# Development of a Multilevel Framework to Increase Use of Targeted Evidence-Based Practices in Addiction Treatment Clinics

Todd Molfenter[*1], Dennis McCarty[2], Victor Capoccia[3], David Gustafson[4]

[1, 3, 4]University of Wisconsin – Madison,1513 University Avenue, Madison, Wisconsin, USA
[2]Oregon Health Sciences University,3181 S.W. Sam Jackson Park Rd., Portland, Oregon 97239-3098, USA
[1]todd.molfenter@chess.wisc.edu; [2]mccartyd@ohsu.edu; [3]victor.capoccia@chess.wisc.edu;[4]david.gustafson@chess.wisc.edu

***Abstract*-Implementing specific evidence-based practices (EBPs) across a set of addiction treatment providers have been a persistent challenge. In the Advancing Recovery(AR) demonstration project, single state agencies, the entities that distribute federal funds for substance use disorder prevention and treatment services, worked in partnership with providers to increase the use of EBPs in the treatment of addiction. The project supported two cohorts of six 2-year awards. Field observations from the first year of implementation guided development of a multilevel framework (the Advancing Recovery Framework). Government entities and other payers can use the framework as a guide for implementing evidence-based clinical practices within treatment networks. The Advancing Recover Framework calls for a combination of policy and organizational changes at both the payer (government agency) and provider levels. Using the Advancing Recovery Framework, 11 of the 12 AR payer/provider partnerships increased use of clinical EPBs. This article identifies key payer policy changes applied during different phases of EBP program implementation. The public health benefit of the demonstration project was broader use of medication–assisted therapy and continuing care in addiction treatment services.**

***Keywords- Evidence-Based Practices; State Addiction Authorities; State-Payer Policy***

## I. INTRODUCTION

Evidence-based clinical practices are used less than 40% of the time in both public and private healthcare settings [1-4]. For nearly a decade, the Centers for Disease Control (CDC), the Health Resources and Services Administration(HRSA), the Substance Abuse and Mental Health Administration (SAMHSA), the National Institute of Mental Health (NIMH), and the National Institute on Drug Abuse (NIDA) have encouraged publicly funded healthcare clinics and behavioral health centers in the United States to use specific evidence-based practices[4-6]. Even with this encouragement, the ability to spread evidence-based clinical practices remains elusive in most areas of healthcare, including addiction treatment services [7]. The traditional approaches to promote the use of evidence-based practices (EBPs) (training, education, and word-of-mouth) preferred by policy makers and treatment organizations (or providers) have not been successful [8,9].

Researchers investigating the limited use of EBPs have concluded that effective diffusion of EBPs requires multi-level strategies that include both policy- and organizational-level changes[1,10,11].This has spurred an interest in understanding the roles state and city health department sand other governmental payers play in promoting the use of clinical EBPs[10,12].State roles identified as supporting EBP adoption are 1) strategic planning and leadership to build awareness, recruit early adopters, and develop mandates for wider implementation; 2) building stake-holder involvement to build support; 3) creating focus on outcomes clients value; 4) developing regulatory standards for program specification; 5) securing adequate funding; 6) using purchasing incentives and disincentives; and 7) developing workforce training[13,14].Through an analysis of state EBP implementation in public mental health systems, Magnabosco[14]discovered that a progression of pre-implementation or "readiness" for implementation, implementation, and sustainability planning occurs in multi-organizational EBP implementation efforts. These previous findings on governmental roles in EBP implementation were derived from case research. What researchers and practitioners need to promote EBP implementation is a multi-level framework that explains the roles of governmental payers, can be applied in practice, and provides clear guidance about what policy actions are most relevant in each of Maganbosco's phases of EBP implementation.

## II. EXPERIMENTAL DESIGN AND FRAMEWORK DEVELOPMENT

### *A. Advancing Recovery: State and Provider Partnerships for Quality Addiction Care*

In 2006, the Robert Wood Johnson Foundation (RWJF) developed a demonstration grant called Advancing Recovery: State and Provider Partnerships for Quality Addiction Care(AR). The primary goals of the national AR program were to 1) increase use of EBPs in treatment of addiction and 2) develop a framework for identifying and removing systems barriers to EBP adoption. Single state agencies (SSAs), intermediate purchasing entities, community treatment organizations (providers), or provider associations were eligible to apply. Each application had to represent a partnership involving a single state agency (or other payer) and sufficient number of community treatment organizations to ensure diversity in treatment settings. Such



DOI: 10.5963/PHF0201002

partnership was vital to the project because SSAs act as governmental payers in the United States. They fund 55% of addiction treatment services; and often have responsibility for the quality and cost effectiveness of addiction treatment services within their states[15].

AR consisted of two cohorts with six states that lasted two years each, with one beginning in 2007 and another in 2008.Six applications were selected for Cohort One (Delaware, Florida, Kentucky, Maine, Missouri, and Rhode Island), and six applications for Cohort Two(Alabama, Arkansas, Colorado, Maryland, Texas, and West Virginia). Each state selected a number of treatment organizations (ranging from three to eleven, depending on the state) as partners to join them in this effort. Missouri invited all 23 of its contracted treatment organizations; ten accepted. The project activity in Maryland focused on the City of Baltimore, and the activity in Texas focused on Dallas.

