Practitioners Guide

Setting the stage for change

Transporting change

Making change happen

Measuring change

Communicating change

Implementation Science Toolkit

Equipping justice agencies with the tools to facilitate the change process

Center for Advancing Correctional Excellence! **| at**

George Mason University

Implementation Science Toolkit

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acknowledgements

Implementation has its own scientific methods that can be used to address the common woes in putting in place a new practice, policy, or intervention. This manual is possible through the support of the Bureau of Justice Assistance, and the guidance provided by Edward Banks, Ph.D., and Elizabeth Griffith. Both support the efforts to use science to advance practice.

Purpose of the toolkit

Implementation science provides methods and techniques to align and adapt an initiative into a desired setting. This toolkit presents the necessary skills and instruments to deepen knowledge and understanding about implementation science. In this toolkit are strategies to help practitioners learn to adopt and adapt Evidence Based Practices and Treatments (i.e. EBPT) into their agency and ultimately improve agency outcomes. Using an implementation science framework, implementation is advanced through a series of smaller, manageable processes, such as identifying and selecting an EBPT to implement, assessing the research to understand key features of the EBPT, recognizing organizational challenges, formulating an appropriate plan to address challenges, evaluating performance and milestones, and sustaining change.

This toolkit uses a self-learning format, which is divided into five self-contained modules. Each module can be used as a stand-alone tool, depending on the understanding and skills of users. Specifically, the thematic areas in this toolkit include:

1. Setting the stage for implementation
2. Transport EBPT into every day practices
3. How to communicate change
4. Know how to do implementation
5. How to measure implementation

Implementation science

Have you ever been told that if you eat an apple a day, it will keep the doctor away? Eating an apple a day to help with your overall health is considered an old wives' tale. Acting based on hunches or stories being passed down is not the way many criminal justice agencies choose which programs and practices to incorporate into their agency. Instead, they are turning to science!

It's About What Works

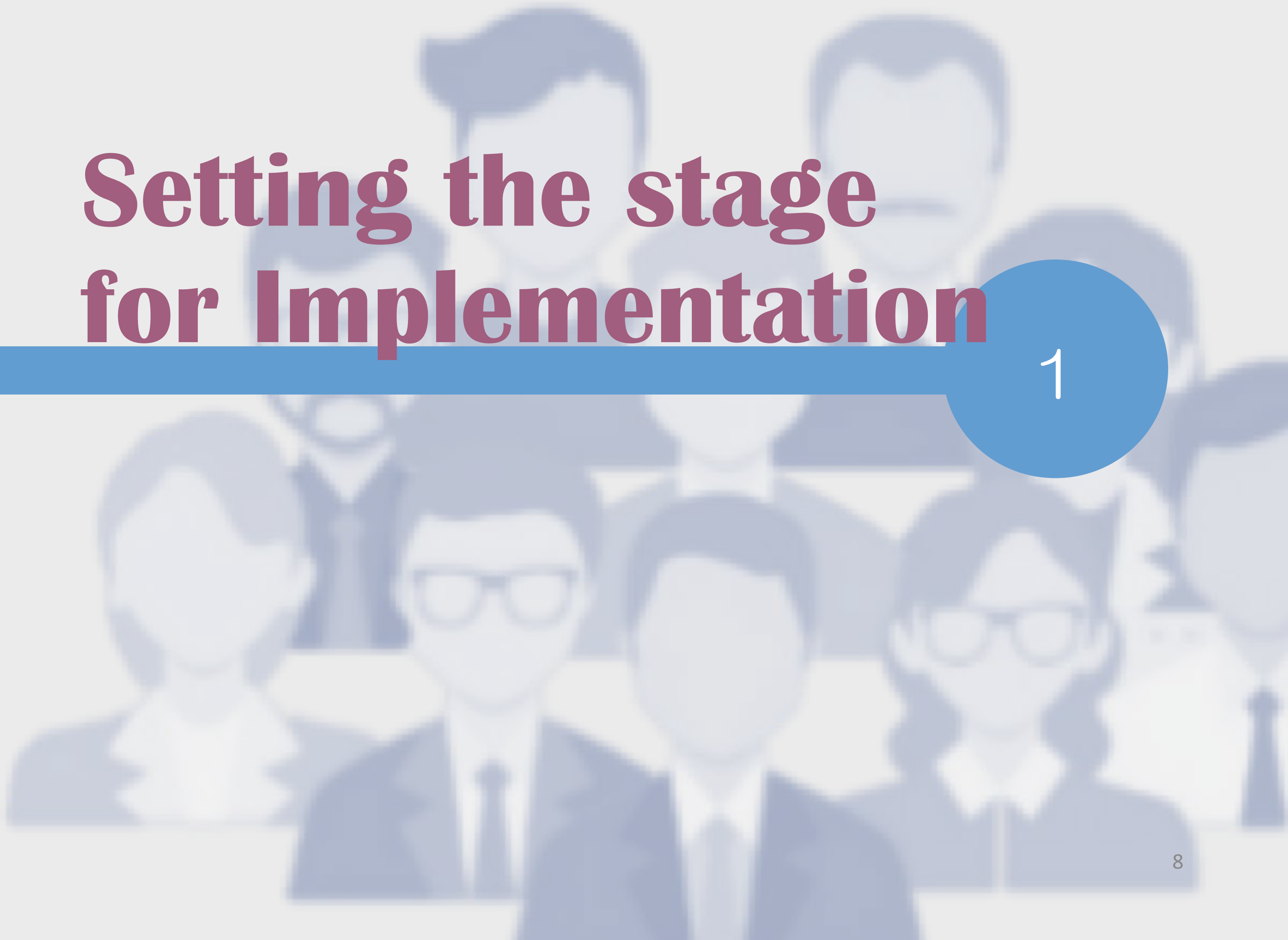
Over the past two decades, the evidence-based approach to crime policy has grown in influence. With this approach, there is a consensus that public policy and practice should be informed by research and guided by rigorous evidence and data when possible. Thus, policymakers, government leaders, and practitioners are increasingly interested in implementing programs and interventions that work, meaning that according to research these specific practices and treatments lead to better outcomes.

Federal, state, and local agencies continue to support and adopt EBPTs into their agencies with varying degrees of success. Along with practitioners' experiences, there is a large body of research recognizing that EBPTs require not only a well-designed program/intervention, but also require an effective implementation plan to achieve desirable outcomes, such as increasing public safety, reducing recidivism, improving accountability and enhancing legitimacy.

Implementation is devoted to improving

the process of translation, uptake and integration of research findings into routine and common practices. Think of implementation as a stack of blocks, where you need multiple blocks of different shapes and sizes to build on one another to create a masterpiece! Those blocks consist of exploring, preparing, dissemination, doing (i.e., implementing), and sustaining. All areas of implementation work together to sharpen your attention by asking: how do I implement research into daily practices, how well are current processes working, and what should be done to improve implementation? This toolkit will help you build these blocks so your agency can effectively implement desired EBPT(s).

