with serious mental illness.[(26)] SAMHSA is developing a toolkit for this practice but will refer to it as a promising practice rather than as an evidence-based practice.

Opportunities & Challenges

A stronger focus on evidence presents an **opportunity** to improve the quality of mental health and substance use disorder care, empower consumers and families to seek and demand

continually improving care and services and ensure consistently better and more meaningful outcomes for consumers and families. In addition, there is an opportunity to redeploy resources to more outcome-driven programs and practices and to incorporate the recovery paradigm into the services and supports that consumers and families receive.

There are several **challenges** to the effective realization of evidence-based healthcare. As the private and public markets rush to embrace anything labeled "evidence-based," one concern is that policymakers and administrators will inappropriately use evidence-based findings as a cost containment tool and, in the process, fail to respond to consumer needs and stifle the growth of new technologies, therapies and practices. Of highest concern is the potential that reliance on narrowly defined evidence-based practices to the exclusion of promising treatments or programs will preclude the development of a rigorous evidence base for a broader range of options.

Need for recovery focus. Consumers and families are particularly concerned that many evidence-based practices were developed and evaluated prior to general acceptance of the recovery model embraced by MHA and the consumer movement and therefore have little real-world relevance to consumers' quest for a full life in the community. It should be noted that SAMHSA's announced development of toolkits for consumer-operated programs, supported employment and supportive housing go far to address this concern, and SAMHSA has emphasized the recovery paradigm in the toolkits that it has published. However, the existing research base is ill-fitted to address the values represented by the recovery movement, including individualized care, holistic care and peer support. Clinical research designs -particularly the "gold standard" of large, long-term, randomized, double-blind, active-placebo-controlled trials - often do not effectively measure important outcomes, such as quality of life, employment, relationships, and the real-life impact of side effects and drug interactions. Realities of the individual consumer (age, gender, ethnicity, co-occurring disorders, and treatment goals and preferences) are inventoried, but statistically insignificant numbers usually preclude conclusions specific to subgroups.

Patient Centered Outcomes Research and PCORI. The next essential step in the development of evidence-based treatments for mental health and substance use conditions is the Patient Centered Outcomes Research (also called Comparative Effectiveness Research) that will look at the most important functional outcomes for consumers rather than only the standardized scales documenting reduction of symptoms that are the staple of most academic clinical research. More recent practical trials like the CATIE and STAR*D trials[(27)] have been designed to improve the collection of such information, refocusing research on effective outcomes in large representative populations in real-life settings, but it will take time to build this more relevant body of evidence. PCORI will assist in facilitating the generation and use of this evidence, focusing on input by consumers and providers. Engagement with PCORI will be a key opportunity to promote the preferences of consumers, as well as providing guidance for better dissemination of research to consumers, providers, payers, and policy makers.

Consumers and families should be recognized as allies of researchers and should be trained to be full members of research teams. PCORI, MHA and other advocates, researchers and governments need to contribute to the translation, summarization, and dissemination of

evidence-based information, in simple, lay language, for use by consumers in helping determine their preferred course of treatment. The SAMHSA toolkits recognizing 12 evidence-based or promising practices are a great step in advancing this needed effort, and MHA commends SAMHSA for its efforts. The difficulty to come is the synthesis of additional information that may become unmanageable in scope and the updating that will be required as more patient centered outcome research becomes available.

A related concern is the dearth of research focused on response differences by people of different **age, gender, sexual orientation, disability, race and ethnicity, and income.** Evaluations of existing scientific evidence by the Agency for Healthcare Research and Quality (AHRQ) and other entities demonstrate the limitations of clinical trials in terms of adequate participation by consumers across age, gender, and racial and ethnic categories. And the lack of focus on subgroups makes it impossible to assess differences in subgroup responses. This may have the unintended consequence of exacerbating health care disparities.

Policy and program **barriers** to implementation of evidence-based practices in the mental health and substance use disorder care systems are a reality in every community. Such barriers include organizational structure, limitations on financing, unique state regulation and licensing issues, the lack of clear guidelines and models for implementation, workforce shortages and lack of sufficient training resources, technology deficits and resistance to change. It is essential that advocates and consumers champion effective treatments and question ineffective treatments to prevail against the many sources of institutional inertia and to stimulate a successful therapeutic dialogue. This will require a new level of dedication to staying abreast of developments in the scientific literature.