Two EBPs selected by partnerships for implementation were: 1) the use of medications for specific diagnoses, or medication-assisted treatment (selected by five partnerships); and 2) enhancing the continuum of care through post-treatment aftercare, (selected by the other seven partnerships). Although pharmacotherapy is common for the chronic disease conditions such as heart disease, asthma, and diabetes [16], less than 35% of treatment organizations use pharmacotherapy for addiction disorders. Only one-third of their opioid- and alcohol-dependent patients receive medications, despite the evidence demonstrating the efficacy of addiction treatment pharmacotherapy [17]. Barriers to broad implementation medication-assisted therapies for addictions include limited access to medication reimbursement [18];attitudes against use of medication-assisted therapy by state policy-makers as well as the public [19];and lack of state regulatory policy that encourages medication adoption [20].Another challenge for the addiction treatment field has been to move beyond an acute care model that only treats individuals in crisis toward a chronic care model that extend scare beyond acute care services [18]. Post acute treatment services such as follow-up phone calls, peer supports, and self-help groups have had positive effects on addiction treatment outcomes [19]. Yet, support for these activities through removal of regulatory barriers, and use of reimbursement support or financial incentives, has been limited [20].

### *B. Technical Assistance*

In cooperation with The Treatment Research Institute (TRI) in Philadelphia, the national program office at the University of Wisconsin's Network for the Improvement of Addiction Treatment (NIATx) provided technical assistance to the grantees. During Year One (of each cohort)all state partnerships participated in a learning format that included: 1) two in-person meetings per year where participants were encouraged to collaborate with other cohort participants;2) monthly teleconferences for instruction and networking;3) monthly coach calls from two coaches–one with for the state policy experience and one with process improvement experience relevant to providers, and 4) a dedicated secure webpage that catalogued evidence-based practice literature, changes made by each of the partnerships, and all presentations made at the in-person meetings and monthly teleconferences. In addition, a member of the evaluation team from Oregon Health and Sciences University (OHSU) was assigned to each state.

At the beginning of the project, states received a list of promising administrative practices and policies for EBP implementation. The list included: conduct a customer needs analysis, braided funding, contract with networks of providers that offer multiple levels of care, standardize definitions, rates, and performance criteria across state purchasing units, evaluate the unintended consequences of funding or regulatory practices, and encourage an active and informed client base. This list was developed through expert focus groups that RWJF conducted prior to the AR program, where participants were asked to list and prioritize the administrative actions that payers could take to influence the adoption of evidence-based practices. These administrative actions address concerns related to segmented funding, the lack of reimbursement for specific EBPs, and regulatory barriers. In both cohorts, the treatment providers were asked to strengthen business and clinical systems, to focus on linkages between clinics, and to apply the NIATx process improvement model [21]to improve the internal processes related to using the selected EBP in their organizations.

Variation existed in The Cohort I payers varied in how they interacted with the treatment provider community and the content of the regulations they removed, revised, or implemented to promote the EBP implementation. Likewise, treatment organizations took a range of approaches to organizational change, how they communicated communicating with their state-or payer-level partner about regulatory barriers, and how they interacted interacting with addiction treatment consumers in their community. Because The Cohort I partnerships were free to choose the interventions they believed most likely to facilitate implementation of the EBP, resulting in six unique laboratories to test tested various administrative and other practices to promote implementation of clinical EBPs.

### *C. Advancing Framework Development*

After the Year 1 field work of Cohort I, a panel of experts, comprised of members of the Advancing Recovery National Advisory Council, members of the Advancing Recovery management team, three expert coaches, a senior Robert Wood Johnson Foundation program staff person, and the four-member evaluation team, convened to identify the administrative



DOI: 10.5963/PHF0201002

practices that had helped the six cohort 1Cohort I partnerships make successful state-level improvements in the adoption of targeted EBPs. Among this group was a former SSA director, a former federal Substance Abuse and Mental Health Services Agency (SAMHSA) director, a former and current treatment agency director; a future director for the President of the United State's Office of National Drug Control Policy (ONDCP), organizational change consultants for state governments and treatment organizations, and academics who specialize in public policy and organizational change. In preparation for the meeting, the coaches and the member of the evaluation team assigned to each state/treatment organization partnership compiled summaries describing the steps each state took to promote use of evidence-based clinical practices. Data gathered through coaching visits, evaluation phone interviews, and quarterly reports submitted by the sites that contained quantitative and qualitative data were included in the summaries. The expert panel used the Nominal Group Technique [25] to identify key factors that increased the use of evidence-based clinical practices and therefore should be included in the Advancing Recovery framework. The nominal group technique is a proven way to make pooled judgments in groups and has been used to identify the factors employed in several validated, predictive models of system and organizational change [26,27]. The technique uses a structured brainstorming session, and concludes with a structured vote, discussion, and vote again process. The review included assessment and categorization of activities leading up to the government entities making any policy changes (readiness planning) and during the development of policy changes toward the aim (the implementation phase).Additional commonalities and differences between partnerships were also identified during the review team analyses. For example, there was considerable variation in the number of patients treated by the implemented EBPs during Year 1 of the project: Delaware (775); Florida (30); Kentucky (940); Maine (2032); Missouri (1400) and Rhode Island (19).Analysis of the project summaries by the review team The analysis yielded a set of information from the experimental phase related to most and least effective practices undertaken by partnerships as well as practices the review team believed would have been effective if utilized. Once the expert group developed a draft of the framework, the site coaches presented it to the state partnerships for their feedback. The states used the final version, called the Advancing Recovery Framework, as a checklist to identify what influences could help with the EBP implementation phase during Year Two of Cohort I. The AR Framework was implemented and evaluated in both years of Cohort II.

