Supporting the Implementation of Evidence-Based Practices for Adults with Co-Occurring Mental and Substance Use Disorders

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Abstract

Significant barriers exist to the implementation of evidence-based practices into routine mental health and substance abuse settings. This paper discusses the role and function of technical assistance centers to help support the implementation process using, as a guide, the experience of the Ohio Substance Abuse and Mental Illness Coordinating Center (SAMI CCOE) in helping mental health and substance abuse agencies to implement Integrated Dual Disorders Treatment (IDDT), an evidence-based practice for adults with co-occurring substance and mental disorders A description of the SAMI CCOE is presented followed by discussion of an implementation framework, using stages of organizational change, to help understand and guide the process of implementing evidence-based practices. The paper concludes with a discussion of lessons learned in helping organizations to implement integrated treatment for adults with co-occurring disorders.
Keywords: Evidence-based Practices, Co-Occurring Mental and Substance Use Disorders, Implementation, Technical Assistance Centers

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Introduction

There has been a paradigm shift from viewing mental health problems as isolated from substance use problems in various populations toward a recognition that individualized treatment within an integrated model is essential to developing best practices (Kola & Singer, in press). This shift is consistent with the movement toward providing evidence-based practices (EBPs) for all clients and their families. In fact, the mental health and substance abuse fields have seen a significant increase in the number of evidence-based practices that have been developed to address the needs of adults with mental illness, substance use problems or co-occurring mental illness and substance use. At the same time, as in other health and social welfare fields, significant barriers exist to the implementation of such practices into routine mental health and substance abuse settings. The implementation of EBPs presents challenges that relate to the individual staff who deliver services, i.e., resistance to change, as well as to challenges on the organizational level, i.e., need for organizational changes that require additional training, changes in policies, etc. (CSAT, 2006).

This paper discusses the role and function of technical assistance centers to help support the implementation process using, as a guide, our experience with the Ohio Substance Abuse and Mental Illness Coordinating Center (SAMI CCOE) in helping agencies to implement Integrated Dual Disorders Treatment (IDDT), an evidence-based practice for adults with co-occurring substance and mental disorders.

The paper begins with a brief overview of problems and service needs of adults with co-occurring disorders and a description of the IDDT model. This is followed by a discussion of implementation barriers and the role of technical assistance centers. A description of the SAMI CCOE is then presented followed by discussion of an implementation framework, using stages of organizational change, to help understand and guide the process of implementing evidence-based practices. The paper

concludes with a discussion of lessons learned in helping organizations to implement integrated treatment for adults with co-occurring disorders.

Co-Occurring Disorders and the Integrated Treatment Model

There has been increasing concern over the past two decades about the problems and service needs of adults with co-occurring mental and substance use disorders. Data confirms that these co-occurring disorders are common. The Epidemiological Catchment Area (ECA) study, based on data collected from 1980 to 1985, showed that the lifetime rate of a substance use disorder for persons with severe mental illness was approximately half, with 48% of persons with schizophrenia and 56% of persons with bipolar disorder affected (Regier et al., 1990). Findings from the more recent National Comorbidity Study (NCS) also documented a high prevalence of co-occurring addictive and mental disorders. In the NCS, 41%-65% of participants with a lifetime occurrence of addictive disorder also reported a lifetime occurrence of at least one mental disorder, and 51% of those with a lifetime occurrence of mental disorder reported a lifetime occurrence of at least one addictive disorder (Kessler et al., 1996). Studies of persons with mental illness have suggested that 25-35% have an active or recent (within the last 6 months) substance disorder (Mueser, Bennett, & Kushner, 1995). Additionally, numerous studies report high rates of substance abuse among clients in treatment for psychiatric disorders (Mueser et al., 1990, 2000).

Dual diagnosis is associated with a variety of negative outcomes. These include higher rates of relapse (Swofford, Kasckow, Scheller-Gilkey, & Inderbitzin, 1996), hospitalization (Haywood et al., 1995), violence (Cuffel, Shumway, Chouljian, & Macdonald,1994), incarceration (Abram & Teplin, 1991), homelessness (Caton et al., 1994), and serious infections such as HIV and hepatitis (Compton, Cottler, Ben-Abdallah, et al., 2000;) than are found for persons with only one diagnosis. Drug abusers with comorbid mental disorders are more likely to engage in risky behaviors that jeopardize their health (Leshner, 1999).

