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# The Critical Role of State Agencies in the Age of Evidence-Based Approaches: The Challenge of New Expectations

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Evidence-based approaches only benefit individuals when fully and effectively implemented. Since funding and monitoring alone will not ensure the full and effective implementation of effective strategies, state agencies have the opportunity to assess and modify current roles, functions, and policies to align with the requirements of evidence-based strategies. Based on a growing body of knowledge to guide effective implementation processes, state agencies, or designated partner organizations, can develop the capacity, mechanisms, and infrastructure to effectively implement evidence-based strategies. This article describes a framework that can guide this process. Informed by the literature and shaped by “real-world experience,” the Active Implementation Frameworks provide a stage-matched approach to purposeful, active, and effective implementation.

*Keywords:* Evidence-based programs, dissemination, implementation, implementation capacity, implementation framework, organizational change

Creating meaningful change in organizations is complex and challenging. Kotter (1996), a recognized leader and expert in organizational change and transformation, asserts that 70% of all major change efforts in organizations fail. Similarly, it should be noted that numerous authors have collected the reasons for system change failures, which cluster around three areas: design, implementation, and sustainability (Foster-Fishman & Long, 2009; Foster-Fishman, Nowell, & Yang, 2007; Kubisch, Auspos, Brown, & Dewar, 2010; Trent & Chavis, 2009). Foster-Fishman and Watson (2012) summarized these system change failures as follows:

## *Design Failures*

- Disconnect between goals and selected strategies
- Unrealistic expectations/time frames
- Insufficient scale and scope
- Insufficient attention to systems’ characteristics and dynamics

## *Implementation Failures*

- Lack of capacity
- Product/process tensions
- Ineffective coordination and collaboration
- Insufficient attention to feedback and continuous improvement
- Insufficient attention to the process of change

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### *Sustainability Failures*

- Lack of attention to sustainability
- Lack of secured, sustained resources.

Funding opportunities continue to be available for state agencies and local communities that demonstrate an interest in implementing evidence-based strategies. Coinciding with this interest in the use of evidence-based strategies to address the challenges of education, child welfare, public health, behavioral health, and criminal justice is the dramatic downsizing of the workforce within the corresponding state agencies (Fehr, 2010). As it turns out, evidence-based practices are only effective when fully implemented (Klein & Sorra, 1996; Mihalic, Fagan, Irwin, & Ballard, 2004), and much is being learned about the necessary infrastructure to support full implementation of evidence-based strategies in order to produce the desired outcomes (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005; Franks, 2010; Wandersman et al., 2008). The developing science of implementation provides guidance to avoid failure. However, the work of successful implementation to achieve desired change takes knowledge, skills, professional courage, and personal commitment. This work is not for the naïve or faint of heart.

In some sectors, such as children's and adult mental health, private organizations and quasi-governmental organizations, now being referred to as "intermediary purveyor organizations," have emerged to address the required implementation needs of evidence-based practices (Franks, 2010). It has been suggested that state agencies lack the flexibility needed to provide the necessary supports for timely, sustainable, high-quality implementation of evidence-based strategies. Given that state agencies continue to promote the use of evidence-based interventions and continue to receive and provide the funding for evidence-based initiatives, state agencies are being recognized as key stakeholders in the implementation of evidence-based strategies (Bruns et al., 2008). As noted by Bumbarger and Campbell (2012),

... state agencies are in a unique position to influence both policy and practice and to leverage resources to move the needle on children's mental health indicators and outcomes. Still there is little research to guide states in effectively moving science into practice on a larger scale. ... (p. 268).

Many state agencies are designed to manage and monitor grants and programs (time-limited change), as opposed to supporting the development of infrastructure, systems, and mechanisms for implementation (long-term, sustained change). This type of organizational change is possible, but it will require that leaders within state agencies determine the readiness of the organization (importance, necessity, feasibility) to define its own role and responsibility in sustaining evidence-based strategies.

This article provides guidance for state agencies that are committed to the full and effective use of evidence-based strategies. More specifically, the article provides a set of frameworks to assist in assessing current methods of supporting the implementation of evidence-based strategies. Based on the results of the assessment, the state agency's roles, functions, processes, and policies can be modified to align with and successfully meet the needs and requirements of evidence-based strategies.

### The Active Implementation Frameworks

A key to understanding the necessary adjustments for state agencies to effectively support evidence-based practices can be found in the growing evaluation and research literature related to the science and practice of implementation. Implementation can be understood as *a specified set of activities* designed to put into practice an activity or program of *known dimensions* (Fixsen et al., 2005). For benefits to be realized, evidence-based strategies must be fully implemented; consumers cannot benefit from interventions they do not experience (Dobson & Cook, 1980).