## III. THE ADVANCING RECOVERY FRAMEWORK

The Advancing Recovery Framework includes a set of: 1) Four Conditions for Change, 2) Three Supports for Change, and3) Five Policy Levers, all of which increase the chances that an EBP will be successfully disseminated (Figure 1).

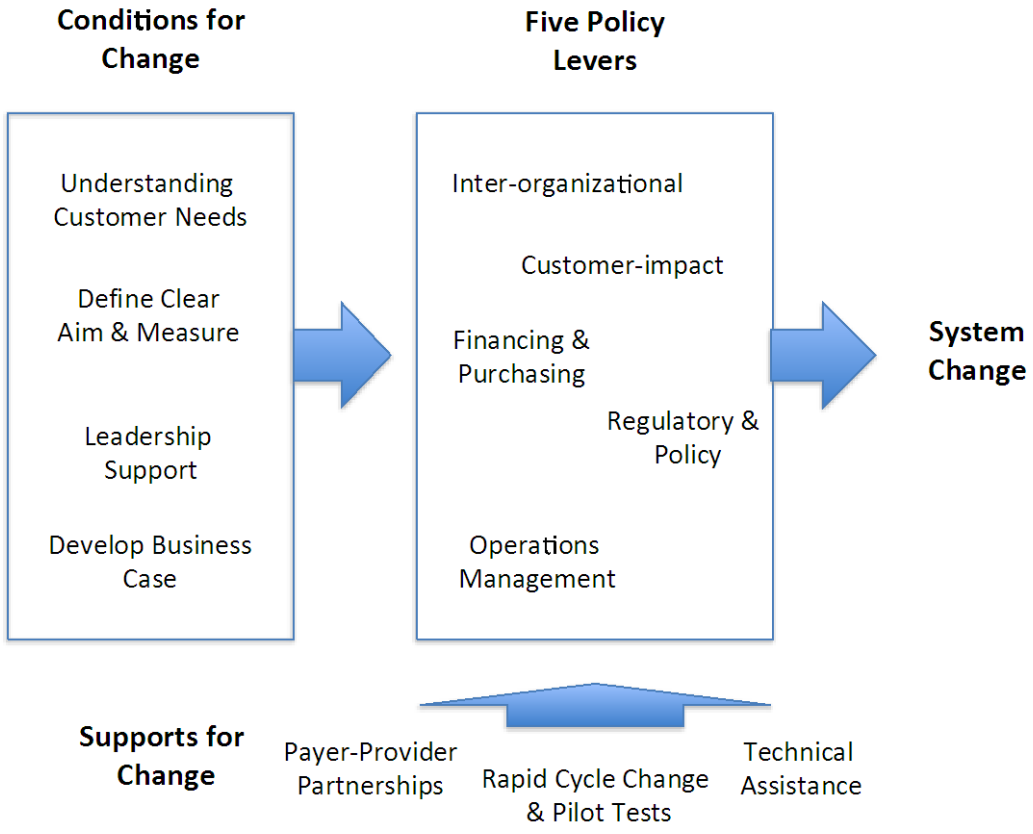


Figure 1 Advancing Recovery Framework



DOI: 10.5963/PHF0201002

Both states and providers relied upon the Conditions for Change and the Supports for Change to improve their processes for using evidence-based clinical practices. However, the Five Policy Levers were primarily used by the states.

The four Conditions for successful organizational change came from the NIATx model for process improvement [21].All 12 state/provider partnerships used the Conditions as part of their participation in the Advancing Recovery Program. The states and each of their providers also used these Conditions within their organizational structures and operations. The conditions include:

- Understand the Customer. Each partnership asked: What is it like to be our client? From this perspective, they could see barriers that kept EBPs from being followed. To understand the client's perspective, state/provider partnerships walked through their processes as if they were clients. For example, if they were trying to increase the use of medication, they walked through the process as clients trying to obtain medication-assisted treatment.

- Define a clear and measurable aim. The partnerships asked themselves: What are we trying to accomplish, and how will we know a change is an improvement? For example, the aim for six of the partnerships was to increase the use of post-treatment aftercare, and the measurement was the number of clients admitted to aftercare.

- Gain Leadership Support: The Advancing Recovery project asked each state and each participating provider to appoint an executive sponsor and a change leader.

- Build a Business Case: Each partnership built a business case to justify the cost of the EBP being implemented. In the project, participants assumed that if a business case could not be established for the aim, changes to support the aim would be difficult.

The Advancing Recovery Framework also offered the following three supports to participants.

- Payer/provider Partnerships: Initially, several of the state authorities and providers (or treatment agencies) were adversaries in conflict over contractual and regulatory issues. The partnering process highlighted their common aim to help those with addiction problems.

- Rapid-cycle Testing & Pilot Tests: State/provider partnerships pilot tested changes with a few of the providers followed by rapid expansion to all providers. This allows for continuous improvement during deployment of EBPs, where lessons learned from early adopters are used in the expansion phase [22].

- Technical Assistance: Advancing Recovery used the NIATx Learning Collaborative model, which combines expert coaching and peer networking with training and education.