the tools you find in this toolkit



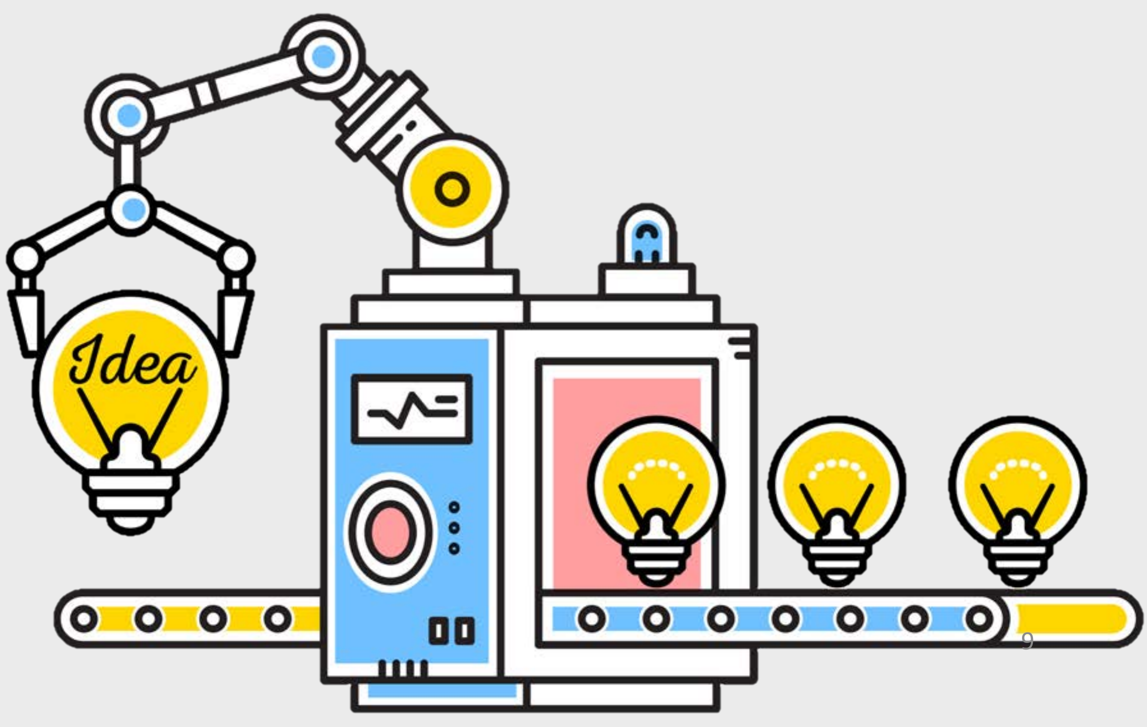
Setting the stage for Implementation

1

In this module

Following an evidence-based model, implementing change within an organization should be based on rigorous evidence. Research studies provide a better understanding of the core components of the EBPT, the target population, the setting where it was developed, and the method/design used to examine the initiative. Together, these dimensions describe the reasoning behind the design of the initiative and the strength of the empirical evidence regarding the initiative. This **knowledge development phase** will help practitioners and administrators trust the initiative and decide how to adopt and incorporate the initiative in their organizational environment.

It can be daunting to determine what good research is, and what evidence about the innovation is most important for implementation. In this module, we will provide you with the tools to help answer those questions and help you use research to help guide implementation.



Know the research

It is seldom that someone would buy a car on a whim. People tend to research the type of car they want before purchasing it. The assessment helps clarify what car best suits ones' needs. The same is true about implementation and the decision on what EBPT to adopt. The key to ensuring sound implementation of an initiative is a firm understanding of the research behind the EBPT. Many people who work in the criminal justice field are accustomed to collecting data and assessing outcomes for a project, but implementation science research is just as important as outcome research because a sound implementation process is unlikely to achieve its desired outcome(s). The process begins with knowing the research.

Before implementing change in your organization, it's essential to build your own knowledge around: (1) what the research says about the initiative; (2) what components must be present for it to "work"; and, (3) what factors to consider when determining if the initiative is a good fit for your agency. The answer to these queries helps you determine the necessities that are needed before starting the initiative. If an EBPT goes "live" in your agency without knowing what is needed to drive success, your initiative might experience undesired outcomes. Also, if the initiative does not "live up" to the desired outcomes, staff might become skeptical about following guidelines in the future. This is why implementation science and the process of change *always* begins with knowing and understanding the research findings.

The Steps…

Evaluating the research

Step 1

What is the problem? This might seem like a strange question to ask, but determining the problem is one of the most critical issues you should evaluate before you turn to research literature (or solution). You should select a research article that is relevant to the innovation and problem you plan to implement. You need to decide what behavior/problem is your focus. Is it a reduction in technical violations or reduction in recidivism among drug offenders? Knowing what problem you are focusing on will help you determine what research to gather and what to examine in the research study. As you dig into the research, you might notice that some programs intend to reduce a particular problem but instead address another problem. Knowing what you want to focus on will guide you in choosing and dissecting the research.

Step 2

Reading research. Reading research. Reading research may be new to you, or something you have not done since college or graduate school, but it is essential to stay on top of innovations in your field. Even though you might find reading research daunting, there are factors to consider to get the most out of reading a research article and using the information you gather. The information gathered from the research will help determine if the initiative is appropriate for- or compatible with your agency and if it is feasible for you to implement. As you read a research article, you should focus on the logic behind the program, the population, the agency setting, the skills of the staff, inner and outer factors such as policies and stakeholders, the research design, and outcome. The question is-–what is the context that delivers positive outcomes?

As you read the research take note of the..

Program

- Core components: (key features of the program that have to be there)
- Logic of the program
- Dosage (how much must occur or the frequency and duration of the program)
- Inner and outer factors
- Methods and research design
- Outcome variable

Population

- Who is the intended target of the initiative?
- How is eligibility determined?

Setting

- Where did the research take place?
- Geographical location
- Organization's size and age
- Sociopolitical context
- Most desirable /preferred setting

Inner and Outer Factors

- What internal policies, culture, resources may impact the initiative?
- What external policies, culture and resources may impact the initiative?

Methods/Research Design

- What method/design was used—experimental, quasi experimental, or non-experimental?
- What is the control/comparison group?
- What are the key measures?

Outcome(s)

- Did the initiative achieve the outcome(s) as intended?

The Steps…

Step 3

Core Components. As you read the research, take note of the core components of the initiative. *Core components are the essential factors that make something tick; without them the initiative would not exist.* They are the parts that absolutely must be present to achieve the intended outcome(s). For instance, if you were to make lemon bars and not include lemons would you have a lemon bar? The core components offer a blueprint for your organization and can guide agencies on the type of protocols the organization might need to develop in advance, the resources staff will need, and the expectations the organization will need to establish with staff. Core components involve: the logic of the program; the frequency and duration of program activities; and the targeted behaviors to change. In scientific terms, this means that the mechanism of change (how the program is likely to work) is consistent with theory.

Step 4

Know your organization. When you read the research, you should consider the agency setting and where (the type of organization) the initiative was tested. Each jurisdiction and agency has different organizational factors that may facilitate or impede implementation. These organizational factors are either internal or external to the organization. When reviewing a program, you should examine the characteristics of the agency and jurisdiction that successfully implemented it. Do they look similar to yours? Some organizational factors are easy to identify, such as the size of the agency, the location, and whether it was an urban or rural area, whereas other factors are more nuanced, such as how amendable the agency is to innovation and staff attitudes toward punishment and rehabilitation. When reviewing the research, try to learn as much as possible about the setting(s) where the implementation was successful.

The Steps…

Step 5

Assessing scientific rigor. Not all published research is ideal; therefore, how do you distinguish between exemplar and adequate research? There are a few critical methodological and design qualities that you should assess when evaluating the research to determine its' scientific rigor.

Research design: Randomized experiments are considered the gold standard of research. These studies randomly allocate individuals or units into the treatment group (the group getting the initiative) or the control group (the group receiving the standard practice). When research studies are assessed these studies tend to receive more accolades concerning their design and their ability to make causal conclusions. However, randomized control trials are not the only study design that produces good research, but you need to examine the research design to distinguish between good and bad.

Internal validity: For researchers to say that an initiative worked, they must account for factors that are happening within the study that may influence the results. If researchers negate these factors, then it's possible the outcome (good or bad) may be caused by a confounding variable(s), meaning that something is affecting both the independent and dependent variable. When there are confounding variables, researchers may question whether the differences between those who received the initiative and those who did not happen by chance and are there differences between groups (null conclusion). High internal validity helps answer these questions. Published studies rarely discuss the potential threats to internal validity, but a good consumer of research should critically evaluate what factors might have led to the outcome.

Good Research Design: 1) has an experimental group and a control and/or comparison group; and, 2) allow us to say that the program is the reason the outcome happened (intended or not).

As you read research you should discern whether any of the following threats to internal validity are present:

Attrition
subjects leave/quit

Maturation
subjects got experienced/bored

Instrumentation
instrument changed

Regression Toward the Mean
extreme subjects selected

Selection
subjects differ in more ways than just grouping

Contamination
study groups overlapped

History
outside event(s) interferes with study

Here's a tip...