Co-occurring disorders pose special challenges for clients' treatment. There is strong evidence that substance abuse impairs the abilities of persons with a severe mental illness to develop and adhere to effective treatment plans and can shatter already fragile social networks. As a result, dually diagnosed individuals tend to use more psychiatric services than those with a single diagnosis, particularly such costly services as emergency room visits and inpatient hospitalizations (Dickey & Azeni, 1996). Similarly, substance abuse treatment seeking and adherence can be negatively impacted by symptoms and other effects of mental illness (Grant, 1997; Mueser, Drake, & Miles, 1997). For example, clinical depression may increase substance-abusing individuals' susceptibility to environmental influences that lead to relapse (Leshner, 1999).

Persons with dual disorders also find it difficult to access the separate substance abuse and mental health treatment systems so common in the U.S. (Tracy & Biegel, 2006; SAMHSA, 2002). For example, most clients with mental illness are unable to navigate separate service systems, and conflicting approaches to treatment often complicate and/or thwart their recovery. Clients' drug abuse may necessitate adjustments in pharmacological treatments for mental illness (Leshner, 1999). Historically, each system has insisted that symptoms of the "other" disorder abate before treatment can be considered. Dually diagnosed clients may not have the wherewithal, perhaps due to transient or long-term cognitive impairment, to be readily aware of their co-occurring disorder and its negative impact, and therefore may not be motivated to seek treatment for it.

To address these barriers, treatments and programs providing integrated dual diagnosis services have been steadily developed, refined, and evaluated (Drake & Wallach, 2000; Sacks, 2000), but are still

not the norm. The Integrated Dual Disorders Treatment Model (IDDT) model overcomes many of the limitations of traditional approaches to intervening with these disorders. It combines philosophical, organizational, and treatment characteristics of both systems to provide coordinated interventions for individuals with co-occurring severe mental and substance use disorders. The model utilizes biopsychosocial treatments that combine pharmacological, psychological, educational, and social interventions that are directed to both clients and their families and friends. It promotes client and family involvement in service delivery, and stable housing and employment as a necessary condition for recovery. The focus of the model begins with the assertion of shared decision making as a core value, i.e., developing a collaborative relationship between the service provider and the client (Mueser, Noordsy, Drake, & Fox, 2003). Components of the IDDT model include the following components: Multidisciplinary Treatment Teams, Stage-Wise Interventions, Access to Comprehensive Services, Time-Limited Services, Assertive Outreach, Motivational Interviewing, Substance Abuse Counseling, Group Treatment, Family Psychoeducation, participation in Alcohol & Drug Self-Help Groups, Pharmacological Treatment, and Interventions to Promote Health (Mueser et al., 2003).

Technical Assistance Centers: An Implementation Resource

Although there has been significant growth in the number of evidence-based practices in the mental health and substance abuse fields, as noted above, these practices have not been widely adopted as standard practice by most mental health and substance abuse systems in the United States. For example, findings from the national Schizophrenia PORT study (Lehman et al., 1998) indicate that no evidence-based treatment for Schizophrenia had been adopted by a majority of routine mental health settings, with some particular treatments, such as psychosocial interventions, being utilized by less than one-quarter of all such settings. Significant barriers to implementation persist despite the existence of rigorous research evidence, thus there is considerable latency in moving from science to services (Torrey et al., 2001).

In fact, there is an extensive literature concerning barriers to the use of research and evidence-based practices by mental health and human service agencies (Blum, Biegel, Tracy, & Cole, 1995; Bond et al., 2001; Dixon et al., 2001; Goldman et al., 2001; Melton, 1997; Miller, Sorensen, Selzer, & Brigham, 2006; Moser, DeLuca, Bond, & Rollins, 2004). These are numerous and present on multiple levels from the individual agency staff person (e.g., lack of knowledge/skills, negative beliefs about the practice), the service delivery agency (e.g., lack of organizational commitment or willingness to change, lack of support by key agency leadership, organizational readiness, lack of fit between EBP and agency culture, staff selection and retention, costs of implementing EBP) or the local, State, or national service delivery systems (e.g., funding, billing, reimbursement, service delivery regulations). Traditional attempts to address these problems through the provision of written materials and training of professionals, which while seen as a necessary change element, have not been sufficient to bring about change in behavior (Hoge, Tondora, & Stuart, 2003; Sorenson, Hall, Loeb, Allen, et al., 1988; Torrey et. al, 2001).