The Five Policy Levers include influences that SSAs or other payers can use to create a supportive environment for broad adoption of targeted EBPs. The state/provider partnerships in Advancing Recovery used an analysis of the Five Policy Levers during the planning phase to identify barriers. Using the policy levers during implementation helped overcome those barrier sand make system-level changes.The levers include:

- Inter-Organizational Capability: This lever identifies organizations within the state that are able to collaborate and/or establish partnerships to promote evidence-based practices. For example, the state of Maine worked with the state medical association to increase the number of physicians certified to prescribe buprenorphine.

- Customer Impact: This lever describes how a change will benefit the customer, impact the number or type of customers involved in treatment, and which customers are needed to support and advocate for a change. For instance, the state of Missouri worked with local community groups who were resisting the implementation of medication-assisted therapy.

- Financial and Purchasing: This lever describes the way a system or funder purchases services. In AR it examined the cost of the EBP along with the purchasing and funding mechanisms. Florida reallocated funds from the state's indigent drug program to purchase Vivitrol®, a long-acting injectable form of naltrexone, used to treat alcohol abuse. Other states made changes to contract that removed disincentives or added incentives to the use of a targeted EBP.

- Regulatory and Policy: This lever describes the regulatory barriers that prevent implementation of the practice. It explores how EBPs can be implemented within existing rules, and/or what alternative countermeasures (i.e., statutory, legal, and financial) can be undertaken to permit support of a proven clinical practice. For example, in West Virginia, partners negotiated with the state Office of Health Facility Licensure and Certification to change stringent data requirements and reduced paperwork requirements to allow clinicians more time to engage clients in medication-assisted treatment.

- Operations: This lever is used to change internal processes or operations to promote the targeted change. During the project, many state (payer) agencies began to appreciate how their daily operations or trainings they supported influenced the provider community. For example, several states conducted training sessions to promote use of continuing care services.



DOI: 10.5963/PHF0201002

## IV. METHODS

Data Collection: The method for analyzing AR's impact was based on self-reported data that the participants provided in annual and final progress reports. There were two strands of data collected and assessed through AR. The first was data used to determine increases in implementation and utilization of the EBP targeted by counting the number of patients treated with the EBP the partnerships. The second strand of data was to assess policy changes made in order to support the increased use of that EBP. Tracking the changes made to increase use of the chosen EBP was accomplished with a two-fold data collection process. Provider partners maintained administrative data bases to monitor the degree to which the target EBP was used within the organization. This data was then compiled for all provider partners in a given state so that the AR project could assess progress by individual organizational partners and the cohort as a whole. The second means by which increased use of the target EBP was tracked was through state funder utilization records. Since funders of addiction treatment were already collecting information about the extent of billing for specific types of addiction treatment services, this data was also collected and analyzed as part of the review of impact on implementation of the chosen EBP's. The second strand of data tracking policies changes emerging through the project was compiled in the form of reports from state partnerships. These The annual and final reports included a list of the policy changes made during the readiness planning and implementation phases as well as the changes planned for the sustainability phase of the project during the post-grant period. The stages of readiness planning, implementation, and sustainability planning are based on past typologies of EBP diffusion or implementation [23, 24, 14].Coaches reviewed state data for accuracy and the AR research team at the national program office analyzed the data. For the assignment of lever categories for activities that already occurred (e.g. readiness planning and implementation phases) or were planned (e.g. sustainability phase), two researchers on the AR team independently reviewed policy changes described by the governmental entities and assigned lever categories. Then they would compare results. When results differed, they discussed their differences and using consensus decision-making arrived at a lever category and phase of implementation designation.

Data Analysis: One analysis compared targeted EBP use in the year prior to the launch of the Advancing Recovery program (Pre-Year) and in the year after the Advancing Recovery Framework implementation (Post-Year). Analyses were also conducted on the use of the five policy levers. In the first policy lever analysis, all policy levers applied during the readiness planning and implementation phases as well as planned for the post-grant sustainability phase by the states were reported by frequency of use for all years of the project (the All Levers Analysis).In their final reports, In the second analysis, each state partnership identified the two policy levers that were most important to their efforts prior to sustainability planning. The research team classified these levers to the readiness implementation or implementation phases. For key practice identification, the partnerships did not differentiate between the readiness planning and implementation phases. Hence, both of the state's selected key policies could have occurred in the implementation phase or they could have chosen one lever from the readiness planning phase and one from the implementation phase.

## V. RESULTS

All 12 state/provider partnerships increased the use of the clinical EBP they had selected (Table 1). The states of Maine, Maryland, Texas, and West Virginia worked to promote buprenorphine (Suboxone®) to treat opioid dependent-patients. Florida, Colorado, and Missouri targeted use of Naltrexone or its injectable form, extended release naltrexone (Vivitrol®), for alcohol-dependence. Alabama, Arkansas, Colorado, Delaware, Kentucky, and Rhode Island focused on implementing continuing care. Colorado and Kentucky supported continuing care by increasing the percentage of patients who were admitted to outpatient services after receiving residential or detoxification services. Alabama provided continuing care through a new case manager service that would continue consumer support in their post-acute care recovery. Delaware, Arkansas, and Rhode Island used a post-acute care telephone-based follow-up protocol developed by McKay[25]to provide continuing care. The increases were dramatic in the states of Alabama, Arkansas, Colorado, Kentucky, Maryland, Rhode Island, Texas, and West Virginia, since the targeted practices implemented had never been used in those states. One state (Florida) was not able to sustain its increases in medication-assisted therapy, as of 2010, because the funding to pay for medication was discontinued.

