

# **Innovations in mental health services implementation: A report on state-level data from the National Evidence-Based Practices Project**

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## **Abstract**

The national *Evidence-Based (EBP) Project* has been investigating the implementation of mental health EBPs [Assertive Community Treatment, Family Psychoeducation, Integrated Dual Diagnosis Treatment, Illness Management and Recovery, and Supported Employment] in state public mental health systems for adult persons with serious mental illness for the past 5 years.

The study reported was a combined retrospective and prospective cross-sectional and comparative investigation of state-level activities associated with the implementation of the *EBP Project's* EBPS in 8 states. It assessed the number and types of innovations that were associated with three phases of the *Project's* implementation—Pre-Implementation, Initial Implementation and Plans for Sustainability.

Key informant interviews were conducted in all participating states during two rounds (Fall 2002-Spring 2003, Spring 2004) of site visits. Qualitative data analysis methods (content and thematic analysis techniques), and application of Greenhalgh et al's (2004) definition of innovation, were used to evaluate state-level implementation innovations from site visit reports.

106 discreet, and 5 types (relationship building and communications; state infrastructure building or commitment to EBPs; financing; licensing, certification, regulations, standards and quality improvement; service delivery treatment and training) of innovative implementation activities were identified. Analysis showed that the state's role is critical to the implementation of EBP's at the community level and that the evolutionary model of implementation helps explain the processes by which this occurs.

This study makes new contributions to the field of mental health, implementation and innovations research. It especially contributes to the limited knowledge base that exists for innovations in mental health services implementation. States and other organizations can use the innovations identified to jump start or enhance the development, implementation and planning for an EBP service delivery culture in mental health, or healthcare systems.

## Background

During the last decade the testing and implementing of evidence-based practices (EBPs) in healthcare systems throughout the United States has been increasing. While a literature on translating EBPs into health and mental health organizations is also growing, [1-26] only a few studies have been conducted to explore the range of EBPs that have been implemented on a national basis [27], or within particular states [28-32] in public mental health systems. Moreover, only select sources discuss innovations in mental health--such as the implementation of EBPs--within a governmental implementation context [33-41]. One recent initiative, the national *Evidence-Based Practice (EBP) Project* [6, 31] was designed to address some of these gaps.

Since 2001, the *EBP Project* has been investigating the implementation of evidence-based mental health practices [including, Assertive Community Treatment (ACT), Family Psychoeducation (FPE), Integrated Dual Diagnosis Treatment (IDDT), Illness Management and Recovery (IMR), and Supported Employment (SE)] in state public mental health systems for adult persons with serious mental illness. For example, researchers have developed and utilized new measures and methods to evaluate the factors associated with adherence to fidelity of EBP service delivery, and administrative and clinical practices that promote readiness for organizational change and adoption and sustainability of EBPs. One key objective of the *EBP Project* has been to collect data that helps to better understand how stakeholders in community-based and state agencies interact to implement, sustain and achieve evidence-based service delivery cultures. This objective is consistent with the need to build an empirical knowledge base that supports the implementation and measurement of EBPs throughout the public health sector.

A related paper describes the methods and trend analyses from state site visits that were conducted to answer two overarching questions about *EBP Project* implementation at the state level [31]: What roles do state mental health (and substance abuse) authorities play in implementing EBPs in general, and specifically with regard to the EBP Projects? What

factors facilitate and create barriers to implement and sustain EBPs, and in particular, the six EBPs included in the EBP Project?

In this paper, analyses of site visit data were expanded to explore the types of innovative activities state mental health (and substance abuse) authorities put forth during the preparation, initial implementation and planning for sustainability of the *EBP Project*. Accordingly, the following research questions were asked: *Can innovations in implementation be identified from activities states engaged in to prepare, initially implement and plan for EBP Project EBP sustainability? What types of innovations were associated with these three phases of initial implementation at the state level? What type of implementation model(s) help explain the implementation? What are some of the implications these innovations might have for the development and implementation of an EBP service delivery culture in state and community-based mental health organizations?*

Exploring the implementation of innovations in the mental health--and in particular for the implementation of EBPs--addresses a call for the direct study of such activities. Torrey et al [39] highlights this call for the study of innovations in mental health as follows: “The literature has an abundance of evidence, whether it is theoretical or empirical, which chronicles the arguments for the need for innovation in mental health services implementation, even though the word innovation is not used predominantly”. While no “golden” standards or criteria have been agreed upon to assess the implementation of innovations on a broader scale, a multi-disciplinary foundation from which to begin to secure such agreement exists.

This foundation includes the fact that:

- *The literature on innovation in government, while minimally inclusive of public sector mental health, raises consistent issues and questions that should be considered when creating evaluation frameworks, criteria and standards to assess innovations.* For example, Capra [40] asks, do we really know an innovation when we see it? Is innovation the product of management or is it an organizational output that depends on how the organization functions as a whole system? For whom does innovation matter? How long does innovation

need to run before we can see effects? And, does innovation fit the pattern of how government functions? Perrin [41], in his mini-synthesis of the literature on “how to- and how not-to evaluate innovation”, challenges us to consider that innovation should only identify the “minority of situations” in which real impacts have occurred and the reasons for them. He points out Campbell’s caution that the process of innovation is “uneven rather than continuous” and that “payoffs are rarely immediate”, and Smith’s analysis that “innovation never occurs alone but always within the context of structured relationships, networks and infrastructures, and in a wider social and economic context”. Senge [42] reminds us that individual contributions of people to innovations are key—that leadership is essential to innovation. And Eimecke [43] assumes that we need to develop a “report card of innovation”, one that includes innovative and non-innovative activities.

- *Evaluations of innovations in government, and organizations that partner with government, have been occurring for many years.* Many entities have recognized government (and other) organizations for their approaches to innovation. For example, The Ash Institute for Democratic Governance and Innovations at Harvard’s John F. Kennedy School of Government awards \$100,000 for pioneering and forward thinking innovations in government [44]. The National Science Foundation [45] created a Partnership for Innovation Program in 2000 “to build a new foundation for innovation in local communities that is responsive to...changes and emerging challenges” and “catalyze the creation of the enabling infrastructure necessary to foster and sustain long-term innovation”. The Malcom Baldrige National Quality Award process uses criteria for performance excellence to recognize leading-edge management practices [46]. The Substance Abuse and Mental Health Administration’s Center for Mental Health Services and Center of Substance Abuse Treatment identify innovative mental health and substance abuse programs annually. The Annapolis Coalition has identified innovative educational programs by adapting the Kennedy School’s innovation criteria [47]. And, the RAND Corporation’s Promising Practice Network on Children Families and Communities [48] identifies best emerging clinical and administrative practices in children’s services.

- *Models of implementation have developed that 1) recognize contemporary changes in organizational complexity and structure, and relationships within and between various human and non-human (e.g. environmental, economic, political and material) factors, and 2) reflect the various ways theorists, policymakers and practitioners view and study organizations* [49]. A theory driven approach to implementation is necessary if we are to better understand how implementation occurs, and the factors which are the most and least likely to predict outcomes and effect change [50, 17], such as innovations. Four main models or theoretical approaches to the study of implementation remain common today: top down or forward mapping” [51]; bottom up or “backward mapping” [52]; adaptive [53]; and evolutionary [54].