Call to Action

MHA envisions a healthcare system that ensures accessible, high-quality preventive and treatment services for all people regardless of treatment setting, age, gender, sexual orientation, disability, racial or ethnic background, or income. The growing emphasis on evidence development and the determination of evidence-based practices holds the promise of moving the healthcare system toward our vision. But there is a significant danger that over-emphasis on already proven practices may curtail innovation and overlook promising treatment approaches that are on the threshold of being evidence-based. Therefore, it is essential that stakeholders in the mental health and substance use recovery communities become familiar with the proliferation of initiatives that focus on evidence-based healthcare. In addition, advocates, consumers, families, clinicians, and providers should work to identify and promote key questions for future research that are relevant to the most important consumer outcomes and that address differences in age, gender, sexual orientation, disability, race and ethnicity, and income. MHA advocates for the following principles of evidence-based healthcare:

- **Transparency**. The process to evaluate evidence and develop evidence-based programs, interventions, treatments and policies should be open to the public and include stakeholders in the decision-making process. Consumers and families should have active and meaningful roles on review, evaluation and governing bodies that make decisions about the application of evidence in practice and policy. In addition, clear and complete

research findings should be communicated to consumers and families, and tools and practices should be developed to aid consumers in how to use such information in their dialogue with caregivers. MHA and its affiliates should advocate broad dissemination of studies and preparation and dissemination of summaries and translations of clinical research, in order to allow consumers and payers to evaluate all of the data, rather than just those that support the provider (whether direct or indirect), in a user-friendly format.

- **Individualized Care**. Scientific and practical evidence can aid in determining the best intervention to optimize an individual's care, but such evidence alone cannot guarantee the right choice for every individual. Therefore, it is important that reimbursement and coverage policies reflect the need for individualized care and maintain flexibility to respond to consumer needs and to test promising practices.. In addition, it is important to advocate for wider investment in Patient Centered Outcomes Research, practical clinical trials and other research methods that generate evidence applicable to real-world treatment settings.
- **Consumer-relevant Outcomes**. The inclusion of consumers and families in the design, discussion and evaluation of clinical trials and other research is also important because consumers can articulate the most relevant variables for their quality of life and health outcomes. Current research is heavily focused on symptom management rather than on quality of life outcomes such as ability to work, independent living and social connectedness. More important, inclusion of people affected by mental illnesses and addictions can ensure that evidence-based healthcare is grounded in the recovery model.[(28)] Thus, Patient Centered Outcomes Research is essential, PCORI needs to be engaged by consumer advocates to ensure that consumer preferences are applied to its research, and research needs to go beyond RCTs to encompass the realities of diverse real-world settings and diverse groups of consumers.
- **Quality First.** Safety and individually tailored treatment should be the top goal of an evidence-based healthcare system. Treatment costs are relevant to the discussion but must be weighed in the system context -total burden of disease costs for an individual across services and settings -rather than restricting costs to a particular cost center - like outpatient care. In the context of clinical decision-making, cost should be evaluated by providers and consumers after a careful weighing and discussion of benefits and risks and a dialogue that emphasizes choice across a range of therapeutic options.
- **Fidelity**. Adherence to program standards and principles is important to ensure reliable outcomes. Ongoing fidelity measurement is especially important in programs or practices that have been altered to suit the age, gender, disability, ethnic or cultural needs and income of those being served. While complete fidelity in implementation may not be possible or desirable, providers need to document the changes being made and rigorously measure the outcomes and the effects of the changes. Policymakers should take fidelity issues into consideration so that the policies are flexible and appropriate.
- **Cultural and Linguistic Competence**. Mental health and substance use research has too often excluded diverse populations, which has created an even wider gap between research and practice for racial and ethnic minorities.[(29)] Similar issues arise in the application of research findings to different groups based on age, gender and sexual orientation. Cultural competence must be integrated into all evidence-based practices and at all stages of implementation. Research should be designed and developed by and with input and participation from members of specific cultural and ethnic populations.

Practices should be adapted, whenever appropriate, to the cultural and linguistic groups being served. Outcomes of evidence-based practices should be evaluated in terms of culture-specific and culturally relevant outcomes.

Effective Period

This policy was Approved by the Mental Health America Board of Directors on September 17, 2011. It is reviewed as required by the Mental Health America Public Policy Committee.

Expiration: December 31, 2016

1. See, e.g., National Association of Mental Health Planning & Advisory Councils, *Science to Service: Implementing Evidence-based Mental Health Services. A Guide for Mental Health Planning and Advisory Councils*, cited as DHHS Publication. Rockville, Maryland: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration (2005). http://www.namhpac.org/PDFs/01/sciencetoservice.pdf . In addition to the practices currently recognized as evidence-based by SAMHSA, NAMHPAC describes four additional practices focused on young people previously endorsed in some form [citation needed] by SAMHSA that are not currently recognized as such by SAMHSA. The NAMHPAC brochure paperwork was returned to the SAMHSA Project Officer in 2006, and the brochure was never officially endorsed by SAMHSA. NAMHPAC posted it to its website in the form presented to the Project Officer. The four semi-recognized practices are:
(1)*Therapeutic Foster Care* is an evidence-based practice 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. 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.
(2)*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." 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. MST programs may also help to improve parenting skills at the family level, or may focus on improving communication between parents and teachers.
(3)*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. PBIS has evolved into a behaviorally-based intervention process that can be used to target individuals as well as entire school communities.
(4)*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.