TABLE I PRE- POST- IMPLEMENTATION SUMMARY

| **State (Cohort)** | **EBP** | **# of Patients Treatment with EBP** | | **% Change** |
|---|---|---|---|---|
| | | ***Pre-Year (n)*** | ***Post-Year (n)*** | |
| Alabama (2) | Continuing Care (through case management) | 138 | 210 | (52.5%) |
| Arkansas (2) | Continuing Care (through telephone follow-up) | 0 | 150 | New Service |
| Colorado (2) | Continuing Care (through better transfers) | 352 | 1388 | (400%) |
| Delaware (1) | Continuing Care (through telephone follow-up) | 0 | 127 | New Service |
| Kentucky (1) | Continuing Care (through better transfers) | 619 | 1208 | 95% |



DOI: 10.5963/PHF0201002

| | | | | |
|---|---|---|---|---|
| Rhode Island (1) | Continuing Care (through telephone follow-up) | 0 | 127 | New Service |
| | | | | |
| Florida (1) | Addiction Medication (Naltrexone) | 0 | 0 | New Medication |
| Maine (1) | Addiction Medication (Suboxone) | 0 | 352 | New Medication |
| Maryland (2) | Addiction Medication (Naltrexone) | 1346 | 5412 | 302% |
| Missouri (2) | Addiction Medication (Naltrexone) | 44 | 299 | 679% |
| Texas (2) | Addiction Medication (Suboxone) | 0 | 52 | New Medication |
| West Virginia | Addiction medication (Suboxone) | 0 | 271 | New Medication |

All levers applied analysis: In a number of instances, states in AR partnerships had unsuccessfully attempted the facilitation of clinic implementation of the targeted EBPs previous to engagement in the project. Thus, the AR project provided partnerships with the opportunity to apply policy levers that aligned with their needs. A range of policy levers were utilized by AR partners during the project period (Table 2). The Customer Impact lever was the most popular since all states used a customer needs analysis to begin their projects. Many state personnel posed as consumers trying to access the service associated with the EBP in order to understand the system barriers to its use. Financial and Purchasing lever was second in terms of frequently of use with nine states applying it. The state partnerships that used this lever made changes such as providing payment for the EPB (n=7), offering incentives for EBP use (n=1), and increasing the funds available for EBP use (n=1). In terms of employing other levers, eight states used Inter-Organizational, six used Regulatory and Policy, and six used Operational policy levers (Table 2). Six of the eight states selecting the Inter-Organizational lever indicated they chose it because of the importance of stakeholder buy-in necessary from various parts of state government for effective planning and policy change to occur. The policy change work by partnerships over the course of the project laid the foundation for ongoing and additional levers to be applied during sustainability planning.

TABLE II ALL LEVERS APPLIED (DURING READINESS PLANNING & IMPLEMENTATION) & PLANNED (DURING SUSTAINABILITY PLANNING)

R = Readiness Planning; I = Implementation; S = Sustainability Planning

| Lever | # of States | | Selected examples of application |
|---|---|---|---|
| | *R&I* | *S* | |
| **Inter-organizational** | 8 | 7 | • Inter-organizational project planning, evaluation, and stakeholder buy-in.<br>• Enroll another agency to assist with paying for EBP<br>• Inter-agency data sharing<br>• Inter-agency agreements<br>• Inter-organizational barrier removal |
| **Client Impact** | 12 | 0 | • Conduct a walk-through analysis and document individual needs and operational barriers |
| **Financial & Purchasing** | 9 | 6 | • Secure funds to pay for EBPs (new funds or reallocation)<br>• Incentivize use of EBPs<br>• Require use of EBPs in provider contract<br>• Negotiate discounts on medications<br>• Increase funds allocation to pay for EBPs |
| **Regulatory & Policy** | 6 | 1 | • Add medications to formulary<br>• Develop reimbursement mechanism for EBP<br>• Created new service<br>• Include use of EBP in certification review process<br>• Allow for sharing of clinical and demographic information between treatment organizations |
| **Operational** | 6 | 6 | • Reducing internal paperwork<br>• Central purchasing of medications<br>• Fidelity scoring of behavioral EBPs<br>• EBP training and program promotion |

Most states applied more than one policy lever to sustain the improvements made during the readiness planning and implementation phases. All states that implemented a new EBP applied the Inter-organizational lever. These states sought to increase buy-in for the EBP from agencies such as drug courts, child, child and family protective services, and provider associations. Six states indicated that they would use the Operational Lever, specifically through provider trainings to increase awareness and reinforce use of the implemented EBP. Six states planned to use the Financing and Purchasing Lever to sustain EBP implementation. One state planned to apply the Regulatory Lever to sustainability. This state included use of the EBP in the certification standards and patient placement criteria. No states listed the Customer Impact lever in their sustainability planning. (Table 2)

Key lever analysis: Each of the twelve participating states was asked to identify the two most influential policy levers