In this study, it is hypothesized that the evolutionary model best fits the manner in which the *EBP Project* is being implemented. Evolutionary implementation is considered a “continuum in which an interactive and negotiative process [takes] place over time, between those seeking to put policy [or practice] into effect and those upon whom action depends” [55]. Recognizing that “*institutions matter*” [56]—or that the institutional settings in which a policy or program is implemented can interact and impact on outcomes [53, 57]--implementation in this model generally occurs through "progressive movements" [58], with implementation "evolving" during the process itself. The evolutionary model addresses the limitations that top-down, bottom-up and adaptive approaches present [55] because it takes into account the 1) combination of micro-<sup>1</sup> and macro-<sup>2</sup> processes that organizations utilize in the implementation of practices and policies, and 2) interrelationships between policy, practice and action [55, 58]. Researchers studying the implementation of the *EBP Project* have been investigating such processes within and between community-based agencies, and state mental health (and substance abuse) authorities.

- *Seminal think pieces that describe the facilitators and barriers associated with*

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<sup>1</sup> Micro- processes are those processes by which lower management or “street level” [59] workers in local government or service agencies devise and carry out policies, programs or laws according to higher-level administration [60].

<sup>2</sup> Macro-processes are those processes by which higher-level management or administration in government executes its influence on lower level management or workers who implement a policy, program or law [60].

*EBP implementation and systematic reviews of how innovations are implemented are increasing in number.* For example, Rosenheck's [61] call for the development of a "dissemination science" is echoed by many, including Ganju who comments that closing the "gap between what is known through research and what is actually implemented in public mental health systems" will only be accomplished if implementation science more fully evolves and includes a "science of implementation of EBPs" [29]. A recent review conducted by Greenhalgh et al [17] developed and utilized a new methodology for systematically reviewing the literature--called "meta-narrative review". When applied, this method can be used to identify features, mechanisms, and metaphors for "spread" across empirical and non-empirical studies of healthcare innovations. Since Greenhalgh et al's [17] review was systematic and yielded reliable results, the study reported in this paper applied its definition of innovation to the analysis of site visit data. Innovation, then, was defined as "a novel set of behaviors, routines, and ways of working that are directed at improving outcomes, administrative efficiency, cost effectiveness, or users' experiences and that are implemented by planned and coordinated actions".

- And lastly, *both the Surgeon General's Report on Mental Health, and the President's New Freedom Commission on Mental Health set further development and implementation of EBPs as a primary goal for mental health system reform [34, 35].*

Evaluating the innovations associated with the implementation of the EBP Project provided a new opportunity to 1) examine the implementation of mental health EBPs within multi-disciplinary contexts, 2) disseminate information about mental health innovations, and 3) conduct a cross-check on recommendations that have been made to address barriers and push forward policy making strategies that promote the adoption of EBPs nationally, state-wide and locally [38]. What follows is discussion of the methods applied to evaluate the state-level innovations associated with the preparation, initial implementation and plans for EBP sustainability of the EBP Project; the number and types of innovations identified; and implications results have for the implementation of an EBP service delivery culture in state and community-based mental health organizations.

## Methods

This study was a combined retrospective and prospective cross-sectional and comparative investigation of the implementation of 5 EBPS—ACT, FPE, IDDT, IMR and SE--in 8 states. A key informant site interview was the major research method used. A complete description of the *EBP Project's* EBPs, state selection, key informant identification, EBP training materials and methods can be found in various articles [6,31] and on the following websites: <http://www.dartmouth.edu/~psychrc/know.html> and [www.mentalhealthpractices.org](http://www.mentalhealthpractices.org).

Eight states were selected for participation in the initial round of *EBP Project* implementation. Table 1 below shows that all but one of the states decided to implement two EBPs. IMR was selected in the most (four) states, followed by FPE, IDDT and SE selected by three states, and ACT selected by two states.

States varied in their selection of multiple EBPS. Two states selected both FPE and IMR. Other states selected the following combinations of EBPs: ACT and IDDT, ACT and IMR, FPE and SE, IDDT and SE, and IDDT and IMR.

Teams of researchers associated with the John D. and Catherine T. MacArthur Foundation Network on Mental Health Policy Research, and the National Association of State Mental Health Directors Research Institute, conducted site visits in each state during a 1-2 day period at two separate points in time. Time 1 site visits were conducted during Fall 2002 and Spring 2003. Follow up site visits at Time 2 were conducted during Spring 2004.

Key informants in each state included the state mental health and state substance abuse directors; state *EBP Project* implementation team; *EBP Project* site agency directors; state managers of finance, Medicaid, research, quality assurance, training, vocational rehabilitation, and supported employment; representatives of consumer groups, such as NAMI or the state's Consumer Affairs Office; consumers from *EBP Project* sites; and consultants states or agencies may have used to assist in the implementation of the *EBP Project*. Interviews were conducted with the state mental health and substance abuse directors separately, and then in

conjunction with groups of staff in meetings. Consumer interviews were also conducted separately.

Key informant interview protocols were developed for use during site visits by the research team and in consultation with various experts in the field of mental health, including consumers. Protocols were informed by diffusion of innovations, implementation, organizational theory, EBP and healthcare delivery literatures.

Time 1 site visit protocol domains included:

- Organization of State Mental Health Systems: state organization of services and providers; background and contexts for EBPs; consensus development; leadership; organizational culture; facilitators and barriers; financing; quality enhancement or improvement; regulation and legislation; information systems and data; training; licensing and certification.

- State role in EBP implementation: site selection; familiarity with Toolkits; challenges to implement EBPs selected by the state; facilitators and barriers; future EBP plans; implementation; contracts with academic and other consulting organizations.

- EBPs: current status of implementation; current extent and models being implemented; political context; existing support levels; identification of champions; strengths and vulnerabilities of EBPs; strategies for implementation, including resources, financing, licensing, standards, certification, treatment planning, performance measures, incentives, quality management, organizational issues to implement EBPs, training, monitoring & feedback mechanisms, general workforce issues; plans for state-wide implementation and sustainability.

Protocols for Time 2 site visits included similar questions from Time 1 so that comparisons could be made between data collected in similar domains. Three main areas were identified from Time 1 site visits for more in-depth investigation during the second site visits. As mentioned previously, a related paper discusses the methods and analyses that support this identification [31]. Time 2 site visit protocol domains included:

- Leadership and political environment: changes in governor, governor’s staff and legislative leadership; SMHA Commissioner and Commissioner reporting relationships and other relevant departments; key SMHA staff; EBP champion, site, local entity leadership; key stakeholder groups; perceived impact of leadership changes or SMHA role on EBP implementation; changes in stakeholder involvement, policies, SMHA, site changes and impact of change; change in expectations about what SMHA will do after Toolkit project ends.

- Financing/Regulations: status of financing efforts, including start-up incentive funds for training, quality efforts, services; issues funding EBPs using Medicaid, block grant and other sources, training; quality improvement efforts; regulations/standards for providers or services; licensing/certification standards; standards or guidelines; fidelity measures; contracting requirements for EBPs.

- Quality and Training: status of training planned and conducted, training content; perceived impact of training efforts; resources for training; supervision; EBP fidelity measurement process and relation to quality management/improvement plans; data collection process for outcome data and EBPs; and use and plans of outcome data.