Based on a methodical review and synthesis of the implementation research and evaluation literature published between 1970 and 2004, the National Implementation Research Network proposed a set of frameworks, now referred to as the “Active Implementation Frameworks,” to guide research and practice related to implementation. The Active Implementation Frameworks are comprised of the following components:

- Stages of implementation
- “Core implementation components” or implementation drivers
- Improvement processes
- Development of implementation teams
- Usable intervention criteria

Stages of implementation based on the experience of program developers and implementers and the findings in the review of the literature, the following set of stages reflect the typical process through which an implementation process progresses.

- Exploration and Sustainability
- Installation
- Initial Implementation
- Full Implementation (Sustainability and Effectiveness)

Although implementation is not a linear process, that progresses in an orderly and predictable manner from one discrete stage to the next, the implementation process can be viewed as developmental in nature: There are critical activities in each stage that create the conditions for the successful accomplishment of the activities of the next stage, on the path toward full implementation. In addition, it should be noted that stage-based activities occur at each level of the system, from the practice level within local agencies to the state agency.

### The Exploration and Sustainability Stage of Implementation

Careful exploration of new opportunities is critical at multiple levels in the system: local community, county, regional, state. Policy makers and funders operate under specified requirements and political pressures that influence how funds are used, with little to no attention to a community or agency’s readiness or capacity to implement successfully (Bumbarger & Campbell, 2012). The wisdom from the research and evaluation literature related to programmatic change provides clear guidance about the importance of assessing readiness for a new program or program expansion: Program implementation efforts fail when necessary resources are not available and when the organizational context is unable to adjust to the requirements of the new program. New programs often are not a good “fit” for the existing system. For example, if current hiring practices, contracting methods, or management practices cannot be re-aligned or re-designed to support the new program, new initiatives will not be able to produce good outcomes. Too often programs are modified to fit the current system and the elements that produce impact are modified such that outcomes are negatively impacted (Fixsen et al., 2005; Hallfors, Pankratz, & Hartman, 2007; McCormick, Steckler, & McLeroy, 1995; McIntosh, Horner, & Sugai, 2009; Schoenwald, 1997). Based on the experience of failed implementation efforts (Foster-Fishman et al., 2007; Foster-Fishman & Long, 2009; Foster-Fishman & Watson, 2012; Kubisch et al., 2010; Trent & Chavis, 2009), additional clarity about new “critical functions” within implementing organizations has emerged, leading to greater confidence in (a) the necessity of transforming current organizational structures or (b) building new, more flexible processes and organizations to actively support effective implementation.

At the local level, the Exploration and Sustainability stage is a time when communities assess and understand the needs of the population of concern, assess readiness for change within one’s

own and partner organizations, and consider the feasibility of available strategies for adoption. For local communities, funding opportunities trigger a burst of activities to quickly explore the grant or funding opportunity. Due to tight timeframes, communities are often pushed to select interventions without time to carefully assess the fit and feasibility of the available interventions or strategies. Inadequate exploration often creates additional challenges during the implementation process.

At the state level, state agencies have become increasingly interested in participating in a careful assessment and selection process of sites/grantees. Beginning with the development of a Request for Proposal, state agencies have the opportunity to include questions related to the capacity and readiness of the applicants to successfully implement or expand an evidence-based strategy. New approaches, to assess the readiness and commitment of applicants to implement the evidence-based strategy fully and effectively, have led agencies to include site visits as a part of the site selection process. Such site visits may include meetings with individuals within the implementing agency and/or key collaborators to support the success of the initiative.

### Exploring the Change Opportunity—Time-Limited or Sustained

Ideally, it is also during the Exploration stage that each level of the system will determine if the change that is being considered will be implemented as a long-term, sustained change, or a short-term, time-limited change (available for the length of the grant or funding opportunity). It should be noted that exploration related to the implementation of a grant (time-limited change) is different from exploration of a new way of work for the state or community (long-term, sustained change), such as the development of a coordinated systemic approach to address a high priority need in the state or community. One implication of this distinction relates to the necessity of fiscal sustainability planning. If the local community approaches the implementation of the evidence-based strategy as a long-term change, sustainability planning will be perceived as relevant and necessary. Similarly, if the role of the state agency is to support and sustain a long-term commitment to the evidence-based strategy, then fiscal sustainability planning will be critical from the beginning of the process. If the role of the state agency does not include support for long-term fiscal sustainability planning, it becomes critical to assess local community capacity to sustain the evidence-based strategy beyond a current funding opportunity.