DOI: 10.5963/PHF0201002

applied during the AR project (Table 3). Eight states listed one policy lever employed during the readiness and planning stage and a second from the implementation phase. The other four states chose both levers from those they had used in the implementation phase. Of the eight states with one from each phase, only two levers were considered important in the readiness planning phase: six noted the importance of Inter-Organizational stakeholder planning and buy-in while the other two states conducted readiness and planning trainings to raise awareness about the importance of the EBP in effective addiction treatment. For the implementation stage, the most common lever was Finance and Planning with nine states out of the twelve choosing it as critical. In addition to identifying the top two policy levers to project aims, state partners provided data regarding how levers were applied to improve services. Specifically, Finance and Purchasing lever related activities considered important to EBP implementation included both securing funds for EBP use and incentivizing EBP use. Several AR partnerships indicated that they could not have moved forward without this lever. For Maine and Baltimore (MD), securing funds to pay for medication-assisted therapy significantly increased the use of Suboxone® in their states. For Colorado, financial incentives proved a necessary step to expanding capacity for allowing patients to go from detoxification into continuing care. The most popular combination of policy levers (n=4), was the use of Inter-Organizational lever (stakeholder planning and buy-in)during the readiness planning phase followed by use of Finance and Purchasing lever during the implementation phase. Table 3 lists the key policy levers selected by each AR partnership.

TABLE III KEY POLICY LEVERS INDENTIFIED FOR EBP IMPLEMENTATION

| Phase | Policy Lever | Action Taken | States that Applied |
|---|---|---|---|
| Readiness Planning | Inter- Organizational | Interagency stake-holder buy-in, planning, and evaluation. | AL, CO, KY, RI, TX, WVA |
| | Operational | EBP training and program awareness | AR, DE |
| Implementation | Operational | Reduce provider certification requirements & billing barriers related to EBP | AL |
| | | Centralize pharmacy purchasing to reduce EBP costs | MO |
| | | Paper-work Reduction | KY |
| | Finance & Purchasing | Reimbursement for services | AR, DE, FL, ME, RI, TX, WVA |
| | | Increase reimbursement for service | MD |
| | | Fiscal incentives for better transfers | CO |
| | Inter-Organizational | Community quality improvement teams eliminated barriers to EBP implementation & sustainability | MD |
| | Regulatory | Changed contract Language that had prohibited use of EBP | ME |
| | | Changed contracts to allow use of state funds to purchase EBP | MO |
| | | Created new level of care. | RI |

## VI. DISCUSSION

The Advancing Recovery Framework proposes that a mix of conditions, supports, and select use of policy levers applied by governmental agencies and clinics would facilitate large-scale implementation of specific EBPs. Several lessons learned emerged from the application of the AR Framework. This Framework brought together the funders and providers of addiction treatment to work toward a common goal or aim. Aims established for the project work were clearly defined and buy-in was obtained from stakeholders at the state level. The project also incorporated choices for partnerships between two EBP's and with regard to the application of policy levers they believed would be most effective in their state. Results from the Advancing Recovery project demonstrated multiple benefits of building positive relationships between the agencies that fund addiction treatment services and those who provide those services.

### *A. Lessons Learned*

Payer-provider partnership: At the core of the Advancing Recovery Framework was the government/payer and clinic/provider partnership. This approach represented a significant change from the way payers and providers reported having worked together in the past. Prior to the AR project, participants indicated that relationships were focused primarily on contracting and reimbursement issues. AR created an opportunity for participants to focus on the advancement of practice implementation strategies within their chosen area. Participants reported that the collaboration between these two entities was important and felt they could not have achieved positive results if each had acted in isolation. An important result of the partnerships was once payers were able to make policy changes, the providers were then able to implement and expand use of the EBP.



DOI: 10.5963/PHF0201002

Opportunistic approach to reimbursement support: Financial support for the implementation of the targeted practice was needed in most of the demonstration projects for training support or service payment to provide the EBP. Demonstration projects that utilized multiple funding sources and continually sought new opportunities had greater success at accessing funds. For example, the medication assisted therapy implementation project in Texas had no initial funding support. With persistence, however, the partnership was able to add this service as allowable billable services under the state block grant. The partnership there also helped providers gain access to Medicaid funds, and the child welfare system contracts began to add addiction medications to their contracts. This opportunistic approach involved strategies that had not been anticipated at the beginning of the project, but yielded positive results.

Additional Level of Support: AR showed that payers and providers require community support to an evidence-based practice like medication-assisted treatment. In some states, community perception about medication-assisted treatment was a significant barrier. Some believe that people addicted to alcohol or other drugs can recover only through abstinence, and the medications just substitute one drug for another. In addition, some 12-Step recovery groups turn away people using medication-assisted treatment. The state of Maine built in support from the recovery community by including the state recovery association as a partner in the AR project. Florida, Missouri and West Virginia developed support groups for individuals medication-assisted that had not previously existed. These projects found the engagement of community groups to support the implementation of the targeted practice were critical to success.

Key Sequence: Four states applied a sequence of stakeholder planning and buy-in (an Inter-organizational Lever) followed by use of Financial and Policy levers. The three states that had the greatest success with number of patients impacted by the targeted EBP (medication-assisted treatment) were Maine, Maryland, and Missouri. All three states had stakeholder planning and buy-in was either built in as part of the project, or had already occurred before beginning AR. In addition, they created mechanisms to pay for the EBP and made changes in contract language to encourage use of the EBP. Combining the Inter-organizational Lever (stake-holder planning and buy-in) in readiness planning with Finance and Purchasing Lever during implementation may be a combination that can maximize the implementation of any EBP across a network of community clinics.