Detailed site notes were taken during each visit and for each individual or group interview. Site visit notes and information discussed during debriefings with members of the research team were used to prepare a total of 16 site visit reports, and 8 state profile reports that integrated data from both site visits. The 16 site visit reports were used in this study to identify state-level implementation activities and innovations associated with the *EBP Project*. As mentioned previously, Greenhalgh et al’s [17] definition of innovation was applied to identify activities as innovative. Activities and innovations were analyzed according to three of the stages of diffusion or implementation that Rogers [62] and Greenhalgh et al [17] describe: pre-implementation or “readiness” for implementation, implementation (active and planned efforts to mainstream an innovation, or EBP, within organizations), and plans for sustainability of the EBPs.

Qualitative data analysis methods [63]--content analysis and thematic data analysis techniques--were used to identify and count, and analyze themes and trends among the implementation activities identified as innovative. Since the number of states involved in the study was small, analyses were conducted in aggregate, focusing on themes or common domains or types of innovations, and trends across the EBPs implemented in all states. Analysis also included an assessment of state activities (e.g. mental health system reforms and other improvements in service delivery), challenges and other factors (e.g. budget crises) that provided broad based contexts for implementing EBPs. Tables were constructed that summarized analyses and showed the number and categorizations of innovative implementation activities across EBPs.

## Results

A total of 106 discreet EBP implementation activities were identified within the 16 site visit reports as innovative. Implementation activities were evaluated as innovative if they met Greenhalgh et al's [17] definition of innovation, and were attributable to the *EBP Project* implementation process. Innovative implementation activities were categorized into five main domain types across the three phases of implementation studied: state infrastructure building or state commitment to EBPs; relationship building and communication; financing; licensing, certification, regulations, standards and quality improvement (QI); and service delivery treatment and training. Analyses were conducted to determine number and type of innovations per domain across and within the 5 EBPs.

a. Number of State Innovative Implementation Activities. Table 2 shows the aggregate number and types of state implementation innovations that were identified across the three implementation phases. Number of innovations for Plans for Sustainability was highest (40), followed by Implementation (39) and Pre-Implementation (27). Relationship building and communication, and financing domains yielded the greatest number (27 and 26 respectively),

followed by state infrastructure building (19), licensing and certification (17) and service delivery and training (17).

Table 3 shows the specific number of implementation innovations that were identified within each implementation phase for each EBP, and for each domain. Here, the IDDT EBP had the greatest number of innovations (46) associated with all three implementation phases, and all domains, followed by the IMR (43), ACT (41), SE (36) and FPE (31) EBPs. Relationship building & communication, and financing domains yielded the greatest number of innovations in the Pre-Implementation phase (20 each), followed by licensing and certification (8), state infrastructure building (7) and service delivery (5). In the Implementation phase, relationship building & communication yielded the greatest number of innovations (22), followed by financing (15), licensing & certification (10), service delivery (5) and state infrastructure building (4). In the Plans for Sustainability phase, state infrastructure building (23) yielded the greatest number of innovations, followed by relationship building & communication (19), service delivery (17), licensing & certification (12), and financing (10).

#### b. Number and Types of State EBP Implementation Innovations

1. Pre-Implementation Phase Innovations. Table 4 shows results for the Pre-Implementation phase innovations. In this phase, relationship building and communications domains yielded the greatest number of innovations; followed by infrastructure building; financing; licensing, certification, regulation, standards, QI; and service delivery treatment or training .

With regards to *relationship building and communications*, states employed one main innovative strategy across all EBPs: to prioritize the participation of consumers on *EBP Project Advisory Boards* and *EBP Project Steering Committees*. For all EBPs, except SE, states held statewide meetings to engage consumers (and other stakeholders) to solidify this input and to integrate some form of recovery principles [27] into the EBP Project implementation process. The IMR, FPE and IDDT EBPs provoked the most consensus building and broad based communication strategies to prepare for implementation, including statewide meetings, workshops, conferences, technical assistance to address philosophical and

clinical practices between providers. Lastly, SE EBP successes were reported in the mass media, and a partnership between one state and the consumer community was formed to train clinical staff in delivering the FPE EBP.

*Infrastructure innovations* in the Pre-Implementation phase were underway for all *EBP Project* EBPs, except for FPE, during the time of the first site visit. This was largely due to the fact that this EBP was started a bit later than other EBPs, and required more intensive stakeholder consensus building due to the newness of FPE as a practice. States developed a range of innovative activities, regardless of EBP, to address the implementation of EBPs at state, local and provider agency levels, and with other stakeholders in their communities. The IMR EBP yielded the most innovations in this domain. Both the IMR and ACT EBPs were modified, based on input from consumers (e.g. consumers wrote a white paper to modify the IMR EBP). IMR and IDDT EBPs were supported by one state mental health research department that was engaging in its own studies to determine facilitators and barriers to implementing EBPs. The SE Toolkit EBP was readied by the fact that both Toolkit and non-Toolkit SE demonstrations were occurring simultaneously.

*Financing innovations* associated with the *EBP Project* EBPs included several strategies that states were already employing at the time of the first site visit. The SE EBP yielded the most innovative activities in this domain, followed by FPE, IMR, ACT, and IDDT. Start-up incentive monies from the states were used to support all EBPs, except IMR. In addition to state funding, SE was supported by a non-state entity. IMR was supported initially by only a non-state entity. Block grants funds were used to support FPE and SE. All states were exploring approaches to making billing easier for all EBPs. One state had shifted inpatient funding to community services to create a financial incentive to bill Medicaid for ACT's start up year. Another state held education and assurance meetings to address concerns about Medicaid billing for SE. Two states used MOUs to solidify payments for services provided by the state's vocational rehabilitation department, and to provide start-up monies to cmhcs to deliver the IMR EBP.

In the *licensing, certification, regulation and standards* domain, the ACT EBP innovations were dominant, followed by FPE and SE, and IDDT. New licensing regulations were being developed, or were being discussed for ACT, FPE and SE. Since IMR required more consensus building start-up (like FPE), no innovations were identified in this domain for this EBP. One state formed an Association for Behavioral Health Centers to discuss reimbursement and administrative rules and incentives with the state for FPE services. In another state, non-state experts (e.g. technical assistance center developed for *EBP Project* implementation) were working on licensing standards for ACT, while another state established new dual certification and licensing standards for IDDT. New standards for service delivery of ACT and SE were also established during the Pre-Implementation phase in one state.

In the *service delivery training* domain, innovations were identified for only the FPE, IDDT and SE EBPs. State training budgets were reallocated to provide more training for the FPE and SE EBPs. One state developed a two year training plan through a community needs assessment process to deliver training through regional training centers for SE. Another state developed tracks for clinical supervision and clinical administration best practices for IDDT, while another made it possible for sites to receive incentives for additional training and technical assistance if they decided to implement IDDT.

2. Implementation Phase Innovations. Table 5 shows results for the Implementation phase innovations. In this phase the financing domain yielded the most innovations, followed by relationship building and communications; licensing, certification, regulation, standards; service delivery treatment training; and state agency infrastructure.