Missing Information in the article

In an ideal world, you would find all the information you need in one research article regarding the program/initiative. However, it is common that you will not have all the information in one publication. Typically the detailed program description is not well described.

As you read an article, it is essential to write down what the article is telling you, but it is equally important that you record what the article is not giving you. If you don't find the information, don't be discouraged. Some articles don't provide all the information that you hoped would be present. If this is the case, write down questions you have regarding the study and program. Bring these questions to your research partner so you can work together to determine if the initiative is right for your agency.

abstract

Summary of the research (e.g. methodology, results/findings, implications)

introduction

Overview and why the researchers did the research.

literature review

Background/other research relevant to the current program/initiative.

methodology

Setting of the research, sample size and characteristics, initiative description, outcome measures.

results/findings

What happened.

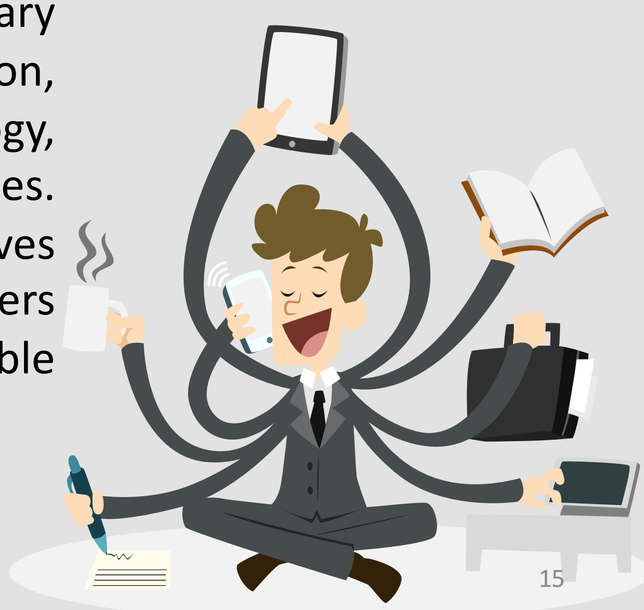
discussion

Why this research might be important to your organization.

Where to find research

There are many places where you can find research. One of the best resources for finding initiatives is the National Institute of Justice's (NIJ) **Crimesolutions.gov** website. This site serves as an information repository for programs that were tested in the criminal justice systems, including those that are for clients and/or their families. To be included in Crimesolutions.gov, the research examined the effectiveness of the initiative. Trained and experienced researchers review the evidence (often multiple studies) to rate each program as effective, promising, or having no effect.

Crimesolutions.gov reviewers examine many factors to determine the success of the intervention, the conceptual framework, the design quality, the outcome evidence, the program fidelity, and confidence in the program. The website provides users with a summary that includes the program description, evaluation outcomes and methodology, cost, evidence base, and references. Essentially, Crimesolutions.gov removes the "guesswork" for busy practitioners by making the research easily accessible and ensuring that it is good research.



Here’s a tip…

Working with and finding the right research partner

Even though we provide tools to help you understand and use research, keeping up with the evidence can be challenging. This is one of the reasons why having a research partner provides excellent assistance to your implementation efforts. Research partners can immerse themselves in the research and be a conduit for translating and sharing information with you, their criminal justice partner.

In many initiatives, research partners are an afterthought. Practitioners and justice agencies might view their research partners as individuals who only analyze data. However, researchers can contribute to the initiative well beyond providing outcome statistics. In an implementation science model, criminal justice professionals work with their research partner early in the process to obtain the most up-to-date evidence that will help shape how the initiative operates in practice and to ensure fidelity.

Here's a tip…

Finding the right research partner

There are multiple ways to find a strong research partner. You may want to start with local colleges and universities, particularly those with criminal justice departments. Another option is speaking with neighboring jurisdictions and/or those who have completed similar initiatives regarding how they found their research partner and their experience working with them. When searching for a research partner, you should ask yourself what type of partner will benefit your agency and the initiative.

The researcher-practitioner partnership should be collaborative; therefore you must determine what that collaboration will entail.

What kind of deliverables (infographics, memos, progress reports, etc.) would you like your research partner to provide to your agency?

Do you want a relationship with your researcher where you can speak with them throughout the implementation process to receive feedback on the adoption or adaptation of your initiative?

Do you want the researcher to physically or remotely attend meetings; and if so, how many per month or quarter?

Would you like your research partner to provide monthly progress reports?

These are the type of questions that you should consider before finding your research partner. Make a list of things you want from this partnership, and when you find a research team make sure you ask the questions on your list to determine if they are the right fit for your agency.

Review & Worksheets

Knowing the research

One essential goal of implementation science is being able to take an evidence-based initiative and adapt it into your agency. Part of the implementation process is understanding what the research says about the initiative. When you read the research you want to keep these questions in mind:

What does the research say about Evidence-Based programs/treatments, policies, and practices?

Specifically, what core components _*must*_ be present for the initiative to "work"?

What factors should I consider when determining if the initiative is a good fit for my agency?

Think about the answers to these questions, pay close attention to the program description, the population, the setting(s) where the initiative took place, inner and outer factors, the methods and research design, and the intended/actual outcome(s).

Understanding these factors will help you implement the initiative in your agency and develop guiding principles for implementation. Guiding principles are core components rewritten and grounded in the setting responsible for implementation – *your* agency. That is, adapt to your setting.

To help you determine these factors use the worksheets to assess the research.

Reading and Understanding Research

The information gathered from the research will help you determine if the initiative is **appropriate** for-or compatible with your agency, and if it is **feasible** for you to implement. Use this worksheet to help you navigate through your research article.

As you read your article answer the following question regarding program/initiative, setting & population, research design, and outcome.

Title of the Article: ____

Program. In this section describe the program/initiative that is documented in the article

Questions	Is it identified in the article ?		Answer
What is the logic behind the program/initiative?	YES	NO	
Explain how this program is structured. Who is responsible for the delivery, what are the phases, and what are the major steps of the program?	YES	NO	
What are the staff skills/qualifications/experience necessary for using the initiative?	YES	NO	
What is the amount of programming required in terms of number of sessions, type of sessions, intensity and duration requirements?	YES	NO	
What are the characteristics of the target population?	YES	NO	
What issues does the program target (substance abuse, decision making, social support, etc.)?	YES	NO	

Title of the Article: ____

Setting and Population of the Program			
Questions	Is it identified in the article ?		Answer
What is the setting in which the research was conducted (rural, suburban, urban)? Is there a preferred setting for the initiative?	YES	NO	
What is the size of the organization that participated in the research? Is this similar to your agency, if not what are the differences?	YES	NO	
How does the research setting compare to your jurisdiction?	YES	NO	
Is the sample in the study typical of your population? If not, what are the differences?	YES	NO	
How does the study population compare to the population you are interested in targeting? What are the unique features of your population?	YES	NO	

Title of the Article: ____

Research Design in the Article			
Questions	Is it identified in the article ?		Answer
Did the researchers use an experimental or quasi-experimental design?	YES	NO	
What was the sample size?	YES	NO	
What was the follow up period? (in other words, how long did they follow-up the person)	YES	NO	
What are the measures used in the study? How did the researchers ensure that the data is high quality? What might be the potential threats to internal validity?	YES	NO	
In what way is the population, study, organization different than your agency and/or program design? What are the threats to generalizability that might occur?	YES	NO	
What strikes you as how the program and the organization that was studied differs from your agency? Consider issues like prior initiatives that they have done.	YES	NO	

Title of the Article: ____

Program Outcome			
Questions	Is it identified in the article ?		Answer
How did the researchers measure 'success' of an initiative?	YES	NO	
How else might you measure 'success' that the research did not consider?	YES	NO	

Next Steps

Now that you have completed the worksheet, start to think about guiding principles. If you were to write guiding principles for the program/initiative (in the article), what information would you use to develop guiding principles? What information do you still need to develop guiding principles?