### *B. Replication of the Advancing Recovery Framework*

Replication of the Advancing Recovery Framework begins with leadership support at the payer level. Once the leadership is secured and the project is structured, payers and providers must work together to identify barriers, secure stakeholder buy-in, coordinate change initiatives, and make systems changes at their respective levels. Identifying barriers to the implementation of an EBP begins with understanding customer needs and the reasons why the targeted practice is important to patient recovery. Taking the use of buprenorphine (Suboxone®) as an example, this medication treats and relieves withdrawal symptoms for people addicted to opioids. Many patients prefer buprenorphine because it can be prescribed once a month in the privacy of a doctor's office, rather than dispensed daily in a methadone clinic. Patients aware of buprenorphine will sometimes ask for the medication, but a state or clinic's regulatory and financing barriers may prevent its use. Once needs are identified, the AR Framework offers a tool for assessing which of the five levers could be activated to remove the barriers and facilitate implementation. For payers, the assessment often results in change initiatives to alter financing and regulatory policy. For providers, the assessment results in the use of rapid-cycle change projects to create an environment receptive to implementation of the new practice. Workflow changes, garnering clinician acceptance to the practice, overcoming any public resistance to the practice, and developing a business case are common activities undertaker by providers to ease implementation of an EBP.

The effectiveness of these projects is measured directly by the number of times the new practice is implemented. The replication of the Advancing Recovery framework can be facilitated by external technical assistance that teaches tools, facilitates communication, and brokers relationships. A payer-provider oversight committee that meets regularly should coordinate all of the Advancing Recovery activities.

### *C. Implications for Multi-level Interventions*

The Advancing Recovery approach and related literature emphasize the state application of financing, purchasing, regulations, and policies, in addition to educational interventions, to stimulate system change [26,27]. For example, policy changes included a few state projects that held a clause in provider contracts specifying that EBPs be used [28,29].Other state projects provided financial incentives through direct pay [30] or increasing case rates[22,26].However, the literature does not emphasize the need for inter-agency buy-in and states do not appear to rely on changes to their own processes as a mechanism for the spread of EBPs. While training is common in the literature, that training does not address the skills required to manage changes and implement EBPs in state and provider organizations [14].The Advancing Recovery Framework places much more emphasis on how the EBP is planned and executed by the state agencies and their provider partners.



DOI: 10.5963/PHF0201002

The Advancing Recovery project documents the need to enhance the implementation of clinical EBPs. However, the research base for administrative practices is not nearly as developed as it is for clinical practices. The Advancing Recovery project was based on a multi-level framework for practice implementation proposed by Ferlie and Shortell[10] that included organizational and state-payer levels. The Advancing Recovery framework adds detail to their multi-level approach by describing specific conditions, supports, and policy levers different organizational levels can apply either independently or while working together. This Framework can serve as a guide for states that want to increase the use of evidence-based and other targeted practices.

ACKNOWLEDGEMENTS

Research funded by a grant from the Robert Wood Johnson Foundation.

The preparation of the manuscript was supported by a grant from the National Institutes on Drug Abuse (R01 DA030431-01A1).

A special acknowledgement goes to Don Holloway for significant guidance on the layout of the manuscript and to Maureen Fitzgerald on the preparation of the final manuscript.

REFERENCES

[1] R. Grol. Improving the quality of medical care: Building bridges among professional pride, payer profit, and patient satisfaction. The Journal of the American Medical Association, 286(20):2578-2585, 2001.

[2] M. A. Schuster, E. A. McGlynn, R. H. Brook. How good is the quality of health care in the United States? The Milbank Quarterly, 83(4):843-895, 2005.

[3] H. K. Knudsen, L. J. Ducharme, P. M. Roman. The adoption of medications in substance abuse treatment: Associations with organizational characteristics and technology clusters. Drug and Alcohol Dependence, 87(2-3):164-174, 2007.

[4] National Institute of Mental Health. Strategic Objective 4: Strengthen the public health impact of NIMH-supported research. http://www.nimh.nih.gov/research-funding/research-priorities/strategic-objective-4.shtml. Updated 2011. Accessed April 1, 2011.

[5] National Institute on Drug Abuse. Strategic Plan. Vol NIH Publication Number 10-6119. Bethesda, MD: National Institutes of Health, U.S. Department of Health and Human Services; 2010. http://drugabuse.gov/PDF/StratPlan.pdf.

[6] Substance Abuse and Mental Health Services Administration. Leading change: A plan for SAMHSA's roles and actions 2011-2014: Executive summary and introduction. Vol HHS Publication No. (SMA) 11-4629 Summary. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2011.

[7] T. B. Baker, R. M. McFall, V. Shoham. Current status and future prospects of clinical psychology: Toward a scientifically principled approach to mental and behavioral health care. Psychological Science in the Public Interest, 9(2):67-103, 2008.

[8] R. P. T. M. Grol,M. C. Bosch, M. E. J. L. Hulscher, M. P. Eccles,M. Wensing. Planning and studying improvement in patient care: The use of theoretical perspectives. The Milbank Quarterly, 85(1):93-138, 2007.

[9] W. R. Miller, J. L. Sorensen,J. A. Selzer, G. S. Brigham. Disseminating evidence-based practices in substance abuse treatment: A review with suggestions. Journal of Substance Abuse Treatment, 31(1):25-39, 2006.