With regards to *financing*, the ACT EBP innovations were most prevalent, followed by FPE; and the rest of the EBPs. At the time of the second site visit, states were using the following innovative strategies to fund ACT: a bundled funding approach; new funding formula integrated into the state financing allocation structure (with codes changed in data

system and audit process); Medicaid approvals to reimburse EBP teams through a state amendment plan; recalculated Medicaid rate that allowed more professionals to be reimbursed; and EBP cost sharing with counties. States that were implementing IMR and IDDT had developed new Medicaid billing codes and coding guidelines. FPE financing innovations included exploring Medicaid requirements to qualify consumers to deliver EBPs and using the Medicaid Waiver 1115B to fund services. One state wrote a position paper to recommend Medicaid reimbursement levels and codes for IMR, while another had approved billing as part of group or individual psychotherapy or day rate for Continuing Day Treatment Program. SE financing innovations included new Medicaid reimbursement codes and rates changes, and a new funding program created specifically to fund this EBP.

*Relationship building and communication* innovations were most dominant for IMR, followed by IDDT; ACT and SE; and FPE. All EBPs were supported by monthly meetings between the state, Toolkit sites and/or Advisory Councils; and increased collaboration between the state mental health and Medicaid agencies to make billing easier. ACT, IDDT and IMR were supported by monthly meetings and/or calls between technical assistance centers or centers of excellence and the sites. EBP conferences for ACT and SE were being planned within the year. In one state, close workings with local sites were designed to create an evaluation and reassurance process for stakeholders associated with the implementation of the IMR EBP. IDDT was also supported by ongoing communication between the state and local sites and boards in one state, and new communications opened between NAMI and the Office of Consumer Affairs in another. Monthly meetings between NAMI and Toolkit sites, and the establishment of a Clinical Practices Advisory Committee were developed to support IMR. SE was also supported by new collaborations between the state mental health, Medicaid and vocational rehabilitation agencies.

Innovations for ACT, IDDT and SE were identified in the *licensing, certification, regulations, standards and QI* domain. While ACT innovations were the most dominant, each EBP had individual innovations associated with its implementation. Medicaid agencies in a few states removed barriers to developing standards for ACT and SE. ACT innovations

included the development and use of a new certification manual; implementation of a new certification process through administrative rule and stakeholder process; and integration of fidelity measures, technical support and supervision into certification. IDDT innovations included the development of a treatment plan tool that included multiple domains consistent with licensure review standards; and the development of mental health and substance abuse language guidelines for auditors to use in evaluations. SE innovations included the development of standards and regulation changes to revise employment referral, employment authorization and individual vocational forms, and the verification of diagnostic process; and the development of an employment outcome measurement definition.

In the *service treatment delivery* domain, innovations were identified for all EBPs except for FPE. The only common innovation was the implementation of a shadowing training program for ACT and SE. The only IDDT innovation identified was the development of a treatment plan tool to include multiple domains consistent with licensure review standards. IMR innovations included the development of a partnership between the state mental health agency to train clinical staff to deliver the EBP, and the provision of funding for consumer training and a joint training program for professionals and consumers to deliver IMR.

While the state agency *infrastructure building* domain yielded the least amount innovations in the Implementation phase, three innovative activities stood out as significant for IDDT, IMR and SE. One state developed a new state-level position to assist in the implementation and monitoring of EBPs, and for IDDT and IMR in particular. Another was considering strategies to penetrate IMR in all licensed programs, while another developed a new RFP process to help fund this SE EBP statewide.

c. Plans for Sustainability. Table 6 shows results for the Plans for Sustainability innovations. In this phase, the financing domain yielded the most innovations, followed by state commitment to EBP rollouts; service treatment delivery; relationship building and communications; and licensing and certification.

With regards to *financing*, plans for sustainability were most dominant for IDDT. However, states planned to better align incentives and rules to encourage desired practices,

behaviors and system change for all of the Toolkit EBPs, and to work on a funding base for roll out for all EBPs, except FPE. FPE was not automatically included in roll out plans because states wanted to assess its fidelity and explore payment mechanisms before moving forward. Innovative plans for sustaining IDDT included the exploration of regulating this EBP; developing new contract language using administrative rule; developing a private insurance program for funding; increasing the tax on alcohol and tobacco for funding; sharing costs between ACT and IDDT EBPs; restructuring the state Medicaid plan to cover IDDT services; and adding IDDT to the Medicaid Rehab Option. States planned to consider higher reimbursement rates for IDDT and SE, and to determine how to shorten timeframes to transfer funds from the state to SE sites.

*State commitment* to EBP rollouts was divided into two categories: intent to rollout and targeted infrastructure building for EBPs. In this domain the most frequent number of innovative plans was associated with IDDT. With regards to intent, states expressed a philosophical commitment to rolling out all EBPs, no matter the resources needed. States set the goal to re-examine ACT, IDDT, IMR and SE before rollout because of the nature of the EBPs (e.g. great paradigmatic or organizational changes needed to implement), with one state having committed to planning roll out in conjunction with sites.

States had plans to disseminate EBP information statewide for all of the EBPs; further develop their infrastructure and mechanisms for integrating EBPs into the larger state agenda; apply for governmental grants to build system infrastructure for IDDT; implement a state institute to support Toolkit and non-Toolkit EBPs; and continue state supported research for EBPs, especially IDDT and IMR.

Innovative plans for sustaining *service treatment delivery* activities mainly focused on training issues, with the greatest number of innovative plans associated with ACT. States were committed to addressing the ongoing skills training needed for all EBPs in various ways: One state was working with several schools of social work to develop an EBP training curriculum that included ACT and IMR Toolkit and non-Toolkit EBPs. Another was planning to use a private donation to create an educative training center for ACT and IDDT

and non-Toolkit EBPs. States that were implementing ACT, IDDT and IMR planned to explore implementing Train the Trainer program. States that were implementing FPE and IMR planned to explore appropriate measurement outcomes to support service delivery. One state implementing IMR planned to increase access to transportation so that this EBP could be delivered more readily. States implementing ACT planned to set aside state monies for training activities and to explore strategies that achieved broader penetration of training through the use of learning collaboratives.

State plans for sustaining Toolkit EBPs through *relationship building and communication* activities largely built on activities set into motion during the Pre-Implementation and Implementation phases. The most number of innovative plans were associated with FPE, followed by IDDT and IMR. States planned to develop a formalized engagement process to involve non-Toolkit agencies; continue to hold regular consumer and stakeholder meetings; and to seek continued guidance on consensus building for all Toolkit EBPs. Innovative plans for FPE also included increasing family involvement in planning and monitoring community based programs, and to continue to create champions in all levels of the system. Innovative plans for IDDT and IMR also included developing language about EBPs that consumers can better understand and use.

Lastly, in the licensing and certification domain, innovative plans for sustainability were identified for IDDT and IMR. States planned to consider requiring EBP training as part of the certification process for IDDT and IMR; to work on IDDT credentialing and licensing issues; and to consider strategies that integrated EBPs in all IMR licensed programs.

## **Discussion**

This study's findings provide new data on the types of innovative activities that are associated with implementing mental health EBPs. This study identified 106 distinct, and 5 types, of innovations associated with the implementation of mental health EBPs in three phases--Pre-Implementation, Implementation, Plans for Sustainability. Results show that much

innovation resulted, and was required to launch and initially plan for the sustainability of the *EBP Project's* EBPs. Hence, the use of Greenhalgh et al's [17] definition of innovation, and qualitative analytical techniques proved to be viable methods for assessing the existence (number) and types of state-level *EBP Project* implementation activities that were innovative.

As other sections of this paper have described, implementation of programs and policies, and the development and implementation of innovations, occur within various social, economic, and political contexts, and certain implementation frameworks [41, 65]. What follows, then, is an integrated discussion of this study's results guided by three main questions.