### Exploring the State's Role—Letting it Happen, Helping it Happen, or Making it Happen

The way the state defines its role in this work is significant. For example, a traditional “grants management” function involves monitoring the activities and outcomes of grantees and ensuring accountability at the local level. However, implementing and sustaining evidence-based strategies in agencies and communities is an active and ongoing process. In their review of the diffusion of innovation literature, Greenhalgh, Robert, Bate, Mcfarlane, and Kyriakidou (2004) made some useful distinctions between more emergent or passive forms of assistance and more active and accountable processes for ensuring that effective implementation occurs. The authors noted that over the course of the last several decades, in an effort to put science into service, the field has shifted from what they call, “letting it happen” and “helping it happen” to “making it happen.” These classifications were taken and applied on how to assess implementation attempts. The less active approaches, of “letting it happen” and “helping it happen” in which local agencies are responsible to “figure it out” on their own, have led to minimal uptake and only modest outcomes for families across the human services field (Fixsen & Blase, 2009). On the other hand, “making it happen” efforts, in which a state agency or a designated partner organization takes responsibility for helping practitioners, agencies, and communities select, adopt, implement, and sustain evidence-based strategies, have shown the potential to increase uptake and produce intended outcomes (Fixsen, Blase, & Van Dyke, 2011; Mihalic & Irwin, 2003; Slavin & Madden, 1999).

### *Exploration Stage Conclusions*

As government agencies and foundations become more engaged in promoting and funding evidence-based strategies, the roles and functions of the state agency or designated partner organization may need to be adjusted quite dramatically. This transition can be highly disruptive as the organization is re-engineered to develop, maintain, and improve new services and new service systems. In a recent publication on the necessary supports for evidence-based practice, Robert Franks (2010) of the Connecticut Center for Effective Practice (CCEP) outlined the following key activities for organizations which actively support effective implementation of evidence-based practices:

- Identification, adoption, and implementation of evidence-based and best practices;
- Research, evaluation, and quality assurance of new and existing services;
- Education and raising public awareness about evidence-based and best practices; and
- Development of infrastructure, systems, and mechanisms for implementation and sustainability (p. 88).

When state agencies lack the mandate, capacity, or expertise to perform these functions, or are only pursuing time-limited change based on the funding opportunity, then one option is for an intermediary purveyor organization, like CCEP, to be developed or recruited to fill in the gaps for states, local sites, and grantees. Nationally, some examples of intermediary purveyor organizations are the California Institute for Mental Health (CiMH), Colorado's Invest in Kids, and the Ohio Center for Innovative Practices. As an example, CiMH was established to promote excellence in mental health services through training, technical assistance, research, and policy development. Local mental health directors founded CiMH to work collaboratively with all mental health system stakeholders (<http://www.cimh.org/About.aspx>; Naoom, Van Dyke, Fixsen, Blase, & Villagomez, 2012). Key functions to support full and effective implementation of evidence-based strategies were clearly articulated by Franks (2010):

Finally, the [intermediary organization] has come to realize that change is an ongoing process that needs constant attention. Once a new practice has been embedded in an agency or system, the [intermediary organization] cannot just "walk away." There must be systems and procedures in place to assure fidelity and adherence to the model. Without some type of continuous quality improvement in place, whether it is delivered by the intermediary organization or whether it is built into the provider agency or system itself, there is likely to be model drift over time. Thus, in order for true change to occur and be sustained, there must be recognition that there is an ongoing process. (p. 92)

By positioning the state agency or designated partner organization to perform these critical functions, a more efficient and effective system is developed to support a sustained change in practice. For example, instead of asking each community to search for and select effective interventions (which the counties may or may not be able to successfully implement on their own), the state or designated partner organization is able to collect, assess, and disseminate information about the effective interventions and what it would take to successfully implement them. This would significantly enhance the quality of the decision-making process during the Exploration stage so that counties are able to select appropriate, effective interventions for which they have (or could quickly develop) the capacity to implement fully and effectively and sustain over time. For state agencies or designated partner organizations that have chosen to engage in active implementation support of effective practices, the other significant change is related to accountability: State agencies or designated partner organizations that are tasked with actively supporting effective implementation hold themselves highly accountable to ensure that local programs are equipped to achieve the desired outcomes. This type of organization would reflect the principle of reciprocity of accountability for capacity (Elmore, 2002): "Accountability must be a reciprocal process. For every increment of performance I demand from you, I have an equal



responsibility to provide you with the capacity to meet that expectation” (p. 5). When state and local partners share the accountability for achieving outcomes, they stay engaged in understanding and responding to challenges.

Since state agencies continue to be interested in evidence-based practices, the following questions are worth consideration:

- 1) How will the state agency provide the necessary support to implement evidence-based practices?
  - a. Will the state agency develop the capacity to fully and effectively support implementation directly?
  - b. Or will the state agency partner with organizations that can provide these functions?

### The Installation Stage of Implementation

Based on the review of the implementation literature, the Installation stage begins after a decision has been made to “adopt” a particular strategy. During installation, the implementation (or planning) team works together to assure the availability of resources necessary to initiate the project, such as staffing, training, space, equipment, organizational supports, and new operating policies and procedures. These activities are occurring at both the local and state levels to meet the requirements necessary to effectively and efficiently implement the evidence-based strategy.