[10] E. W. Ferlie, S. H. Shortell. Improving the quality of health care in the United Kingdom and the United States: A framework for change. The Milbank Quarterly, 79(2):281-315, 2001.

[11] A. Wandersman, J. Duffy, P. Flaspohler, R. Noonan, K. Lubell, L. Stillman, M. Blachman, R. Dunville, J. Saul. Bridging the gap between prevention research and practice: The interactive systems framework for dissemination and implementation. American Journal of Community Psychology, 41(3):171-181, 2008.

[12] R. Grol, J. Grimshaw. From best evidence to best practice: Effective implementation of change in patients' care. Lancet, 362(9391):1225-1230, 2003.

[13] K. R. Isett, M. A. Burnam, B. Coleman-Beattie, P. S. Hyde, J. P. Morrissey, J. Magnabosco, C. A. Rapp, V. Ganju, H. H. Goldman. The state policy context of implementation issues for evidence-based practices in mental health. Psychiatric Services, 58(7):914-921, 2007.

[14] J. L. Magnabosco. Innovations in mental health services implementation: A report on state-level data from the national evidence-based practices project. Implementation Science, 1:13, 2006.

[15] T. L. Mark, K. R. Levit, R. M. Coffey, D. R. McKusick, H. J. Harwood, E. C. King, E. Bouchery, J. S. Genuardi, R. Vandivort-Warren, J. A. Buck, K. Ryan. National expenditures for mental health services and substance abuse treatment: 1993-2003.Vol SAMHSA Publication No. SMA 07-4227. Rockville, MD: Substance Abuse and Mental Health ServicesAdministration; 2007.

[16] S. L. Thier, K. S. Yu-Isenberg, B. F. Leas, C. R. Cantrell, S. DeBussey, N. I. Goldfarb, D. B. Nash. In chronic disease, nationwide data show poor adherence by patients to medication and by physicians to guidelines. Managed Care, 17(2):48-57, 2008.

[17] H. K. Knudsen, A. J. Abraham, P. M. Roman. Adoption and implementation of medications in addiction treatment programs. Journal of Addiction Medicine, 5(1):21-27, 2011.

[18] A. T. McLellan, D. C. Lewis, C. P. O'Brien, H. D. Kleber. Drug dependence, a chronic medical illness: Implications for treatment, insurance, and outcomes evaluation. The Journal of the American Medical Association, 284(13):1689-1695, 2000.

[19] L. J. Damschroder, H. J. Hagedorn. A guiding framework and approach for implementation research in substance use disorders treatment. Psychology of Addictive Behaviors,25(2):194-205, 2011.



DOI: 10.5963/PHF0201002

[20] S. J. Lash, C. Timko, G. M. Curran, J. R. McKay, J. L. Burden. Implementation of evidence-based substance use disorder continuing care interventions. Psychology of Addictive Behaviors, 25(2):238-251, 2011.

[21] D. McCarty, D. H. Gustafson, J. P. Wisdom, J. Ford, D. Choi, T. Molfenter, V. Capoccia, F. Cotter. The Network for the Improvement of Addiction Treatment (NIATx): Enhancing access and retention. Drug and Alcohol Dependence, 88(2-3):138-145, 2007.

[22] E. J. Bruns, K. E. Hoagwood, J. C. Rivard, J. Wotring, L. Marsenich, B. Carter. State implementation of evidence-based practice for youths, Part II: Recommendations for research and policy. Journal of the American Academy of Child and Adolescent Psychiatry,47(5):499-504, 2008.

[23] E. M. Rogers. Diffusion of innovations.5th ed. New York: Free Press; 2003.

[24] T. Greenhalgh, G. Robert, F. Macfarlane, P. Bate, O. Kyriakidou. Diffusion of innovations in service organizations: Systematic review and recommendations. The Milbank Quarterly,82(4):581-629, 2004.

[25] J. R. McKay, K. G. Lynch, D. S. Shepard, H. M. Pettinati. The effectiveness of telephone-based continuing care for alcohol and cocaine dependence: 24-month outcomes. Archives of General Psychiatry,62(2):199-207, 2005.

[26] D. T. Levy, A. L. Graham, P. L. Mabry, D. B. Abrams, C. T. Orleans. Modeling the impact of smoking-cessation treatment policies on quit rates. American Journal of Preventive Medicine,38(3):S364-S372, 2010.

[27] C. A. Rapp, G. R. Bond, D. R. Becker, S. E. Carpinello, R. E. Nikkel, G. Gintoli. The role of state mental health authorities in promoting improved client outcomes through evidence-based practice. Community Mental Health Journal, 41(3):347-363, 2005.

[28] R. Raghavan, C. Bright, A. Shadoin. Toward a policy ecology of implementation of evidence-based practices in public mental health settings. Implementation Science, 3(1):26, 2008.

[29] V. Ganju. Implementation of evidence-based practices in state mental health systems. Schizophrenia Bulletin,29(1):125-131, 2003.

[30] T. R. Rieckmann, A. E. Kovas, H. E. Fussell, N. M. Stettler. Implementation of evidence-based practices for treatment of alcohol and drug disorders: The role of the state authority. The Journal of Behavioral Health Services & Research, 36(4):407-419, 2009.



DOI: 10.5963/PHF0201002