First, *is it reasonable to expect that state-level approaches to implementing the EBP Project's EBPs could be evaluated as innovative?* The intuitive answer is "yes". Based on results produced in this study, the empirical answer is also "yes".

States included in this study had been engaging in various preparation activities to incorporate *new* organizational change process and implementation strategies to 1) integrate EBPs into their mental health and substance abuse systems prior to the start-up of the *EBP Project*, 2) institute mental health system reform.

At the *national* level, planning for EBPs was sanctioned by a number of developments in the field of human services. For example, the accountability and outcomes measurement movements [66, 67, 49] acted as one of the catalysts for all states to apply for and implement federal grants--such as Data Infrastructure Grants--and to increase performance contracting [68] for services. Such activities primed states with better knowledge on how to measure EBPs, and to integrate measurement with financing. As mentioned, two national reports on mental health were also released prior to both sites visits conducted for this study. The Surgeon General's Report on Mental Health [35] was disseminated prior to the selection of states for the *EBP Project*, and the first site visit. States at that time used the Report to support their planning efforts in general, and later, in particular to support their efforts to implement EBPs. Similarly, during the early stages of the *EBP Project's* implementation, and just prior to the second site visit, The President's New Freedom Commission on Mental Health report

[34] was released. States at that time were using the Report to develop strategic planning goals for their systems in general, and for EBPs in particular.

At the *state* level, much infrastructure and stakeholder relationship building, and chronic attention to financial issues, was occurring prior to, and during, participation in the *EBP Project*:

- *History of state reform and innovation, and EBP promotion.* All states involved in the *EBP Project* considered themselves, historically, to be innovative reformers of their mental health systems, deliverers of cutting edge services, and to be supported by strong leaders in key state-level positions. For example, one state had passed a senate bill to implement a blueprint for change in the mental health system that emphasized local control and financing EBPs. Another state's mental health system had received an infusion of millions of dollars that helped to launch 1) a statewide initiative to achieve accountability, best practices, and coordination and continuity of care, and 2) an EBP campaign to improve the quality of mental health services through several EBPs. Another state had been implementing a statewide mental health quality improvement agenda to establish centers of excellence in several service areas to train providers to deliver best and evidence-based practices.

All states involved in the *EBP Project* had a history of promoting some aspect of the EBP that they had agreed to implement. States had established Task Forces and Steering Committees to address service provision issues in particular areas, such as SE, IDDT and ACT, before the *EBP Project* was launched. One state's goal to influence the national agenda on EBPs led to its participation in the revision of some of the *Project's* materials before the *Project* was launched. Prior to the first site visits, all states involved in the Project wished to increase or build their state's EBP activities. *Hence, the EBP Toolkit project can be considered part of a larger set of activities that were geared towards fostering an EBP culture within the states.*

- *Relationship building, collaboration and commitment.* All but one state involved in the *EBP Project* had merged their mental health and substance abuse departments to encourage integration and collaboration between systems. Governors in two states

demonstrated particular interest in mental health issues, establishing legislation to improve mental health services and systems. All states had state mental health and substance abuse directors who supported the implementation of EBPs and were working together to improve service delivery in general. Commitment to EBPs remained consistent, and high, even when leadership changes in these positions occurred (due to elections or resignations) throughout the timeframe of the site visits.

All states had long-standing arrangements with universities for provider and consumer training, outcomes measurement or research. All states considered consumer involvement key to their system reform and service planning efforts, especially for implementation of EBPs that were more directly consumer oriented (such as FPE and IMR). Two states had developed technical assistance and research centers to support the implementation of EBPs throughout their states.

Prior to the *EBP Project* launch, states were also forging more collaborative relationships between their state mental health, Medicaid, substance abuse, and vocational rehabilitation offices, and between local boards. A few states established formal agreements, such as Memorandums of Understanding, with local boards or community mental health centers, to solidify funding, delivery of services, and support organizational change needed to implement the EBPs. One state established a Question and Answer group between the State Mental Health and Medicaid offices to improve quality enhancement activities, while another had merged its Medicaid and state mental health agencies to develop and implement policies together.

- *Training.* All states were concerned about how to maintain ongoing training needs and staff turnover, and in turn, how to manage the impact these issues have on EBP service delivery. Here, states expanded community-based professional training program to include EBPs; engaged in a conference on medical necessity; were piloting a standardized recovery oriented and accreditation Medicaid compliant individualized service plan; and conducted the first inpatient IDDT fidelity assessment at a state-operated facility.

- *Financing strategies.* States made definitive decisions to spend their money on EBPs

to improve their mental health services and systems in light of budget and Medicaid funding crises. All states were committed to implementing EBPs, despite these challenges. Prior to the launch of the *Project*, and during the early stages of its implementation, all states were planning, or had applied for governmental or non-governmental grants that could support system reform. States also had developed budget initiatives to prioritize funding for certain services; established the Medicaid Buy-In Program option; established a case rate system; applied for and received a Medicaid 1115B waiver to increase access to services; and combined Medicaid and other state funds to pay for new services, including EBPs.

- *Research, outcomes measurement and quality improvement.* As mentioned, all states had relationships with universities that supported their need for research or management of outcomes, and training. A few states had longstanding research departments that supported their delivery of services, quality improvement and measurement efforts. Prior to the first site visit one state's research department was eliminated. One state established a bureau of EBP evaluation, increased staff and system capacity to monitor outcomes, and hired volunteers to support EBPs implementation.

All states were working to improve some aspect of their outcomes measurement systems, and were developing or revising outcomes and performance indicators for mental health, substance abuse and EBPs, such as SE and ACT. States started an initiative to train providers to collect performance data from local boards; were engaging in the Balanced Scorecard [69] process to measure system outcomes statewide; passed a new performance measurement rule that mandated agencies use outcomes data in agency performance improvement activities; were testing the standardization and implementation of a new client record; and developed an information technology business plan to determine which types of information systems can most efficiently integrate data from multiple sectors. While all states wished to formally link outcomes measurement and performance measurement and EBPs to their quality improvement or enhancement processes, most states involved in the *EBP Project* were still in the process of formulating strategies to accomplish this statewide [31].

Second, *does the data collected in this study support the supposition that the implementation innovations identified in the Pre-Implementation, initial Implementation and Plans for Sustainability phases occurred within an evolutionary implementation framework?* The overall answer is “yes”.

The innovation domains represent a “continuum in which an interactive and negotiative process has taken place over time” [55, 58]. Activities across all implementation phases, and EBPs, built on activities set in motion in earlier phases. For example, since all states considered consumers key to mental health system reform, this philosophy laid the foundational ground for regular meetings, Advisory Groups and technical assistance activities to take place between the state agencies, consumers and other stakeholders. The development and implementation of effective financing, and licensing and certification strategies, would not have been possible if multiple state agencies, and sites, had not engaged in a negotiative process concerning new billing codes, incentives, funding streams, regulations and standards. Service delivery training innovations would not have solidified if states and local organizations, or local boards, did not start working together to address chronic issues underlying the delivery of services, such as training, shared financing, and the measurement of EBP outcomes.