2. Tanenbaum, S. J., "Evidence-based Practice as Mental Health Policy: Three Controversies and a Caveat," *Health Affairs*, 24:163-173(2005).
3. Miller, J. and Thompson, S., *Findings of a Focus Group of Consumers on Evidence-based Practices Challenges and Opportunities: Final Report.* Unpublished manuscript. National Mental Health Association and NAMI for NASMHPD Research Institute (2004).
4. Lehrer, J., "The Truth Wears Off," *The New Yorker*, December 13, 2010 http://www.newyorker.com/reporting/2010/12/13/101213fa_fact_lehrer and the author's January 3, 2011 blog response, http://www.newyorker.com/online/blogs/newsdesk/2011/01/jonah-lehrer-more-thoughts-on-the-decline-effect.html
5. Institute of Medicine, Committee on Quality of Health Care in America, *Crossing the Quality Chasm: A New Health System for the 21st Century*. National Academy Press, ISBN 0-309-07280-8, Washington DC (March 2001). http://www.iom.edu/Reports/2001/Crossing-the-Quality-Chasm-A-New-Health-System-for-the-21st-Century.aspx.
6. Office of the Surgeon General, Public Health Service, Department of Health and Human Services, *Mental Health: A Report of the Surgeon General* (1999), www.surgeongeneral.gov.
7. The President's New Freedom Commission on Mental Health, *Achieving the Promise: Transforming Mental Health Care in America*. DHHS publication SMA-03-3832 (2003), http://store.samhsa.gov/product/SMA03-3831.
8. Institute of Medicine, Committee on Quality of Health Care in America, *Crossing the Quality Chasm: A New Health System for the 21st Century*, *supra* at footnote 5 and Institute of Medicine, Committee on Crossing the Quality Chasm: Adaptation to Mental Health and Addictive Disorders, Board on Health Care Services, *Improving the Quality of Health Care for Mental Health and Substance-Abuse Conditions*. Washington DC: National Academies Press (2005), http://www.iom.edu/Reports/2005/Improving-the-Quality-of-Health-Care-for-Mental-and-Substance-Use-Conditions-Quality-Chasm-Series.aspx.
9. For links to these initiatives, see National Working Group on Evidence-based Healthcare, www.evidencebasedhealthcare.org.
10. Patient Centered Outcomes Research Institute, http://pcori.org/.
11. *Many* of these summaries and those in footnote 1 have been condensed from the summaries published in *Science to Service*, supra, footnote 1, at p. 36-41
12. For SAMHSA publications generally, see http://store.samhsa.gov/facet/Treatment-Prevention-Recovery
13. http://store.samhsa.gov/facet/Professional-Research-Topics/term/Evidence-Based-Practices?filterToAdd=Kit
14. Blyler, C., "Evidence-based Practice KITs: Moving Science into Practice," power point presentation to the American Association of Community Psychiatrists, October 14-16, 2010. No URL available.
15. http://store.samhsa.gov/product/SMA08-4345
16. http://store.samhsa.gov/product/SMA08-4365
17. Drake, RE, Mueser, KT. Brunette MF, & McHugo, G.J., "A Review of Treatments for People with Severe Mental Illnesses and Co-Occurring Substance Use Disorders," *Psychiatric Rehabilitation Journal*, 27 (4): 26-374 (2004).See also MHA Position Statement 33, Substance Use, Abuse or Dependence and Co-occurring Interactive Disorders. http://www.nmha.org/go/position-statements/33.
18. http://store.samhsa.gov/product/SMA08-4367
19. http://store.samhsa.gov/product/SMA09-4423
20. http://store.samhsa.gov/product/SMA09-4463
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23. Bartels, S.J., Dums, A.R., Oxman, T.E., Schneider, L.S., Areán, P.A., Alexopoulos, G.S., & Jeste, D.V., "Evidence-based Practices in Geriatric Mental Health Care," *Psychiatric Services* 53(11):1419-1431 (2002). http://psychservices.psychiatryonline.org/cgi/reprint/53/11/1419
24. http://www.nmha.org/go/position-statements/45
25. *Evidence-based Mental Health Promotion Resource*, published by the Public Health Group, Victorian Government Department of Human Services, Melbourne, Victoria (2006).

http://www.health.vic.gov.au/healthpromotion/downloads/mental_health_resource.pdf

See also MHA Position Statement 48, Prev