Guiding principles

Now that you learned what key factors to consider for an effective EBPT, the next step is to develop a blueprint for implementing the initiative. The blueprint design consists of the core components identified in the research in conjunction with your organizational context. These principles take the research from the pages of scientific articles to the walls of your organization.

Many EBPT initiatives are not clearly defined - some use terms that are confusing or ambiguous, and often the components are too vague to be operationalized. Thus, it is important to dissect the program design in the literature and identify mandatory and supplemental elements of the intervention. Once this is complete, the core components will be the basis to create guiding principles. These guiding principles will help transport the initiative into your organization and implement it with fidelity. Basically, guiding principles are the core components rewritten in a simple language and grounded in the context of a specific organization. These facilitate using an initiative in daily routines, setting expectations about desired outcomes, and providing a framework for monitoring fidelity.

Guiding principles should clearly identify how the initiative will operate within the organization. These guidelines identify key features of the initiative, processes, and resources that are needed throughout implementation, what the initiative will look and feel like in everyday practices, and inform performance measures to gauge progress and outcomes.

The Steps…

Developing guiding principles

Step 1

Know the core components. From the research, one should be able to identify the core features or components of a program/intervention/EBPT. You should use the worksheets, identify the core components from the research study and consider how they will fit into your organization. Remember, the guiding principles should reflect the research findings.

Step 2

Organizational context. Developing guiding principles is not limited to knowing the research; you must know your organization and the setting where the EBPT will take place. One of the most critical questions that you should be thinking about as you read the research, "is the initiative compatible with everyday practices in my organization?" For example, if the underlying conceptual model for an initiative differs from how the organization conducts business, then this misalignment creates tension. This tension will undermine efforts to implement changed practice including helping others accept the EBPTs. Also, if the new initiative contrasts with how staff believe they should do their job, they may be unwilling to incorporate the new initiative into their daily practices.

This is why you need to become an expert on what goes on in your organization. You should outline everyday practices and see how the initiative will align. It is important to remember that it may not always fit perfectly into your organization. You may need to alter or adjust current policies and protocols. One way to think about your organizational context is by considering inner and outer factors.

Organizations are not only impacted by internal workings, they are also influenced by external factors too. You should know the needs and workings of external networks that might affect your initiative.

Knowing your internal factors

Internal setting factors are the inner workings of the organization where the initiative takes place. These include the organizational mission, goals, priorities, norms, culture, leadership, number of staff, staff attitudes and skills, and material resources. Here is a list of internal factors that you should consider when developing your guiding principles:

Readiness for Change

This factor relates to how committed staff are to supporting and adopting new ideas and embracing the EBPT. Some parts of the organization may be prepared for change while other areas may not be ready. Both realities can exist simultaneously, and each can occur at the upper administration and/or at various other levels. Successful implementation depends on identifying the processes or pockets of the organization that are underdeveloped and determining why this is occurring. Other elements that need attention while assessing the organization's capacity to change include the understanding of current values and norms of the organization, formal structure of authority and power, staff professionalism and resources available to support the adoption the innovation. Overall, the readiness assessment should include an understanding of the motivation for change and the degree of cynicism for change or change fatigue.

Resources

Resources can include physical space, supplies, personnel, training, feedback loops, and management information. The number of resources available to the organization can impact the adoption and implementation of innovations. It is critical to identify the necessary resources throughout the implementation of the initiative (informed by the guiding principles) and assess if the organization has access to them.

Alignment with Values and Norms

This inner factor is essential for successful adoption and implementation. The most important questions to ask include: is if the initiative design compatible with the work processes? If not, what should be changed? For example, if the underlying conceptual model for an initiative differs from how the organization believes it should conduct business, then this misalignment creates tension. This tension will undermine perceptions that the changed practice is acceptable. Also, if the new initiative contrasts with how staff believes they should do their job, they may be unwilling to incorporate the new initiative into their daily practices.

Organizational Structure

This factor refers to the formal authority and power structure within the organization. For instance, how is authority delegated? How does information flow through the organization? Is the organizational structure top-down or is it less hierarchical?

Professionalism and Staffing

You should consider specific skills, education or experience that staff might require to adopt and implement an innovation. It is essential to recognize the proper knowledge or skills needed to support the EBPT. If staff lack professionalism, it may impact the support and attitudes toward the innovation.

Knowing your external factors

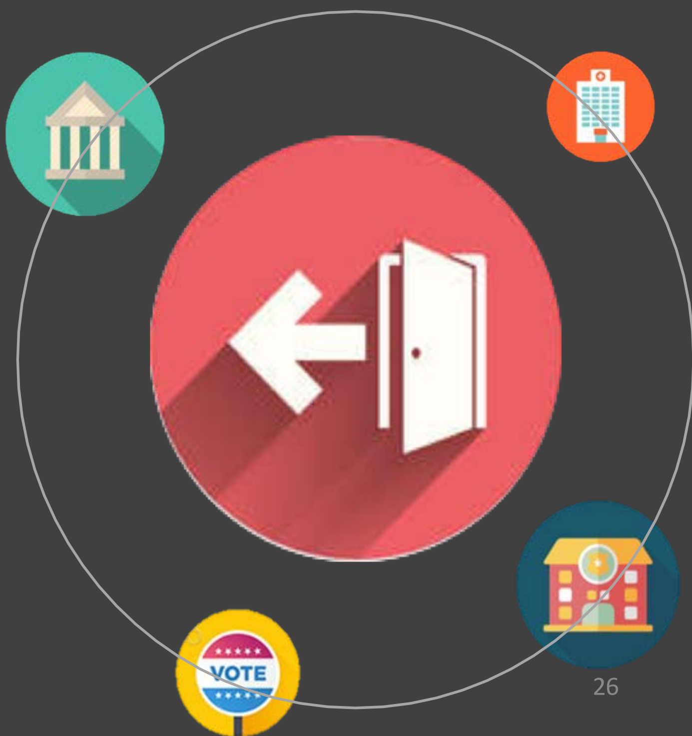
The external influences on the organization include stakeholders, socio-political climate, incentives, regulatory and legal mandates, and systemic norms and networks. Here a list of external factors that you should consider when developing your guiding principles:

Interorganizational Networks

Implementation of a new initiative does not happen in a vacuum. Interorganizational networks play an important role in influencing adoption practices. Many initiatives are designed to work across processes that involve an array of agencies (i.e., criminal justice agencies and treatment providers, state-wide or local level organizations). It is essential that there is consistency among stakeholders and social networks on the value and advantages of the initiative to advance and sustain change within the organization. Gaining support from relevant stakeholders is essential to ensure that the agency is making progress in building expectations about the outcomes, and addressing the knowledge needed to support the initiative. This requires conversations with external stakeholders about the agency-specific mission, norms, goals, and processes.

Policy Incentives and Mandates

These outer factors can directly impact initiatives, particularly if there are policies or legislation that influences operational features. Government priorities to adopt EBPT established through policy, legislation or regulation have a positive impact on the implementation of innovations at the agency level. It also facilitates funding and additional resources. Support from external stakeholders is essential during the change process. It signals that others support the initiative and believe that the initiative is considered necessary.



Developing and evaluating guiding principles

Step 3

Write your principle.

When you write your guiding principle, you are taking knowledge about the research studies (core components) and combining it with the factors related to the organizational context. Remember – Guiding Principles should always be researched-based and organizationally aligned.

Once you write your guiding principles, it is important to review them to ensure that they are specific, reflect the research, and consider the organizational context. When you review your principle, they should have the following qualities. If these qualities are not reflected in your guiding principle, you should reconsider and redevelop the principle.

Evaluating Your Principle

Reflects the research. Guiding Principles should consist of core components that stem from the research. Remember - guiding principles should always be research-based.

Audience is specified. When you read a guiding principle, it should be clear why the principle is written.

Ordered per workflow. The guiding principle should detail when the principle should take place.

Who is doing what. The guiding principle should detail who is responsible for completing specified tasks.