### Installing the Implementation Drivers

Much of the work of the Installation stage is focused on “installing” the implementation drivers (see Figure 1). The implementation drivers are comprised of competency drivers, organizational drivers, and a foundation in transformative and distributive leadership. The competency drivers are mechanisms that help to develop, improve, and sustain one’s ability to implement an evidence-based strategy, as intended, to produce the desired outcomes. The competency drivers include recruitment and selection of staff, pre-service and in-service training, coaching, and performance

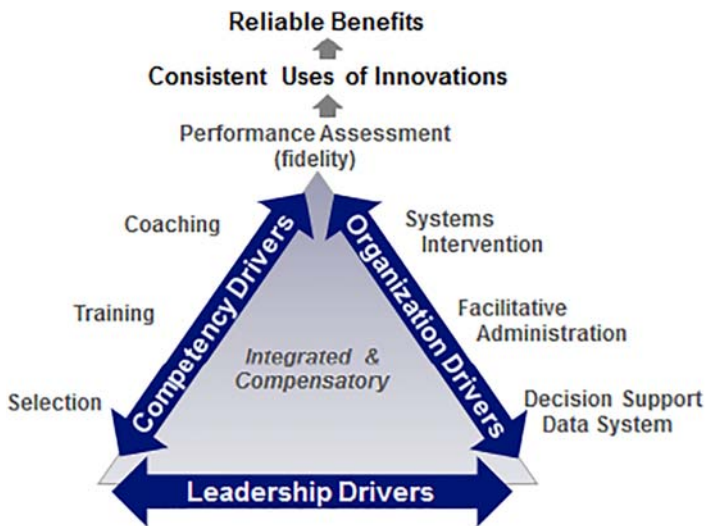


FIGURE 1 Implementation drivers, from Fixsen and Blase (2008). © National Implementation Research Network. Reproduced by permission of National Implementation Research Network. Permission to reuse must be obtained from the rightsholder.

assessment (Fixsen et al., 2005). In general, the “national office” or purveyor for the evidence-based strategy directly provides the training or the curriculum. Typically, guidance related to use of “best practices” to support quality coaching and effective staff selection is less available from these experts, and the strength (or even existence) of a method to assess performance (or fidelity) is limited. Once the state agency has fully assessed the availability of advice and supports for installing each of the competency drivers, the agency is able to determine the appropriate next steps to strengthen each driver within the implementation infrastructure.

The organization drivers are mechanisms to create and sustain hospitable organizational and systems environments for evidence-based strategies. The organization drivers include the decision support data system, facilitative administration, and systems intervention (Fixsen et al., 2005). Creating the organizational environments in which practitioners and programs can be successful may be the more significant challenge for state agencies. Darling (2005), a business expert and founder of the Leadership Institute, Inc., provides this astute, yet concerning, insight: “All organizations are designed, intentionally or unwittingly, to achieve precisely the results they get.” From a “systems thinking” perspective, this statement makes complete sense. As new approaches are encouraged (and required) which are well-defined to ensure effectiveness, it can be expected that the current system, which was not designed to support the new requirements for evidence-based ways of work, will be disrupted. The organizational drivers to support implementation provide a framework to guide planning and to initiate functional changes to the regulatory, fiscal, and human resource systems in support of these new, effective programs and practices. It is often necessary to address job descriptions, position requirements, salary ranges, contracting language, data systems and data sharing agreements, and to formalize new expectations with systems partners with the development of “memoranda of understanding and/or agreement.” Through focused attention and improvement of the organization drivers, the state agency has the opportunity to decrease the burden for local sites, thereby increasing the potential for successful implementation and improved outcomes for children, families, and communities.

The use of data for decision making and program improvement is an integral component to the implementation of an evidence-based strategy. Bumbarger and Campbell (2012) have suggested that the

most critical need for [the field] is the development and utilization of . . . data management platforms. There are few examples of an institutionalized system for providing coaching and support for implementers based on real time feedback from implementation monitoring data. . . . (p. 275)

Local agencies are often left with the task of figuring out how to collect and use data while learning a new model. The state agency may choose to provide the resources (human and financial) to develop a decision support data system that would support and inform the continuous improvement processes for practice and programmatic work of local agencies. By spearheading the development of the decision support data system, the state agency will (a) relieve the burden for new sites to develop their own data system, (b) ensure the quality of the data system, and (c) increase the ease with which benchmark data can be collected. In addition, and perhaps more importantly, a common or shared decision support data system will provide the opportunity for data to drive both state and local level program improvement and to monitor program outcomes.

Leadership provides the foundation to ensure that both technical and adaptive challenges are responded to in the most appropriate way. In this complex context, traditional “command-and-control” leadership is no longer the best approach. As stated by Russell Ackoff (1979), a well-respected operations theorist:

Managers are not confronted with problems that are independent of each other, but with dynamic situations that consist of complex systems of changing problems that interact with each other. I call such situations messes. . . . Managers do not solve problems, they manage messes. (pp. 99–100)



Waters, Marzano, and McNulty (2003) found that these complex environments require leaders who are willing to disturb every element in a system. These leaders break with the past, operate outside of existing paradigms, conflict with prevailing values and norms, and find solutions that are emergent, unbounded, and complex (p. 7). Of course, the risks for this type of leader are significant, so one must be committed to a vision of an organizational environment in which functional risk-taking is supported and barriers in the system are addressed, so that new, effective approaches can grow and thrive for the benefit of children, families, and communities.