Though many gaps remain in our understanding of how best to implement evidence-based practices (Fixsen, Naoom, Blase, Friedman, & Wallace (2005), it is clear that effective strategies for implementing evidenced-based practices must occur at a variety of levels within the mental health and substance abuse systems, including the practitioner/clinical level, the agency/organizational level as well as the broader State and federal policy levels (ATTC, 2000).

Growing attention to the implementation of evidence-based practices has been focused on the need for a more comprehensive approach, incorporating ongoing technical assistance, in order to best help agencies and organizations to successfully implement evidence-based practices. A number of States were involved in a comprehensive approach to this issue as part of the recently completed Implementing Evidence-Based Practices for Severe Mental Illness Project, which was funded by the MacArthur, Johnson & Johnson, and

Robert Wood Johnson Foundations, the U.S. Substance Abuse and Mental Health Services Administration, the National Alliance for the Mentally Ill, and State and local mental health organizations. This project involved promoting change in the use of evidence-based practices through three program elements: predisposing/disseminating strategies—educational materials and training; enabling methods—practice guidelines and decision support; and reinforcing strategies—practice feedback mechanisms (Torrey et. al, 2001).

As federal mental health and substance abuse agencies have increasingly supported the adoption and implementation of evidence-based practices, there has been the concomitant creation of federally operated or supported technical assistance centers such as the Substance Abuse and Mental Health Service Administration's Co-Occurring Center for Excellence, the Center for Substance Abuse Treatment's Addiction Technology Transfer Center, or the Technical Assistance Partnership for Child and Family Mental Health, funded by the Center for Mental Health Services.

The National Association of State Mental Health Program Directors Research Institute has formed the Center for Mental Health Quality and Accountability which coordinates State level mental health system activities to help facilitate the implementation of evidence-based practices. Individual states have taken various approaches to supporting the implementation of evidence-based practices in their States. For example, North Carolina has created a single statewide entity focused on a variety of evidence-based practices, the North Carolina Evidence-Based Practices Center, while Indiana has formed the ACT Center of Indiana to promote the implementation of Assertive Community Treatment. In Ohio, the Ohio Department of Mental Health has supported the development of more than one half dozen separate Statewide technical assistance centers, some of which are devoted to providing support regarding the implementation of a particular evidence-based practice such as integrated dual disorders treatment or supported employment, while others specialize in particular populations, such as adults with mental illness and developmental disabilities.

The Ohio Substance Abuse and Mental Illness Coordinating Center of Excellence

A collaboration between the Mandel School of Applied Social Sciences and the Department of Psychiatry, School of Medicine at Case Western Reserve University since 2000, the SAMI CCOE's mission is to assist the implementation and maintenance of high fidelity IDDT programs in Ohio. The Center accomplishes this through the provision of training and technical assistance, consultation and research services for mental health and substance abuse programs implementing the IDDT model.

Starting with nine "demonstration sites" funded by ODMH to develop IDDT programs prior to the CCOE's existence, the SAMI CCOE has assisted in the further development of 62 community-based teams in 49 mental health and/or substance abuse agencies over the past six years in 38 of Ohio's 88 counties. In 2003, the SAMI CCOE began to support a second evidence-based practice, Supported Employment (SE), in the context of its IDDT programs. Subsequently, SE has become a distinct Coordinating Center, administratively linked with SAMI under the umbrella of the "Center for Evidence-based Practices at Case."

Structure and Funding of the SAMI CCOE

The SAMI CCOE is staffed by twelve full and part-time individuals, including psychiatrists, social workers, licensed professional counselors, Ph.D.-prepared researchers and non-professional support staff. The Center is led by two Co-Directors, one a senior faculty member at the Mandel School of Applied Social Sciences, and one a senior faculty member at the Department of Psychiatry at Case. The Center's core staff consists of a Director of Implementation Services, a Clinical Training Director and two Trainers, Directors of Research and Communications, a Medical Consultant, Research Associate and other staff. Regional and national consultants provide additional training and consultation services as needed.

An Advisory Committee including representatives of the Ohio Departments of Mental Health (ODMH) and Alcohol and Drug Addictions Services (ODADAS), national consultants and participating Ohio programs has helped to guide the work of the Center. The Committee included subcommittees on Training, Evaluation, and Barrier Reduction. The Barrier Reduction group addressed system barriers such as differences in eligibility, billing, documentation and treatment philosophy between the mental health and substance abuse systems as they impacted effective implementation of integrated services.