Action verb. The guiding principle should be grounded in an action.

Organizational context. The guiding principle should consider the organization where the initiative is taking place.

Example of the **Focused Deterrence Initiative**

Guiding principles

Step 1

Know the research. The theory behind **focused deterrence (FD)** is rooted in pulling levers, and in deterrence theory--The individual believes that the cost of committing a crime outweighs the benefits. The individual should expect that there will be a response from the criminal justice system (police, prosecutors, courts, corrections); FD includes a response from the justice system but also support systems.

Increase risk (more police on the street or enhanced justice controls).	Use different way to communicate incentives and sanctions to targeted group, including the benefits to individuals of being prosocial.	Incentives: Use social services or social networks (i.e. family, represented members of the community) to influence an individual to be prosocial (adapted from RNR).

The crime principle: police are more likely to reduce incidents or crime rather than an individual propensity to commit crime

The risk principle: Focusing on high-risk places and/or higher-risk people will reduce crime events

The salience principle:

Individuals will engage in fewer crimes when there is greater presence of the police.	Individuals will reduce involvement in crime when they are offered opportunities in the community for employment, being a role model, being part of a social network, being treated with respect, etc.	Individuals will reduce involvement in crime when incentives exist from peer supports (mentors and/or family)

Example of the **Focused Deterrence Initiative (cont.)**

Guiding principles

Step 2

Guiding principle(s) based on FD research. These are the core principles that are important to deliver an effective services. Once you know the research write guiding principles for your own program.

Research Based Guiding Principles

Police should make their presence known in the community through active patrol.

Community leaders should show respect for the individuals in the Focused Deterrence program through consistent engagement in prosocial matters.

Individuals are provided with cognitive behavioral programming to improve their decision-making for more prosocial, civic responsibilities. The detractors include unstable housing, lack of employment/education, and/or unstable social networks –they need to be addressed.

Example of the **Focused Deterrence Initiative (cont.)**

Guiding principles

Step 3

What is missing. Once you have a guiding principle rooted in research think about what information you would like to have in order to answer the who, what, where, and when.

Who	should be aware of the police presence and community partners to prevent crime and violence?
What	behaviors are of concern (i.e. violence, public disorder, etc.)?
Where	should the police spend their time (location); how should community networks be involved?
How	should the police make their presence known. In what manner can the choices of social networks and services versus justice involvement be presented? Should the interventions be offered only to the individuals in the justice system or with others?

Guiding principles

Step 4

Research + what is missing. Take what you know from FD research studies and incorporate that information with the information regarding your program/initiative. It is important to address what you feel is missing so it aligns with your local culture and practices.

Research: Certainty principle in a deterrence model- The individual must know in advance the incentives for certain behavior (transparency).

Example of Guiding principle: The officer should communicate to the target group the positive consequences of reducing violence, working with community partners, and being part of the community.

Example of Guiding principle: Service providers and social networks (i.e. family members, etc.) should be visible and active to engage the individual in the process.

Guiding principles

Step 5

Organizational context. Remember, your guiding principle should be written to fit your organization. Take the guiding principle that you wrote based on the FD research and tailor it to your organization. To do this you should ask yourself:

What happens when social services are involved with police?

Where and when can a conversation occur concerning incentives for reducing negative behavior?

How can better relationships be developed to improve an integrated message to the community that the focused deterrence project is designed to help individuals become productive members of the community?

Example of the **Focused Deterrence Initiative (cont.)**

Guiding principles applying FD for your organization

Original

Police should make their presence known in the community

Core components

Evidence Based Guiding Principle

Core components

The officer should communicate to the target group the negative and positive consequences of committing a particular crime

Organizational Context

Officers can use routine patrol and community groups to communicate message

Organizational Guiding Principle

During routine patrol and community group meetings police should communicate what crimes they are targeting

Core components

Review & Worksheets

Guiding principles

Guiding principles are core components rewritten and grounded in the setting that is implementing an EBPT. By assessing the research, you can understand what elements are essential to the initiative. Essentially, if a core component was not present, would the initiative still be the same? More importantly, if this core component was removed would you still achieve the desired outcome?

Look for details on what was studied. Drawing from research that is more scientifically robust will allow you to establish more specific guiding principles, including what the features of the tested initiative involved. Then you can identify what you need to have in place to make your implementation successful. You should consider:

Order the guiding principles in a way that reflects the natural flow of work.

Anchor each principle with an action verb to define a step.

Specify who will do what and with whom they will complete the task(s).

Internal or inner setting issues may complicate how core components might be implemented or work in practice. Or, perhaps the language used in the research is not consistent with the language used in your organization. Once you have a list of the core components reflecting how the EBPT would operate in your organization, you should list all potential organizational issues that may impact how each specific element will work in practice.

The following is a list of organizational issues to consider:

- *Local language and word choice*
- *Role of the "doer" is consistent with their position within the organization*
- *The inclusion of other components given the flow of work, and the procedures in your organization*

In conjunction with the "reading and understanding research," worksheets use the following guiding principle worksheets to help you take those core components from the research and ground them in your agencies processes.

Core Principles

Use this worksheet to list the core principles you have identified from the research article. Also, list the information you wish the research article included.

Title of the Article: ____

Name of the Initiative ____

Core Components Per the Research

Missing Information

Organizational Context: Players and their role

Use this worksheet to list the key players/staff who will be involved with the initiative and their role in the organization and during the initiative.

Players/staff	Role in the organization	Role during the initiative

Organizational Context: Process

Use this worksheet to list the processes where the initiative will take place and what part of the initiative will take place during that process. Also determine what might need to be adjusted to the process in order to accommodate the initiative.

Core Component of the Initiative	Current Process	Adapted Process

Organizational context: Needed Resources/skills

Use this worksheet to think about what resources and/or skill development that needs to take place. Also, consider what internal and external factors may hinder implementation.

Adapted Process	Needed Resources	Needed Staff Skills	Internal and External Barriers

Writing Guiding Principle

Now that you know the core components (per the research) and have assessed your organizational context and how the initiative will fit in your agency's processes it's time to develop your guiding principles!

Core Component Based on Research	Organization Context	Guiding Principle Grounded in your organization (what will it look like in your organization)

Scoring/Measuring

Now that you have your guiding principles it is time to see how well you developed them. Use this worksheet to score/measure your guiding principle. Remember if you answer no to any of the questions you should consider re-writing your principle.