### Installing Innovation and Implementation Capacity and Accountability

The Installation stage requires installing the infrastructure needed to effectively implement and maintain the innovation. The infrastructure includes determining who will do the work at each level, how communication among levels will facilitate creating alignment, and what implementation infrastructure is required and supported at each level. During installation, it is common to begin to encounter aspects of the current system, at each level of the system, which interfere with what is needed to effectively implement the evidence-based strategy. To begin, current policies and processes related to recruitment, selection, and hiring new staff may make it very difficult to quickly build a well-qualified team necessary to implement at the local level and a capable implementation team at the state-level to support the development of local capacity. In general, a commitment to the development of teams at each level of the system is vital. Without a team, the loss of one staff member could significantly set back program development and implementation progress. From an implementation perspective, the development of competent, empowered implementation teams, at each level of the system, provide the structure to support the development of state, regional, and local *capacity* to carry out effective implementation activities for this initiative and future initiatives. The state has a vested interest in *growing the capacity* of local, regional, as well as state teams in order to initiate and manage change and to reduce and eliminate barriers at every level of the system.

Teams are a purposeful component of the framework for building capacity so that the responsibility for and experience of program success is shared collectively throughout the system and to ensure the development of organizational capacity to achieve and sustain a program that produces the desired child, family, and community outcomes (Fixsen, Blase, Metz, & Van Dyke, 2013). These teams guide the overall implementation process from the Exploration to the Full Implementation stage. As implementation teams begin to support new implementation efforts, program developers or other purveyors may be included in the work to provide technical expertise and guidance to the implementation teams. Unlike purveyors and program developers who are external change agents, implementation teams are internal to the agency or community. This allows for implementation capacity to be built, integrated, and sustained within the local organization and system.

Implementation teams collectively are comprised of individuals who have special expertise related to the evidence-based strategy, as well as expertise related to evidence-based implementation and improvement strategies. They are accountable for actively supporting and guiding the implementation of initiatives, from exploring possible service improvement or system change, to full, effective, and sustained implementation. The implementation team's focus is on creating readiness, installing and sustaining the implementation drivers, monitoring fidelity and assessing achievement of intended outcomes, funding and policy alignment, and problem-solving and sustainability.

The state implementation team will need to be linked directly to the agency's executive leadership team to allow for efficient problem solving, removal of system barriers, and continuous improvement of state-level policy and practices, to support local sites to improve program outcomes. As the effort continues, it will be useful to further discuss the potential benefits and

efficiencies that can be achieved through the development of multi-level teaming structure (see Figure 2), which might allow for additional linkages and alignment to support full and effective implementation, and possible expansion, of evidence-based approaches throughout a state.

*Installation Stage Conclusions*

Based on this information, it may be beneficial for state agencies to review current teaming structures and to determine the extent to which the teams have been created, empowered, and equipped to support full and effective implementation of evidence-based strategies within their domain. Based on this assessment, the state agency will be able to develop and implement plans to address skill and knowledge needs and to link teams, through formal communication protocols, to initiate and manage change, as well as to resolve barriers at every level of the system. In addition, state agencies will want to support local sites in their efforts to strengthen their implementation infrastructure, particularly related to the development of a shared (or closely aligned) data system and the coordination and dissemination of “implementation best practices” (e.g., for recruitment, selection, training, coaching).

The Initial Implementation Stage

Based on the review of the implementation literature, initial implementation commences as organizations first begin to provide the evidence-based innovation to benefit the intended population (e.g., children, youth, families, etc.). This stage involves applying what was learned during installation, learning from mistakes, and continuing to develop buy-in with those who will need to implement the program components. This stage is characterized by early detection of challenges and frequent problem-solving at the practice (practitioner, supervisor, and trainer), local agency, community, and state levels.

At the agency level, initial implementation is the awkward phase of beginning to engage with children, youth, and families using the new evidence-based strategies. Early efforts to “practice” in a new way can be very uncomfortable, so it is important that the critical installation activities have occurred to position staff, supervisors, and coaches to be as ready as possible to persist through the discomfort of the first few attempts along their path toward full competence.