The CCOE's initial funding came entirely from the Ohio Department of Mental Health. Subsequent funding streams from ODADAS, subcontracts of state-level grants funded by SAMHSA, project specific grants from various foundations, and training and consultation revenues for services to other states have substantially grown and stabilized the CCOE's fiscal portfolio. Funds primarily support the salaries of the CCOE staff, as well as training materials, fidelity monitoring and other activities of the CCOE as detailed below.

Services and Impact of the SAMI CCOE

Clinical training and supervision. The SAMI CCOE provides training in clinical treatment, team building, and program development to assist agencies to develop, implement and sustain successful IDDT programs. The IDDT model requires that all team members have an awareness of both addictions and mental health assessment and treatment methods. Training emphasizes consumer driven, stage-wise interventions across disciplines and modalities. Training also facilitates awareness of resources for linkages to consumers' more basic needs, such as housing, employment, benefits, and other social supports.

Training occurs in several formats. Core topics are broadcast monthly via statewide video network to numerous sites throughout Ohio so as to minimize travel time and costs. Other training is presented locally in order to address specific program needs. Annual conferences provide an opportunity for networking and team building. Workshops address aspects of program development, with particular focus on overcoming programmatic and service delivery barriers, while large group presentations from national experts broaden participants' awareness of broader issues such as employment strategies, systems integration, and emerging evidence-based practices.

Other training modalities include multi-team videoconferences, virtually linking neighboring teams to share successes, challenges, and strategies through the sharing of case studies; and the use of print and media training resources. The SAMI CCOE's interactive website and its newsletter, *SAMI Matters* have been designed as educational resources to complement other training efforts. Both enable the CCOE to reach diverse audiences. The primary audiences are service providers, agency and board administrators; while other audiences may include policy makers, caregivers, and consumers.

Clinical and administrative consultation. The SAMI CCOE provides clinical consultation to individual programs. Case consultations provide useful opportunities to integrate and reinforce core components of the IDDT model. It is not unusual to discover even experienced teams providing interventions that are not "stage appropriate" or struggling with the challenges posed by difficult to treat, chronically relapsing consumers. The consultant provides perspective and the experience gained from other state-based teams who are experiencing similar challenges.

The CCOE also provides administrative consultation to county services boards, agencies and hospitals who wish to implement IDDT programs. These consultations generally follow a five step process: 1) needs assessment; 2) goal development; 3) fidelity education; 4) fidelity self-study; and 5)

ongoing consultation, training, and support. The consultant engages key stakeholders, e.g. board members, administrators, program managers, and existing or prospective team members to establish goals through a collaborative decision-making process. Barriers such as insufficient resources, competing initiatives, system integration issues, and the need for further consensus building are identified. Support, coaching, and consultation with experienced service providers generates unique local solutions, further expanding the consultant's problem solving "toolkit."

Research and evaluation. Research efforts focus on two primary areas: program fidelity and outcomes' measurement. Fidelity measures are used to evaluate the degree to which programs adhere to the IDDT model, enabling programs to identify strengths and weaknesses in the organization and administration of services. Similarly, outcome measures evaluate the degree to which consumers and their families are achieving the goals that they have set with their treatment teams. Outcome measures can also be used to assess the success of the IDDT implementation effort in terms of systems change, service costs, and long-range planning.

Assisting programs to monitor fidelity has been a primary responsibility of the CCOE since its inception. The CCOE organizes external site visit teams including representatives from ODMH and ODADAS, CCOE staff, and peer program representatives. Materials adapted from the New Hampshire-Dartmouth Integrated Treatment fidelity scale facilitate a team assessment approach including group interviews, interaction with administrative and Board staff/members, review of client records, and meetings with consumers and family/support members. Fidelity reports are provided to sites; and data is aggregated, analyzed, and reported for review by the Advisory Committee, programs, and state level funders.

Early on, the SAMI CCOE provided semi-annual site reviews for each agency: With the greatly expanded number of programs now served, the need for fidelity monitoring has far outstretched our capacity. Developing effective self-study alternatives, streamlining the analysis and reporting process through the use of technology, and tailoring review frequency to success or failure in achieving fidelity objectives has become critical to our continued success.

In addition to monitoring fidelity and developing outcomes measures, the CCOE studies adaptations of the IDDT model, including an adaptation to inpatient psychiatric settings; application of IDDT principles to home- and school-based treatment services for adolescents; use of the IDDT model in treating homeless populations, etc. Other research efforts have included participation in the National Toolkit Dissemination project and a study of the impact of Supported Employment for adults with co-occurring mental and substance use disorders. Studies regarding the effects of implementing multiple EBPs on the implementation process are also underway.