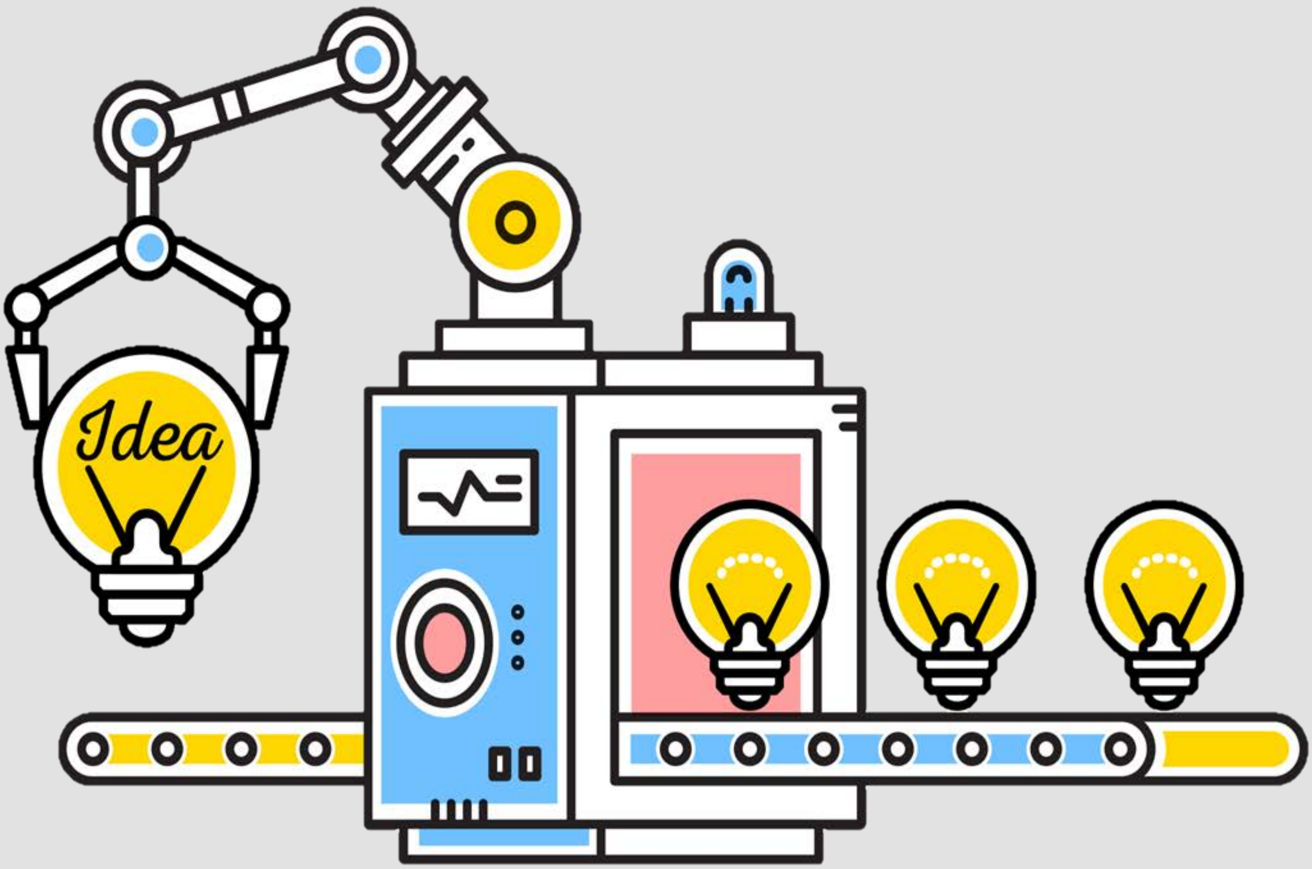
Guiding Principles	Reflects Research	Audience Specified	Ordered per Workflow	Who is Doing What	Action Verb	Considers Org	Re-written Guiding Principle
	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No	
	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No	
	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No	
	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No	
	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No	
	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No	
	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No	
	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No	
	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No	
	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No	
	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No	
	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No	
	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No	

Transporting EBPT into every day practices

2

In this module

Implementing a new initiative into an organization is a complex process. It is important that your agency develops an implementation plan to help guide your decision making throughout the process. This module will introduce you to an implementation framework that your agency can use to help guide you through the process. This can be used as part of an implementation plan.



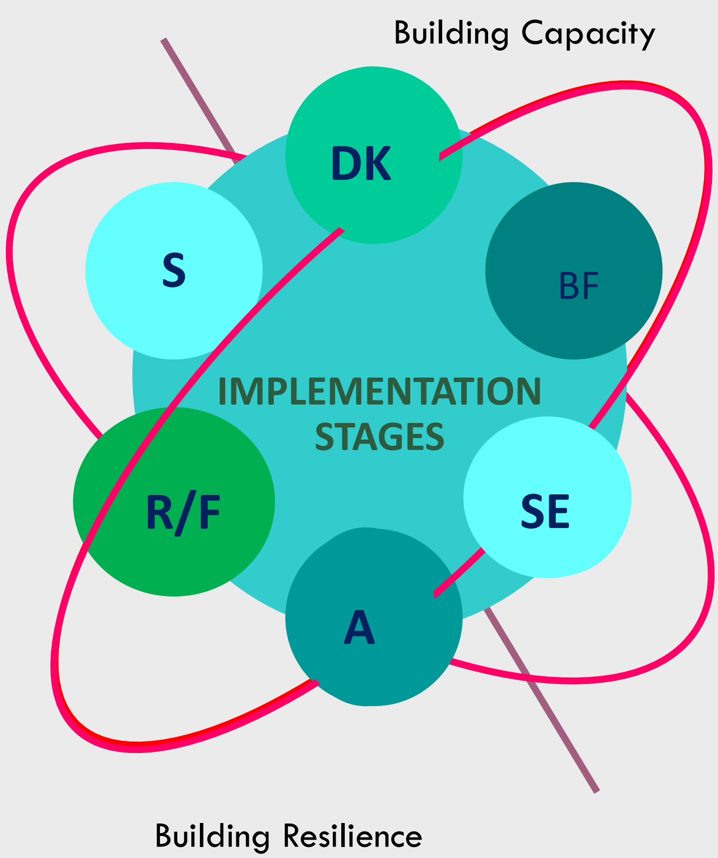
Why You Should Utilize Implementation Science

Transporting scientific research into practice is not always accomplished. When transferring EBPTs from the clinical setting into real-life practices, it means that the initiative is being transferred into an organization that has many moving parts which can act as a facilitator or a barrier to adoption. Shifting scientific research into everyday practice is a complex process and can take years for an agency to successfully integrate a new program into the fabric of its organization. Implementation science helps with the transportability issue by using a series of processes that refine an EBPT to fit your environment, build agency capacity through knowledge dissemination, foundation building, and procedure expectations. Implementation science frameworks are designed to help navigate through the complexity of transferring evidence-based practices into real-life settings.

Implementation science framework

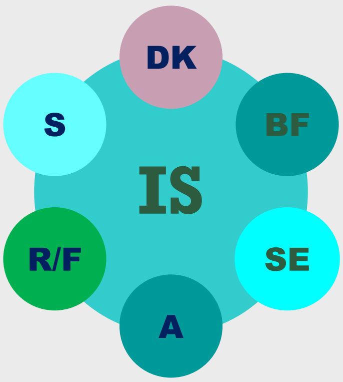
Implementation is a process, not an event. Transporting a research-based practice into a real-world setting requires careful examination and assessment of both the initiative and the organizational capacity in which it will be implemented and sustained. It involves a complex interplay between the characteristics of evidence-based interventions, the organizational capacity, and the service delivery setting. The Evidence-Based Interagency Implementation Model (EB-IIM), conceptualized by Taxman and Belenko (2012), is a framework that supports this process. Their framework details the decision-making process around transporting change, which includes, selecting an EBPT to implement, adapt to fit the organization, and sustain it over time. This toolkit uses the EB-IIM and represents their model as the "Implementation Science Wheel."

The implementation science wheel consists of six domains within the process of transporting, adopting, and sustaining change: Developing knowledge (DK), Building a foundation (BF), Setting expectations (SE), Alignment (A), Renovating/Fit (R/F), and Sustainment (S). The domains are divided into two implementation areas: Building Capacity and Building Resilience. These areas emphasize the knowledge, resources, skills, and expectations needed before using the initiative, as well as strategies on how to adapt and sustain adherence to the initiative once implementation has started.

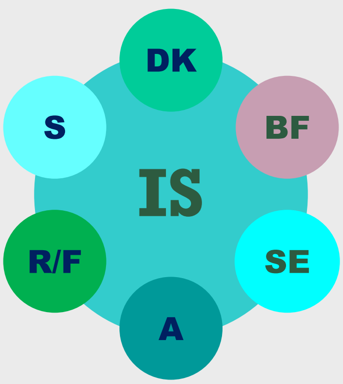


Building capacity

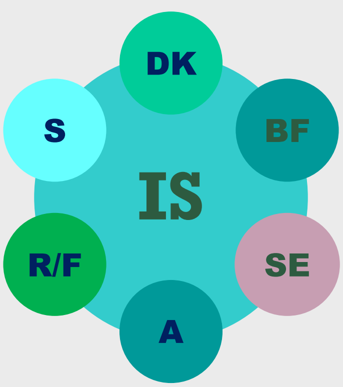
Before implementation, your agency should explore this implementation area. The domains in this area are developing knowledge, building a foundation, and setting expectations. These domains are designed to clarify the research, assess and address the needed training and resources required, and link organizational values with the organization's expectation of staff according to the role they play as it relates to the initiative.