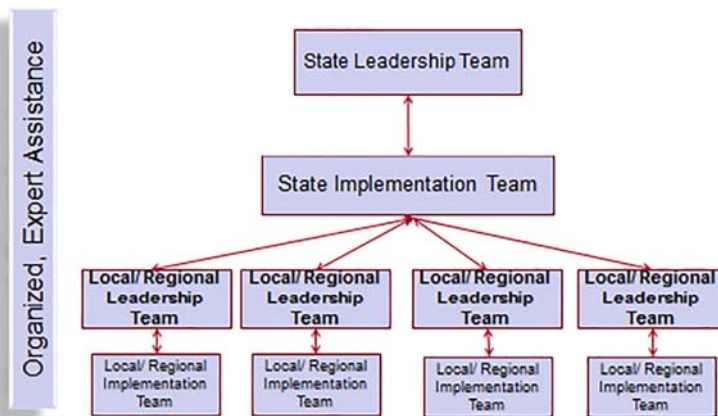


FIGURE 2 Linked teaming structure, from Fixsen and Blase (2008). © National Implementation Research Network. Reproduced by permission of National Implementation Research Network. Permission to reuse must be obtained from the rightsholder.

At the state level, initial implementation is the time when changes at the local levels begin to create ripples in the local and state level systems. New effective local strategies require the implementation of new and effective practices, procedures, and policies at the state level. Although adjustments in procedures and policies are made during the installation phase, it is not until these procedures and policies are put into practice that the adjustment and improvement process can begin. During initial implementation, the state-level implementation team will be actively engaged in learning how to create and improve the organizational and system environments that make the work at the local level less burdensome and more effective.

If there is interest in benefiting from the implementation of evidence-based strategies, it is critical that state agencies communicate their willingness, as well as develop the ability to efficiently respond to the identified systems barriers and to enhance the infrastructure, systems, and mechanisms for implementation. As mentioned earlier, the current system is designed to produce and sustain the practices that have been in place over the years. New practices require adjustments to current organizational roles, functions, processes, and policies. As mentioned previously, two common challenges in traditional organizations are related to hiring practices and fiscal practices. Evidence-based practices, with specific requirements related to personnel, require hiring systems that ensure that qualified candidates can be recruited and hired through an efficient process. Hiring candidates for evidence-based strategies can be highly problematic for governmental organizations which have strict regulatory guidelines and negotiated contractual obligations related to all aspects of the hiring process. Often it is difficult to re-write job descriptions, adjust pay bands, and modify selection processes. In governmental organizations, fiscal practices and processing routines often prevent the efficient execution of contracts for necessary services, even when funds are available. In addition, multiple layers in the approval process prevent the professionals hired to carry out programs from making even minor decisions or small purchases. State organizations that have been designed or re-engineered to support effective practices monitor and continuously improve human resource, financial, and management practices to create an organizational environment that makes the work of managers, supervisors, and local programs as efficient and productive as possible.

Successful implementation requires the ongoing use of improvement processes. For this work, there are two major improvement processes. The Plan-Do-Study-Act Cycle (PDSA improvement cycle; see Figure 3) allows for rapid development and improvement of program components that happen frequently (e.g., day-to-day practice; on-going improvement of coaching practices; De Feo & Barnard, 2005; Deming, 1982; Shewhart, 1931). In these cases, plans are clarified (Plan), the plans are carried out as intended (Do), the results are examined (Study), actions are taken to improve the plan (Act), and the process is repeated until desired outcomes are obtained (Cycle). The PDSA cycle is well suited to improving practitioner performance, training for practitioner and other staff, data collection methods, and other activities that are repeated with some frequency.

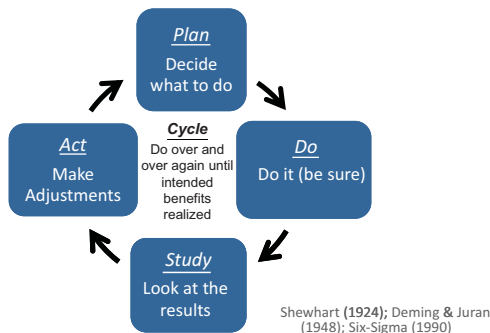


FIGURE 3 Plan-Do-Study-Act.

The other major improvement process, called policy–practice feedback loops, helps to establish and maintain improvements on a larger scale. As shown in Figure 4, the executive management team (state, county, city, or agency) enacts policies designed to encourage changes at the practice level to benefit children, families, and communities. As a competent implementation team helps to put the intended changes into practice, problems inevitably arise. The implementation team members and others at the practice level are able to directly provide information on a regularly scheduled basis to the executive management team that initiated the change process. In this way, useful functions, roles, and structures within the system are reinforced, and others are changed to better support the desired work and outcomes.

Once established, policy–practice feedback loops provide the mechanism through which current policies and practices, such as human resource, fiscal, and management policies and practices, can be adjusted to better align with new ways of work in support of full and effective implementation of evidence-based strategies, which will produce improved outcomes for children, families, and communities. Policy–practice feedback loops ensure that members of the executive management team spend less time giving and receiving program “updates” (10–20%) and more time on barrier removal and resolving adaptive challenges (80–90%; Joe McCannon, senior advisor to the administrator for Centers for Medicare and Medicaid Services; CMS).