Implementing Integrated Dual Disorders Treatment and Stages of Organizational Change

It is important to recognize that organizations and individuals may be at various stages of readiness to change when presented with technology transfer initiatives (Lehman, Greener, & Simpson, 2002; Simpson, 2002). Organizational readiness to change has been articulated by the Transtheroetical Model of Change for Organizations (Prochaska, Prochaska & Velasquez , 2001; Hyde et al., 2003) which states that changes occur incrementally over time through stages: pre-contemplation, contemplation, preparation, action and maintenance and that there are particular change strategies that are employed at each stage (Prochaska, DiClemente, & Norcross, 1992).

As discussed above, the SAMI CCOE has developed both an organizational and management plan for implementing IDDT as an evidence-based practice. The SAMI CCOE, through its training and

clinical and programmatic consultation as well as the research components of the program supports fidelity to the current IDDT model while allowing for adaptations to the many service system and situational challenges existing in Ohio as well as being mindful of cultural relevance of the components. Building upon the works of Carpinello (2002), Aarons (2004), Torrey et al. (2001), Kruszynski & Boyle (2006), ATTC (2000), Fixsen et al. (2005), and others, the SAMI CCOE has developed and manualized a guide to implementing IDDT (Kruszynski, Kubek, Boyle, & Kola, 2006). The guide articulates the technical support strategies and detailing of various tasks provided to each organization with criteria based on each organization's readiness to change. Some of the key features of this process are discussed below.