Developing Knowledge. Before implementation, it is critical to know the research that supports the EBPT. Understanding the initiative is an important step and an ongoing process to create a receptive environment for new ideas and to prepare an organization to adopt an EBPT into everyday practice. To do that, it is essential to recognize that there may be a need to help staff or stakeholders understand the research literature and findings around the EBPT, as well as move away from attitudes and opinions that may interfere with change. Developing this knowledge is crucial because it makes users comfortable and confident in using scientific findings as part of their everyday work. In addition to creating working knowledge about research, it is imperative to generate procedural knowledge. This is how scientific findings connect with existing policies and procedures within the agency and how these can facilitate implementation of the EBP.



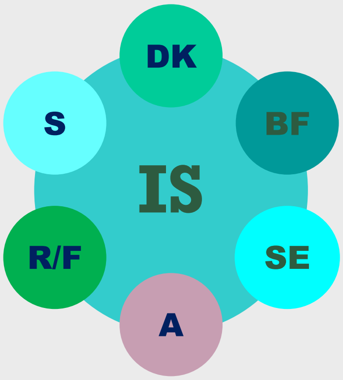
Building Foundation. This domain recognizes that with any new initiative there is likely to be skills and competencies that may or may not be present in the designated personnel for an initiative. It is important to identify how to build skills and expertise to use the initiative. In this sense, the organization should make the necessary investments to provide staff with technical skills associated with the implementation of the EBPT. This will help ensure adherence to the initiative and strengthen the organization.



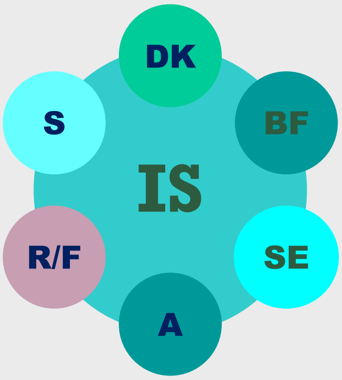
Setting Expectations. The third domain focuses on setting realistic goals and objectives expected from the implementation of the EBPT. It is important to identify the value of the initiative and how it contributes to the organization's mission, as well as outlining the performance measures staff will be expected to meet. This is essential to help internal and external stakeholders understand what is expected and how they will be involved in achieving long-term change. If incremental and modest expectations are not set early, staff may anticipate they will immediately be responsible for big changes. This assumption can reduce morale and excitement about change, reduce innovation, and foster staff and stakeholder resentment.

Building resilience

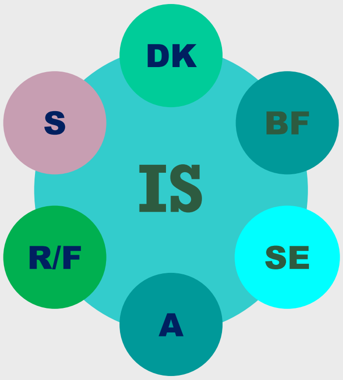
Building capacity helps guide your agency in the correct path before starting the initiative. Building resilience in your implementation framework is concerned with ensuring that the initiative fits in your organization and sustain over time. It implies aligning and reviewing organizational processes that protect the initiative from being a onetime event. This stage involves three domains: (a) aligning practices; (b) renovating and fit; and, (c) sustainability. These consider how routines and protocols may affect the use and sustainability of the initiative, provide guidance for assessing how often and how well staff are using the initiative, and modify the EBPT to fit the environment.



Alignment. This domain involves a two-way process with the organization and the innovation. First, it consists in piloting the initiative, and developing policies and protocols that are needed for the initiative to operate within the organizational culture, while simultaneously adjusting and aligning the initiative to the culture and needs of the organization. This process allows the organization to respond and adjust to the innovation and to demonstrate its organizational resilience.



Renovate/fit. Organizations need to assess how the initiative is working and adjust it to ensure optimal performance and achieve a desirable outcome(s). Even when the initiative is adapted to the local needs and context, it is essential to ensure that the core components are maintained and well-implemented.



Sustainability. The last domain ensures that the initiative weaves into the fabric of the agency, meaning that it is not forgotten. Once an initiative is implemented, it must be monitored to ensure that it is being practiced as intended. This can be done by having performance measures/benchmarks in place that will determine how well and how often staff are using the initiative. Benchmarks are also essential to provide continuous feedback to the organizational staff.

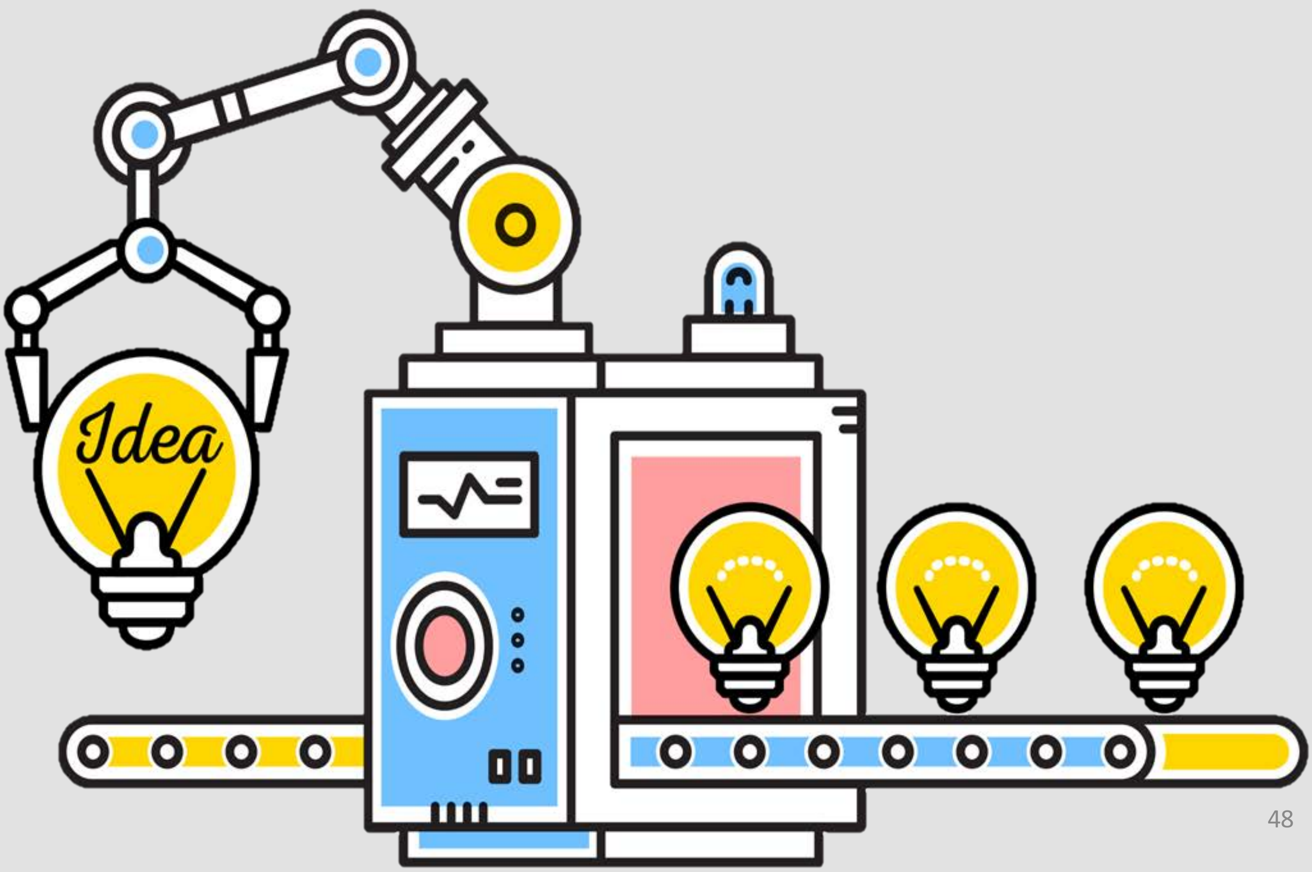
Communicating Change

3

In this module

In the previous modules, we discussed finding research resources and using them to help shape interventions and determine if those interventions are appropriate for your agency. We reviewed how to “transport” those interventions in your agency. Once you identified the intervention to implement and thought about steps for implementation, you need a communication strategy to share the innovation with your office, especially those who will be affected by it. And you should share it with your stakeholders (outer setting).