The policy–practice system improvement process becomes part of the new way of work for the executive management team. The continual flow of information from the practice level provides the information needed to establish a learning organization, one that is self-examining, self-correcting, and continually adjusting to improve intended outcomes.

*Initial Implementation Stage Conclusions*

Early in the change process, state agencies may choose to create opportunities for high-level leaders within the state agency to meet one-on-one with program directors to discuss the alignment of current human resource, contracting, and management practices with the requirements of evidence-based strategies. In state agencies for which these types of conversations may be uncommon, it will be critical that agency leaders actively acknowledge and demonstrate appreciation for honest feedback from staff and managers. To ensure that this type of problem solving process continues, state agencies can establish formal communication protocols to ensure



FIGURE 4 Policy-Practice feedback loop, adapted from Fixsen and Blase (2008). © National Implementation Research Network. Adapted by permission of National Implementation Research Network. Permission to reuse must be obtained from the rightsholder.

that practice level barriers (locally and within the state agencies) are able to be communicated in an unfiltered way, directly to the level within the system which has the authority to address the barrier.

### The Full Implementation Stage

The implementation stage of full implementation (sustainability and effectiveness) is experienced during those times when at least 50% of staff are meeting performance criteria (fidelity) in their use of the new strategy (Fixsen et al., 2011). During this stage, attention is given to assuring that key implementation components, such as performance assessment, supervision and coaching, pre-service and in-service training, and recruitment and selection processes, are integrated into the organization and are functioning effectively to achieve the desired outcomes. At the community or local agency level, staff members have become skillful in their use of the new strategy, and the local organization has adjusted to the new, facilitative processes and procedures which have become routine. At the community or local agency level, the new strategy is fully integrated into the organization, and supported by aligned policies and efficient management processes. Similarly, at the state level new roles and functions have been fully embraced and the implementation team is equipped to build capacity locally while simultaneously linking with state-level leaders to ensure that internal and external policies and procedures facilitate effective practice and activities at the state, community, and agency levels.

## CONCLUSION

Federal grant opportunities now expect (often require) state agencies to select and fund evidence-based practices, yet neither local agencies nor the state nor the federal governmental organizations were designed with evidence-based practices in mind. The extent to which the current system is not aligned to support evidence-based practices effectively creates daily challenges and diminishes the potential benefits that can be experienced when evidence-based practices are fully and effectively implemented. Reviews of the literature and the experience of successful implementation efforts support the need for some entity (whether a state agency or a quasi-governmental entity) to become actively engaged in the development of a competent workforce and the organizational context that can support and sustain newly implemented effective approaches. Motivated state agencies that are committed to the full and effective use of evidence-based strategies will benefit from a careful review of their current methods of supporting the implementation of evidence-based strategies. At its core, the interest in evidence-based practices is directly related to the interest in achieving outcomes for identified populations, but those outcomes will only be achieved if state agencies can either modify their own roles, functions, processes, and policies to align with and successfully meet the needs and requirements of evidence-based strategies, or partner with an organization who can do so. To do anything less would be to undermine the entire effort.

## REFERENCES

- Ackoff, R. L. (1979). The future of operational research is past. *The Journal of the Operational Research Society*, 30, 93–104.
- Bruns, E. J., Hoagwood, K. E., Rivard, J. C., Wotring, J., Marsenich, L., & Carter, B. (2008). 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, 499–504.