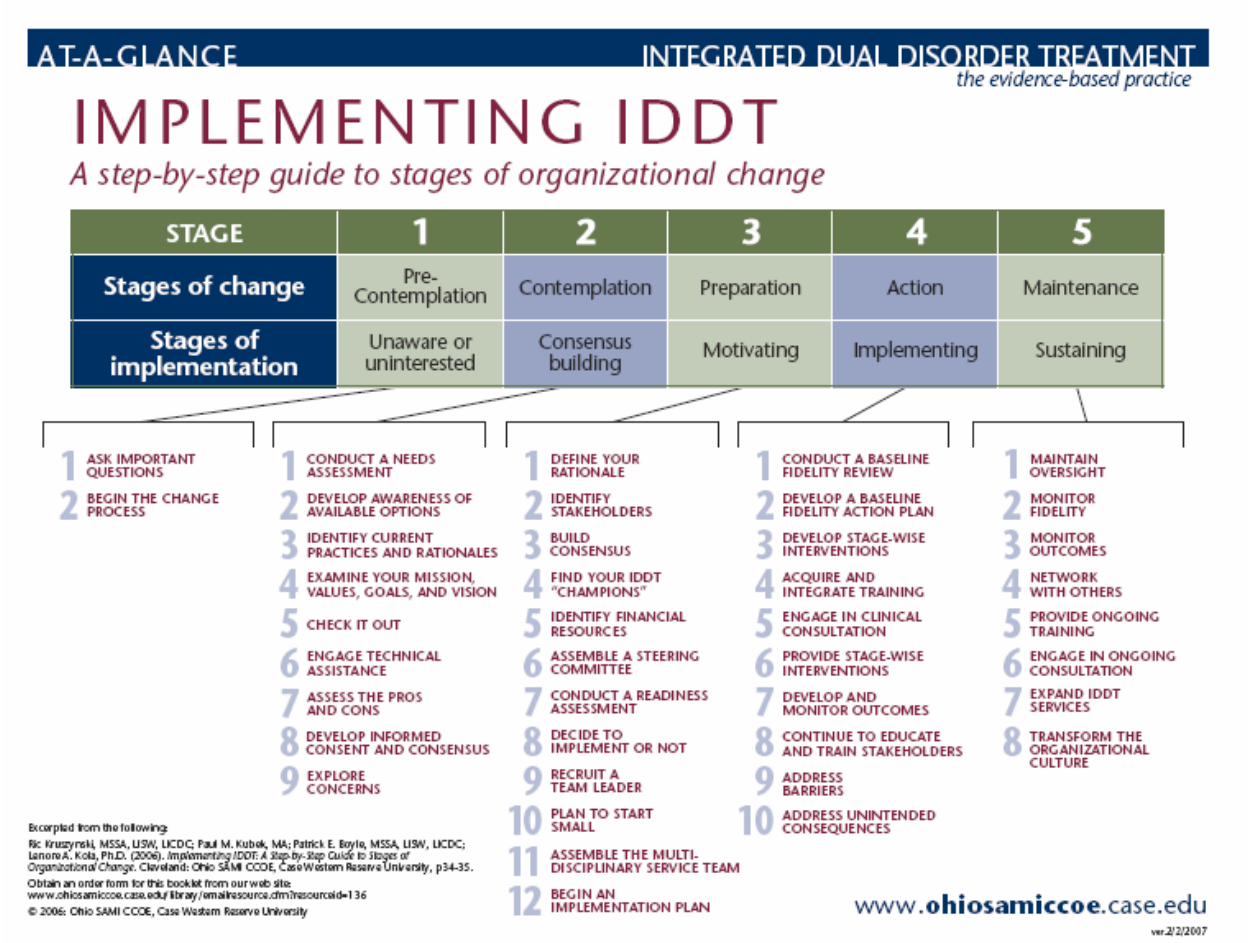

Figure 1: Guide to Implementation of Integrated Dual Disorder Treatment.

While there are numerous factors that influence the readiness of an organization to adopt an EBP, efforts at the various levels of the community, organization, staff and consumer level must be made to prepare the organization for movement through the stages of organizational change from contemplation through maintenance - - a process based upon motivational principles (Miller, 1991) as well as the decision making process developed by Janis & Mann (1977). Stakeholders who are the key players in this process include mental health and AODA authorities (funders) who create administrative rules and financial incentives, administrators of the organizations who develop policies and set priorities, the practitioners who provide the direct care, and consumers and their families. The challenge at the precontemplation stage is to engage the stakeholders to work on adopting changes in their current services (Torrey et al, 2001).

In the Contemplation Stages, the assumption is that there is some interest of the organization to adopt the EBP. This is determined by a Needs Assessment wherein all constituencies are educated about the proposed EBP approach, and they must decide through a rigorous process of articulating pros and cons of change whether or not they wish to proceed. This includes an assessment of the fit between the new practice and the current practices and values of the organization. Making a commitment to change requires a significant investment of time, energy, human and financial resources and must be thoroughly explored with the organizations in order to build consensus to move ahead through the remaining stages of implementation (Kruszynski et al., 2006).

In the Preparation Stage. the assumption is that stakeholders are predisposed to adopting an EBP, and it is necessary to begin the process of organizing the change or implementation plan with all the necessary elements of stakeholders involvement required, e.g., recruiting a team leader and assembling the team as well as making the decision that there are sufficient resources – both human capital as well as financial to move ahead.

In the Action Stage, the focus is on implementing the EBP into practice through training, clinical and programmatic consultation. Providing a feedback mechanism to assist the stakeholders in maintaining and extending the program is critical at this point if programs are to be sustained. Fidelity scales are implemented through baseline and ongoing regular measurements for program self-assessment and outcome measures are selected to evaluate success of the practice. In addition, an ongoing process of review and revisions of the implemented practice must occur (Torrey, 2001, Kruszynski et al., 2006).

The focus of the Maintenance Stage is sustainability through the transformation of the organizational culture by continuing to integrate the principles, practices and structure of the IDDT model. All strategies are directed toward that end and include monitoring fidelity, outcomes, and continuing with ongoing training and clinical and programmatic consultation.

Conclusion

There are significant barriers that often accompany attempts to implement, maintain, and sustain evidence-based practice in community-based mental health and AODA settings. The implementation of EBPs can only exist within the context of system change strategies requiring commitments on the part of state, county and local mental health and substance abuse authorities who are responsible for the development of policies and practices that support this implementation. This includes policies related to organizational structures, i.e., assigned responsibilities to ensure coordination across the two service delivery systems and eliminate service redundancies; financial planning that assesses current reimbursement practices and provides seamless services without financial barriers, management information systems that link services and information across different systems of care, etc. In addition, program and clinical barriers must be addressed by potential providers of EBPs. These would include the development of quality assurance procedures and outcome measures necessary to implement EBPs as well as selection of competent staff who are committed to system change as well as a belief in an integrated clinical philosophy, and funding to support the development of expertise at the clinical and programmatic levels (Minkoff & Drake, 1991, Drake et al., 2001).

The work of the SAMI CCOE over the past 6 years has reinforced our belief in the need for, and importance of, continuous training, clinical and programmatic consultation, and research and evaluation activities to support the development and maintenance of high fidelity to evidence-based treatment models once they have been implemented.

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