The innovations identified show that “implementation takes into account a combination of micro- and macro-implementation processes”[60], “interactions...occur[ed] on various levels, between top and bottom actors”, and a variety of “interrelationships” [55, 58] were necessary to launch, initially implement, and initially plan for the sustainability of the *EBP Project* EBPs. Here, state agencies exercised their authority to set policy for the delivery of clinical practice, and voluntarily engaged in an interactive and cooperative relationship building process with local service and other organizations to meet the full range of needs--infrastructure building, financing, communications, licensing, certification, regulations, standards, quality improvement, service treatment delivery and training--necessary to solidify EBPs as usual mental health and administrative practice. Interactions, then, between the

macro- or top down actors (state agencies) and the micro- or bottom-up actors (local service organizations or boards) were required to successfully implement, and roll out, the EBPs.

Furthermore, the variety of ‘institutions’ represented in this study—namely, state agencies of mental health, substance abuse, Medicaid, vocational rehabilitation; universities; technical assistance centers; centers of excellence; consumer organizations; local service organizations; local boards; governor offices; federal government grant entities; accrediting boards; and research groups-- engaged in a variety of inter-relationships to implement the *EBP Project* EBPs. Consequently, “institutions matter[ed]” [56], in this study.

And third, *what are some of the implications the innovations identified have for the development and implementation of EBP service delivery cultures in state and community-based organization?*

Data analyses in this study showed that in all three phases of EBP implementation, relationship building or financing innovations were most prominent (see Tables 3 and 7). Considering the “evolutionary” way the *EBP Project’s* EBPs were being implemented, the prominence of these two types makes sense. Since this is the case, if states governments, and other organizations and stakeholders involved in mental health EBP implementation set relationship-building and development of financing strategies for implementation as top *ongoing* priorities implementation will have a greater chance of being successful.

Results from rank ordering of the types (and number) of innovations identified support the premise that “different implementation strategies” are needed at “different phases of implementation”, and that “multiple strategies are more effective than just one” [39]. Rank order of innovation type was defined as the comparison between number of innovations per type, with highest rank equalling most number counted. Here, the greatest number of innovations of a particular type, in aggregate, can be interpreted as the most important type of innovation needed to implement EBPs during a particular implementation phase.

The rank ordering of innovations in the Pre-Implementation phase showed relationship building and communication as primary, followed by state infrastructure building; financing; licensing, certification, regulations, standards and QI; and service delivery and training. Here,

ordering reflects the necessity to launch more foundation building or macro-system activities, namely through relationship building and communications, and state infrastructure building. In the initial Implementation phase, rank ordering of innovations showed financing to be primary, followed by relationship building and communication; licensing, certification, regulations, standards and QI; service delivery and training; and state infrastructure building. Not surprising, initial Implementation required more, and new, financial support to aid in the specifics of organizational change, training, and monitoring efforts at the community-based agency level.

Rank ordering of implementation in innovations in the Plans of Sustainability phase also reflected financing as primary, followed by service delivery and training; relationship building and communication; licensing, certification, regulations, standards and QI; and state infrastructure building. Here, the top two implementation innovations reflect the states' projections on factors most important to maintaining EBPs at both the state and agency levels: financing mechanisms for broad based support of the implementation of EBPs--such as start-up funds and reimbursement mechanisms specifically for EBPs--and support for ongoing training of staff in EBP service delivery and monitoring methods.

Overall, the greatest number of innovations identified in this study was associated with Plans for Sustainability. In light of the budget and Medicaid funding crises states faced during the timeframes site visits were conducted, all states expressed a deep and general philosophical commitment to rolling out EBPs no matter the resources required. This result is a testament to states' commitments to 1) mental health system reform, and 2) goal to provide cutting-edge service delivery methods that can improve the quality of care for their mental health populations, especially for persons with serious mental illness.

## **Conclusion**

This study makes several new and important contributions to the field of mental health, implementation and innovations research. First, it demonstrates that 5 types of innovations can be identified from state-level activities associated with the preparation, early implementation and planning for sustainability of mental health EBPs: state infrastructure building; relationship building and communication; financing; licensing, certification, regulation, standards and quality improvement; and service treatment delivery. Second, it provides a list of 106 innovative activities that state and other governmental organizations, community-based organizations, and other stakeholders, can model to achieve readiness, early implementation, and planning for sustainability of EBPs. Third, it complements a related paper's conclusion that the state's role in the implementation of mental health EBPs is critical [31], and that innovations resulting from states' efforts to push forward new service delivery strategies at both the state and community-based levels "matter" [56, 71-74]. And fourth, it provides new evidence that EBPs in mental health systems are being implemented within an "evolutionary" framework. Consequently, the study's results provide new evidence that can be used to improve the quality of services and systems of care for persons with mental illness and substance abuse disorders, and enhance the knowledge bases in a few fields.

While this study provides new data on the implementation of mental health EBPs, it also has several limitations. Data sources were limited since analyses were based on 16 state site visit reports. Site visits were scheduled at two cross-sectional points in time. Site visit one occurred when a few states had not yet launched all of their EBPs; site visit two occurred during the early implementation phase of the EBPs. Therefore, it was not possible to assess longitudinal perspectives on implementation and sustainability. Likewise, the innovations identified can be considered a subset of innovations that otherwise might be discovered if intensive case study methods were used to investigate each state's EBP implementation process in greater depth. While the innovations showed patterns across and within the EBPs, the states selected for the initial implementation of the *EBP Project* considered themselves innovators of mental health reform, and were very committed to developing a statewide EBP culture. Hence, some of the innovative activities may not be as useful to states that are not as

committed to this mode of service delivery. Lastly, comparisons between the innovative activities used to implement the *Project's* EBPs and non-*EBP Project* EBPs was not possible since this was not systematically explored during site visits. Therefore, it was not possible to explore the similarities and difference in implementation innovations among a larger set of EBPs, or the implications such similarities and differences may have on outcomes.

The results from this study, however, can be used as check points from which to assess how systemic barriers and policy recommendations for the dissemination of mental health EBPs [38, 39, 70] are being addressed. With regards to systemic barriers recently described in the literature, the implementation innovations identified in this study show that states are directly taking steps to help “build a science base”; “ensure that the supply of EBP services and practices and providers are trained in EBP practice; “ensure delivery of state of the art treatments”; “facilitate entry into treatment”; and “reduce financial barriers to treatments” [38]. The data collected in this study did not overtly show how states were directly addressing “overcoming stigma”; “improving public awareness of effective treatments”; or “tailoring treatment to gender, sex, race and culture”.

The implementation innovations identified in this study show that the participating states in this study are addressing the majority of national policy recommendations that were recently cited in the literature [38]. States are providing “leadership in EBPs...reviving an infrastructure for mental health program training for EBPs...modifying Medicaid, and ...using mental health services block grant funding to initiate EBPs”. States were also in the process of “developing and strengthening their quality improvement program linked to EBPs”. Data collected during the site visits in this study did not explore how states might “modify Medicare” to accommodate EBPs, or how to “create national information leadership in EBPs”.

Hence, this study shows that the states involved in the *EBP Project* demonstrated innovative implementation activities that were addressing the majority of systemic barriers and policy recommendations that have been made to achieve a national EBP service oriented culture. This is compelling news.