- Bumbarger, B. K., & Campbell, E. M. (2012). A state agency-university partnership for translational research and the dissemination of evidence-based prevention and intervention. *Administration and Policy in Mental Health and Mental Health Services Research*, 39, 268–277. doi:10.1007/s10488-011-0372-x
- Darling, R. S. (2005). *Leadership Institute, Inc.* Retrieved from <http://www.lii.net/leadership/Default.htm>
- De Feo, J. A., & Barnard, W. (2005). *JURAN Institute's six sigma breakthrough and beyond: Quality performance breakthrough methods*. New York, NY: McGraw-Hill Professional.
- Deming, W. (1982). *Out of the crisis*. Cambridge, MA: MIT Press.
- Dobson, D., & Cook, T. J. (1980). Avoiding type III error in program evaluation: Results from a field experiment. *Evaluation and Program Planning*, 3, 269–276.
- Elmore, R. (2002). *Bridging the gap between standards and achievement: The imperative for professional development in education*. Washington, DC: Albert Shanker Institute.
- Fehr, S. C. (2010). *Recession could reshape state governments in lasting ways*. Retrieved from <http://www.stateline.org/live/details/story?contentId=454018>
- Fixsen, D. L., & Blase, K. A. (2008). *Drivers framework*. Chapel Hill: National Implementation Research Network, Frank Porter Graham Child Development Institute, The University of North Carolina.
- Fixsen, D. L., & Blase, K. A. (2009). *Implementation: The missing link between research and practice* (NIRN Implementation Brief #1). Chapel Hill: The University of North Carolina, Frank Porter Graham Child Development Institute.
- Fixsen, D., Blase, K., Metz, A., & Van Dyke, M. (2013). Statewide implementation of evidence-based programs. *Exceptional Children*, 79, 213–230.
- Fixsen, D. L., Blase, K. A., & Van Dyke, M. (2011). Mobilizing communities for implementing evidence-based youth violence prevention programming: A commentary. *American Journal of Community Psychology*, 48, 133–137.
- Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M., & Wallace, F. (2005). *Implementation research: A synthesis of the literature* (FMHI Publication No. 231). Tampa: University of South Florida, Louis de la Parte Florida Mental Health Institute, National Implementation Research Network.
- Foster-Fishman, P., & Long, R. (2009). The challenges of place, capacity, and systems change: The story of yes we can!. *The Foundation Review*, 1(1), 6.
- Foster-Fishman, P. G., Nowell, B., & Yang, H. (2007). Putting the system back into systems change: A framework for understanding and changing organizational and community systems. *American Journal of Community Psychology*, 39, 197–215.
- Foster-Fishman, P., & Watson, E. (2012). The ABLLe change framework: A conceptual and methodological tool for promoting systems change. *American Journal of Community Psychology*, 49, 503–516. doi:10.1007/s10464-011-9454-x
- Franks, R. P. (2010). Role of the intermediary organization in promoting and disseminating best practices for children and youth: The Connecticut Center for Effective Practice. *Emotional and Behavioral Disorders in Youth*, 10(4), 87–93.
- Greenhalgh, T., Robert, G., Bate, P., Macfarlane, F., & Kyriakidou, O. (2004). *Diffusion of innovations in health service organizations: A systematic literature review*. Oxford, England: Blackwell.
- Hallfors, D., Pankratz, M., & Hartman, S. (2007). Does federal policy support the use of scientific evidence in school-based prevention programs? *Prevention Science*, 8(1), 75–81.
- Klein, K. J., & Sorra, J. S. (1996). The challenge of innovation implementation. *Academy of Management Review*, 21, 1055–1080.
- Kotter, J. (1996). *Leading change*. Cambridge, MA: Harvard Business School Press.
- Kubisch, A. C., Auspos, P., Brown, P., & Dewar, T. (2010). Community change initiatives from 1990–2010: Accomplishments and implications for future work. *Community Investments*, 22(1), 8–13.
- McCormick, L. K., Steckler, A. B., & McLeroy, K. R. (1995). Diffusion of innovations in schools: A study of adoption and implementation of school-based tobacco prevention curricula. *American Journal of Health Promotion*, 9, 210–219. doi:10.1002/9780470987407
- McIntosh, K., Horner, R. H., & Sugai, G. (2009). Sustainability of systems-level evidence-based practices in schools: Current knowledge and future directions. In W. Sailor, G. Dunlap, G. Sugai, & R. Horner (Eds.), *Handbook of positive behavior support: Issues in clinical child psychology* (pp. 327–352). New York, NY: Springer.
- Mihalic, S., Fagan, A., Irwin, K., Ballard, D., & Elliott, D. (2004). *Blueprints for violence prevention*. Washington, DC: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.
- Mihalic, S., & Irwin, K. (2003). Blueprints for violence prevention: From research to real-world settings—factors influencing the successful replication of model programs. *Youth Violence and Juvenile Justice*, 1, 307–329. doi:10.1177/1541204003255841
- Naoom, S. F., Van Dyke, M., Fixsen, D. L., Blase, K. A., & Villagomez, A. N. (2012). Developing implementation capacity of organizations and systems to support effective uses of family literacy programs. In B. H. Wasik (Ed.), *Handbook of family literacy* (pp. 447–464). New York, NY: Routledge.



- Schoenwald, S. K. (1997). *Rationale for revisions of Medicaid standards for home-based, therapeutic child care, and clinical day programming*. Columbia: Technical Report prepared for the South Carolina Department of Health and Human Services.
- Shewhart, W. A. (1931). *Economic control of quality of manufactured product*. New York, NY: Van Nostrand.
- Slavin, R. E., & Madden, N. A. (1999). *Disseminating success for all: Lessons for policy and practice* (Report No. 30). Baltimore, MD: Johns Hopkins University, Center for Research on the Education of Students Placed at Risk (CRESPAR).
- Trent, T. R., & Chavis, D. M. (2009). Scope, scale, and sustainability: What it takes to create lasting community change. *The Foundation Review*, 1(1), 8.
- Wandersman, A., Duffy, J., Flaspohler, P., Nonnan, R., Lubell, K., Stillman, L., . . . Saul, J. (2008). Bridging the gap between prevention research and practice: The interactive systems framework for dissemination and implementation. *American Journal of Community Psychology*, 41, 171–181.
- Waters, T., Marzano, R., & McNulty, B. (2003). *Balanced leadership: What 30 years of research tells about the effect of leadership on student achievement*. Denver, CO: McRel.