This research study adds to the knowledge bases on the implementation and dissemination of mental health EBPs and innovations. States, and organizations and stakeholders involved in the implementation of mental health and types of EBPs will hopefully use the innovative activities identified here to jump start or enhance their EBP implementation processes. While this study utilized qualitative research methods to explore new avenues of inquiry, more quantitative studies are also needed to explore links between the cause and effects of EBP implementation factors and outcomes. Using both qualitative and quantitative methods to investigate the multiple dimensions of EBP implementation, such as innovation, will most optimally help us to deepen our capacity to agree upon the standards and criteria we need to evaluate the short and long term outcomes EBPs have been designed to achieve.

## **Competing interests**

The author declares that there are no competing interests associated with this manuscript. However, the author would like to thank the John D. and Catherine T. MacArthur Foundation Network on Mental Health Policy Research for financing the preparation of data analyses and writing of the manuscript associated with this phase of the *EBP Project*.

## **Authors' contributions**

The sole author listed conceived of this manuscript's design, data analyses, and interpretation of analyses; wrote this manuscript; and gave final approval for this version to be published.

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**Table 1: State Selection of EBPs**

STATE/EBP	ACT	FPE	IDDT	IMR	SE	TOTAL
1	X		X			2
2	X			X		2
3		X			X	2
4			X		X	2
5					X	1
6		X		X		2
7		X		X		2
8			X	X		2
Total	2	3	3	4	3	15

**Table 2: Number of Implementation Activities & Innovations Across Implementation Phases & Type of EBP**

DOMAIN & IMPLEMENTATION PHASE/EBP	ACT	FPE	IDDT	IMR	SE	TOTAL #
<i>State Infrastructure Building/Commitment:</i>						
PreImplementation	2	0	1	3	1	7
Implementation	0	0	1	2	1	4
Plans for Sustainability	4	3	7	5	4	23
<i>Relationship Building &amp; Communication:</i>						
PreImplementation	3	5	4	6	2	20
Implementation	4	3	5	6	4	22
Plans for Sustainability	3	5	4	4	3	19
<i>Financing:</i>						
PreImplementation	4	4	2	4	6	20
Implementation	5	3	2	3	2	15
Plans for Sustainability	2	2	0	2	4	10
<i>Licensing, Certification, Regulations, Standards &amp; QI</i>						
PreImplementation	3	2	1	0	2	8
Implementation	4	0	3	0	3	10
Plans for Sustainability	0	0	10	2	0	12
<i>Service Delivery Treatment &amp; Training:</i>						
PreImplementation	0	1	2	0	2	5
Implementation	1	0	1	2	1	5
Plans for Sustainability	6	3	3	4	1	17
Total #	41	31	46	43	36	N/A

**Table 3: Number of Implementation Activities & Innovations Across Implementation Phases**

DOMAIN/# ACTIVITIES & INNOVATIONS	# PRE-IMPLEMENTATION EBPS	# IMPLEMENTATION EBP	# PLANS FOR SUSTAINABILITY EBPS	TOTAL #
State Infrastructure/Commitment to EBPs	5	3	11	19
Relationship Building & Communication	8	13	6	27
Financing	5	9	12	26
Licensing, Certification, Regulation, Standards, QI	5	9	3	17
Service Delivery Treatment or Training	4	5	8	17
Total #	27	39	40	106

**Table 4: Pre-Implementation EBP Activities & Innovations**

<b>Innovations: Pre-Implementation Stage</b>	<b>ACT</b>	<b>FPE</b>	<b>IDDT</b>	<b>IMR</b>	<b>SE</b>
<p><b>Infrastructure Building</b></p> <ul style="list-style-type: none"> <li>• Technical Assistance Center for state &amp; Toolkit efforts established</li> <li>• Participation in other demonstrations to ready state for EBPs</li> <li>• Modifications to Toolkit made to fit state context of implementing EBPS</li> <li>• White Paper written by consumers to modify EBP</li> <li>• State sponsored research establishing evidence base to implement EBPs</li> </ul>	X X		X	X X X	X
<p><b>Relationship Building &amp; Communications</b></p> <ul style="list-style-type: none"> <li>• Statewide meetings, workshops, conferences, technical assistance activities to address philosophical and clinical practice differences between providers</li> <li>• Broad communication strategies established (e.g. educational forums, peer support programs, statewide consumer and advocacy meetings) to discuss EBPs</li> <li>• Statewide meetings to engage consumers and other stakeholders in state &amp; Toolkit efforts</li> <li>• Statewide Advisory Group established</li> <li>• Statewide Advisory Committee established, integrating recovery perspectives</li> <li>• Priority to include input &amp; consumers on Advisory Board, Toolkit site Steering Committees</li> <li>• Reporting of current EBP successes in mass media</li> <li>• Partnership formed between state and consumer community to train clinical staff</li> </ul>	X X X	X X X	X X X	X X X X	X X
<p><b>Financing</b></p> <ul style="list-style-type: none"> <li>• Start-up incentive monies for sites provided by state</li> <li>• Start-up incentive monies for sites provided by non-state funder</li> <li>• New use of block grant funds to support EBPs</li> <li>• Shift of funding from inpatient to community services by state</li> <li>• Financial incentives, using Medicaid billing, for start-up year</li> <li>• Approaches to make Medicaid billing easier for EBPs investigated by state</li> <li>• Education &amp; assurance about Medicaid billing procedures provided to sites by state</li> <li>• White paper written by consumers to address Medicaid reimbursement &amp; coding issues</li> <li>• MOUS signed by cmhcs to receive start-up funds</li> <li>• State Vocational Rehab Agency established MOUS to solidify payment for services</li> </ul>	X X X X	X X X	X X	X X X	X X X X
<p><b>Licensing, Certification, Regulation &amp; Standards</b></p> <ul style="list-style-type: none"> <li>• New licensing standards developed by non-state experts</li> <li>• New licensing regulations developed or discussed</li> <li>• New dual certification &amp; licensing standards established</li> <li>• New standards for service delivery established</li> <li>• Association for Behavioral Health Centers formed to discuss reimbursement &amp; administrative rules &amp; incentives for clinical staff to perform services</li> </ul>	X X X	X X	X		X X
<p><b>Service Delivery Training</b></p> <ul style="list-style-type: none"> <li>• Training budget reallocated to be more effective for EBPS</li> <li>• Two year training plan developed through community needs assessment process to deliver training through regional training centers</li> <li>• Tracks in clinical supervision and clinical administration best practices developed by state</li> <li>• Sites to receive incentives for additional training &amp; technical assistance if decide to implement EBP</li> </ul>		X	X X		X X

**Table 5: Implementation EBP Activities & Innovations**

<b>Innovations: Implementation Stage</b>	<b>ACT</b>	<b>FPE</b>	<b>IDDT</b>	<b>IMR</b>	<b>SE</b>
<p><b>State Agency Infrastructure Building</b></p> <ul style="list-style-type: none"> <li>New state position developed to assist in implementation &amp; monitoring of EBPs established</li> <li>SMHA considering strategies to penetrate EBP in all licensed programs</li> <li>New RFP process developed to help fund EBP projects throughout state</li> </ul>			X	X X	X
<p><b>Relationship Building &amp; Communications</b></p> <ul style="list-style-type: none"> <li>Monthly meetings between state, Toolkit sites and/or Advisory Councils</li> <li>Monthly meetings between NAMI and Toolkit sites</li> <li>Monthly meetings and/or calls between technical assistance centers &amp; sites</li> <li>Ongoing communication between state and local sites/boards</li> <li>Increased collaboration between SMHA &amp; State Medicaid Office</li> <li>New collaboration between SMHA, Medicaid &amp; Vocational Rehab Office</li> <li>First time meeting held between state NAMI and Office of Consumer Affairs directors</li> <li>State &amp; local sites working to implement evaluation process &amp; reassure stakeholders of process</li> <li>Developed Clinical Practices Advisory Committee</li> <li>Planning EBP conference</li> </ul>	X  X  X     X	X   X   X	X  X X X  X	X X X X   X	X         X
<p><b>Financing</b></p> <ul style="list-style-type: none"> <li>SMHA working with State Medicaid agency to make billing easier</li> <li>Developed new Medicaid billing code &amp; coding guidelines</li> <li>Using bundled funding approach to fund EBP</li> <li>Exploring Medicaid requirements to qualify consumers to deliver EBP</li> <li>Using Medicaid Waiver 1115B to fund EBP</li> <li>Position paper written by state to recommend Medicaid reimbursement levels &amp; codes</li> <li>Billing of EBP allowed as part of group or individual psychotherapy or day rate for Continuing Day Treatment Program</li> <li>Reimbursement codes and rates changed to support EBP</li> <li>Created new funding program only for EBP</li> <li>New funding formulas integrated into allocation structure, with codes changed in data system &amp; audit process</li> <li>Medicaid approval received to reimburse EBP teams through amendment to state plan</li> <li>Medicaid rate recalculated to allow more professionals to be reimbursed</li> <li>State cost sharing with counties to fund EBPs</li> </ul>	X       X X X	X  X X	X X	X X	X X
<p><b>Licensing, Certification, Regulation, Standards &amp; QI</b></p> <ul style="list-style-type: none"> <li>Distributed SAMSHA's standards of care to local sites</li> <li>Developed &amp; using new certification manual</li> <li>Developing treatment plan tool to include multiple domains &amp; to be consistent with licensure review</li> <li>Developing mental health &amp; substance abuse language guidelines for auditors to use in consistent evaluations</li> <li>Developing standards for EBP</li> <li>Barriers to standards for EBP teams removed by Medicaid agency</li> <li>Regulation changes to revise employment referral &amp; authorization form, individual vocational form and verification of diagnostic process, and employment outcome measurement definition</li> <li>Implementing certification process through administrative rule &amp; stakeholder process</li> <li>Integrated fidelity measures, technical support &amp; supervision into certification</li> </ul>	X     X X		X  X  X		X X X
<p><b>Service Treatment Delivery</b></p> <ul style="list-style-type: none"> <li>Developing treatment plan tool to include multiple domains &amp; to be consistent with licensure review</li> <li>SMHA &amp; consumer community developing partnership to train clinical staff to deliver EBP</li> <li>SMHA funding for consumer training &amp; joint teaching to professionals &amp; consumers for EBP</li> <li>Implementing shadowing training program</li> <li>Administrative rule revised to include fidelity adherence for EBP</li> </ul>	X		X	X X	X  X

**Table 6: EBP Sustainability Plan Innovation**

<b>Innovations: Sustainability Plans</b>	<b>ACT</b>	<b>FPE</b>	<b>IDDT</b>	<b>IMR</b>	<b>SE</b>
<p><b>State Commitment to EBP Rollouts Intent</b></p> <ul style="list-style-type: none"> <li>Philosophical commitment to statewide rollout no matter the resources needed</li> <li>State and sites committed to rollout of EBP together</li> <li>Goal assess fidelity before rolling out EBP</li> <li>Goal to reexamine EBP &amp; retrofit rollout because of nature of EBP</li> <li>Goal to examine difference between EBP rollouts because of difference between EBPs &amp; paradigm shifts required to implement</li> <li>Goal to determine system-level adaptations perceived to be required for sustained uptake</li> </ul>	X	X	X X	X	X
<p><b>Targeted Infrastructure Building</b></p> <ul style="list-style-type: none"> <li>State applying for governmental grants to build system infrastructure</li> <li>Plan to implement a state institute to support EBPs</li> <li>Issues for systematic implementation of EBP identified</li> <li>Develop infrastructure &amp; mechanisms for integrating EBPs into larger state agenda &amp; dissemination of EBP information across states</li> <li>To continue state supported research on EBPs</li> </ul>	X	X	X	X	X X
<p><b>Relationship Building &amp; Communication</b></p> <ul style="list-style-type: none"> <li>Need to develop engagement process to involve non-Toolkit agencies in EBPS more</li> <li>Increase family involvement in planning &amp; monitoring community based programs</li> <li>Continue to create champions at all levels of system</li> <li>Continue regular consumer and stakeholder meetings</li> <li>Continued guidance on consensus building</li> <li>Develop language about EBPs that consumers can better understand and use</li> </ul>	X	X X X	X	X	X
<p><b>Financing</b></p> <ul style="list-style-type: none"> <li>Need to better align incentives &amp; rules to encourage desired practices, behaviors &amp; system change</li> <li>To work on funding base for full roll out</li> <li>To explore regulating EBPs</li> <li>To develop new contract language for EBPS using administrative rule</li> <li>To explore developing private insurance program to pay for EBP</li> <li>To explore increasing tax on alcohol and tobacco to fund EBP</li> <li>To explore expanding ACT to share financing with other EBPs</li> <li>To consider higher reimbursement rates</li> <li>To explore restructuring Medicaid plan to cover services</li> <li>To add EBP to Medicaid Rehab Option</li> <li>To explore solid payment mechanisms</li> <li>Determine how to shorten timeframes to transfer funds from the state to sites</li> </ul>	X X	X	X X X X X X X X	X X	X X X
<p><b>Licensing &amp; Certification</b></p> <ul style="list-style-type: none"> <li>To work on credentialing and licensing issues with locals</li> <li>Considering strategies to penetrate EBP in all licensed programs</li> <li>Considering deeming EBP training part of certification process</li> </ul>			X X	X X	
<p><b>Service Treatment Delivery</b></p> <ul style="list-style-type: none"> <li>State working with Schools of Social Work to develop EBP training curriculum for students</li> <li>State to use private donation to create educative training center for EBPs</li> <li>To address ongoing skills training</li> <li>To explore appropriate outcome measurement of EBP</li> <li>To implement Train the Trainer Program</li> <li>State to set aside monies for training activities</li> <li>To explore strategies that achieve broader penetration of training &amp; use of learning collaboratives</li> <li>To increase access to transportation to receive EBP</li> </ul>	X X X X X	X X	X X	X X X	X

**Table 7: Rank Order\* of Innovation Types in EBP Implementation Stages**

PRE-IMPLEMENTATION PHASE: RANK ORDER 1-5	INITIAL IMPLEMENTATION PHASE: RANK ORDER 1-5	PLANS FOR SUSTAINABILITY PHASE: RANK ORDER 1-5
1. relationship building & communication	1. financing	1. financing
2. state infrastructure building	2. relationship building & communication	2. service delivery and training
3. financing	3. licensing, certification, regulations, standards, quality improvement	3. relationship building & communication
4. licensing, certification, regulations, standards, quality improvement	4. service delivery and training	4. licensing, certification, regulations, standards, quality improvement
5. service delivery and training	5. state infrastructure building	5. state infrastructure building

Rank Order is defined as the comparison between number of innovations per type, with highest rank (#1) equalling most number counted, and lowest rank (#5) equalling least number counted.