In this module, you will learn techniques on how to “sell” your initiative to your staff so that they understand why the initiative is adopted, why and how their daily routines change and achieve buy-in from staff.



Communicating change

Communicating openly and being transparent about change is critical in gaining buy-in from your colleagues around the new initiative. You need to articulate both verbally and in writing the value the new initiative will bring to your agency and expectations.

Without a formal introduction, the value of the initiative can get lost, and it may lead staff to feel that the new initiative is just one more thing piled onto their workload. Communicating with colleagues is not simply "you have to do this" or "did you complete that." Communicating change is not a series of making sure boxes are checked but rather it is a process that must be well thought out. Effectively adopting new practices is facilitated when agencies are thinking about how the process and the impact of change is perceived by staff. Ignoring how we talk about change can affect:

- Staff's trust or believability of the evidence behind an initiative
- Staff likelihood to use the new practice, how well and how often they will use it when they do
- Stakeholders' trust that the "newbie" is purposeful and directed at a particular issue

···continue

Introducing the new initiative is a multi-step process that needs to begin with thoughtful planning. Staff will need to understand and accept the what, when, who, why, and how of the new initiative. You should consider these questions:

What is the innovation you plan to introduce? You should clearly define what you plan to implement.

Who will this initiative impact? Is it going to be agency-wide, or will a select set of officers or supervisors be involved? Good communication will encompass all those factors.

When is this going to take place? What is the timeframe, and is there any flexibility?

The "why" and "how" are the most complex pieces of this process. Staff must understand the value of the initiative and what to expect from the rollout. When thinking about the "why" of the initiative, you should go back to the research. Where has this initiative been tried and what were the outcomes? When communicating results such as the impact on recidivism, relationships, and productivity staff will learn that if the practice is implemented correctly their work will have a positive effect on the desired outcome. You need to instill in your staff that the new initiative is not the "flavor of the month" and is not intended to create more busywork for them. When considering "how is this going to work", people will want to know the impact the initiative will have on their workload. What kind of training will be involved? What sort of support will staff receive? How does it fit with existing practices? Take into consideration whether other new initiatives are starting at the same time and if so, are those initiatives compatible? Starting too many things at once is taxing to the staff and can lead to "innovation fatigue."

···continue

Another thing to keep in mind is that while your agency is taking the lead on the initiative, you are probably not "going in it alone." Communicating change is not only important within your agency but you also need to craft messages for partner agencies, stakeholders, and even the clients who report to your agency. This will require learning more about your partner agencies and their cultures, as well as finding a champion within each agency who can help you advocate for the initiative.

...continue

Framing change

When you think about framing change, you need to think about the order and form by which you deliver information. Presentation of the information can affect how well the recipient understands and retains the information. Think about how information generally gets shared in your agency. If you're part of a smaller agency, you may have regular, in-person, all-staff meetings where information is shared. In agencies that are larger or more spread out, information may be conveyed via email/memo. Appropriately framing change requires knowing your audience. If you are part of an agency that values "face time," then delivering the message in-person should be a priority. You can always follow-up with a memo that outlines what details were discussed. Also, think about who gets told what and when. You need buy-in from managers and supervisors, so they will need to be brought up to speed early in the process, allowing them to show support, as well as enabling them to answer questions from line staff.

Framing change is the process of crafting a message that is complete with the appropriate tone and language and comes from the most appropriate person in the organization.

…continue

Pitching change

Effectively pitching a new initiative to your colleagues requires thinking about your organization holistically. How well does the initiative fit with current practices? Will it require additional client contacts? Staff at each level will have questions about the impact it will have on workload, so you will need to have a realistic picture of the workload impact and what strategies you will use to help staff manage additional responsibilities. Be clear about the ultimate goal(s) of the initiative. Is it reducing recidivism, improving relationships, having fewer technical violations, or all of the above? Ensure that your pitch makes it very clear what you are trying to accomplish with this initiative.

Pitching is about mobilizing staff to action. We use the acronym AWEE to emphasize important points in pitching change.

A

Align – Think about how the initiative aligns with the office and agency goals

W

Workload – Be clear and transparent about how the initiative will impact workload (at the line staff, supervisor, and manager levels)

E

Effectiveness – Explain how the initiative will foster/increase staff effectiveness

E

Evidence – Explain why the initiative looks the way it looks (theory) and the evidence behind the effectiveness

Here's a tip…

Providing information

Here are some final tips to prevent information from being lost in communication. When you think about providing information, you first want to ensure the person delivering the message is knowledgeable. Perhaps the person delivering the message is a trusted deputy director, but they did not work on the grant application, so they are not as familiar with the initiative. If this is the case, you will want to get them up to speed, so they can accurately relay the information. Be prepared! Think in advance about the questions staff will have about the initiative and come ready to answer them. You may even want to start a list of "Frequently Asked Questions" as they roll in, so you have a document to share. Remember - it is ok not to have all the answers right away but think about where you can gain information. This can involve going back to the research to learn more, going to the funding agency with questions, or even talking to other offices that have implemented similar initiatives.

Who Delivers the Message?

Once you have a solid plan for what the message will be, you need to think about who will deliver the message. The person who delivers the message needs to be…

Credible
Reliable
Knowledgeable about the project
Internal to the agency
In a position of authority

In many cases, the most appropriate person will be the agency director, but in other instances, it may make more sense to have a deputy who is more involved in day-to-day operations deliver the message. Or it may be best to have the person who is spearheading the initiative provide the message since they will likely know the most about the initiative and be best prepared to answer questions. It does not have to be a single person delivering the message to everyone—for instance, you may want to have each supervisor relay the information to their supervisees—but the message needs to be consistent regardless of who is delivering it.

Here's a tip…

Receiving information

Communicating change (or anything else!) is a two-way street. When you talk to an officer, supervisor, or director about the initiative, take notes! If one person has a specific question or reaction, it is likely to come up again. Taking notes will also show the other people that you are listening and you are interested in what they have to say. It's also important to ask questions. Some people will be very upfront and tell you exactly how they feel about what you are asking of them, but others will need prompting. Important questions include: How do you see this fitting into your current workload? What resources will you need from the agency to help you make this initiative a success? Finally, it's important to speak up. It is natural for people to express concerns, but it is the messenger's job to be an advocate for the initiative.

Review & Worksheets

Communicating change

Anytime a new initiative or policy is introduced it might seem daunting to alter habits that people and the agency have become accustomed. However, to adopt an initiative change must occur. Therefore, how you introduce change into your agency may help facilitate the desired change or hinder the process.

Remember that ignoring how we talk about change can affect staff's trust or believability of the evidence behind the initiative and how likely the staff is to use the new practice and how well and how often.

"THE SINGLE BIGGEST PROBLEM IN COMMUNICATION IS THE ILLUSION THAT IT HAS TAKEN PLACE"

-George Bernard Shaw

Use the following worksheets to help you develop how you will communicate change and the guiding principles to your agency and staff.

Introducing Change and Guiding Principles

Implementation science is not limited to dissemination of knowledge. An important factor of implementation science is the understanding of information. Part of understanding is based on how well information is communicated. Use your guiding principle worksheet in conjunction with this worksheet to help develop ways in which you will communicate change and guiding principles.

PRINCIPLE:	
Questions	Answer
What is the core component of this guiding principle?	
Who is the attended audience?	
How would you frame this guiding principle?	
How would you pitch this guiding principle?	
Who do you think is best to deliver the message?	
What mode of communication do you believe is appropriate to deliver this message?	
What questions do you think you may receive from your intended audience concerning this principle and how will you address them?	

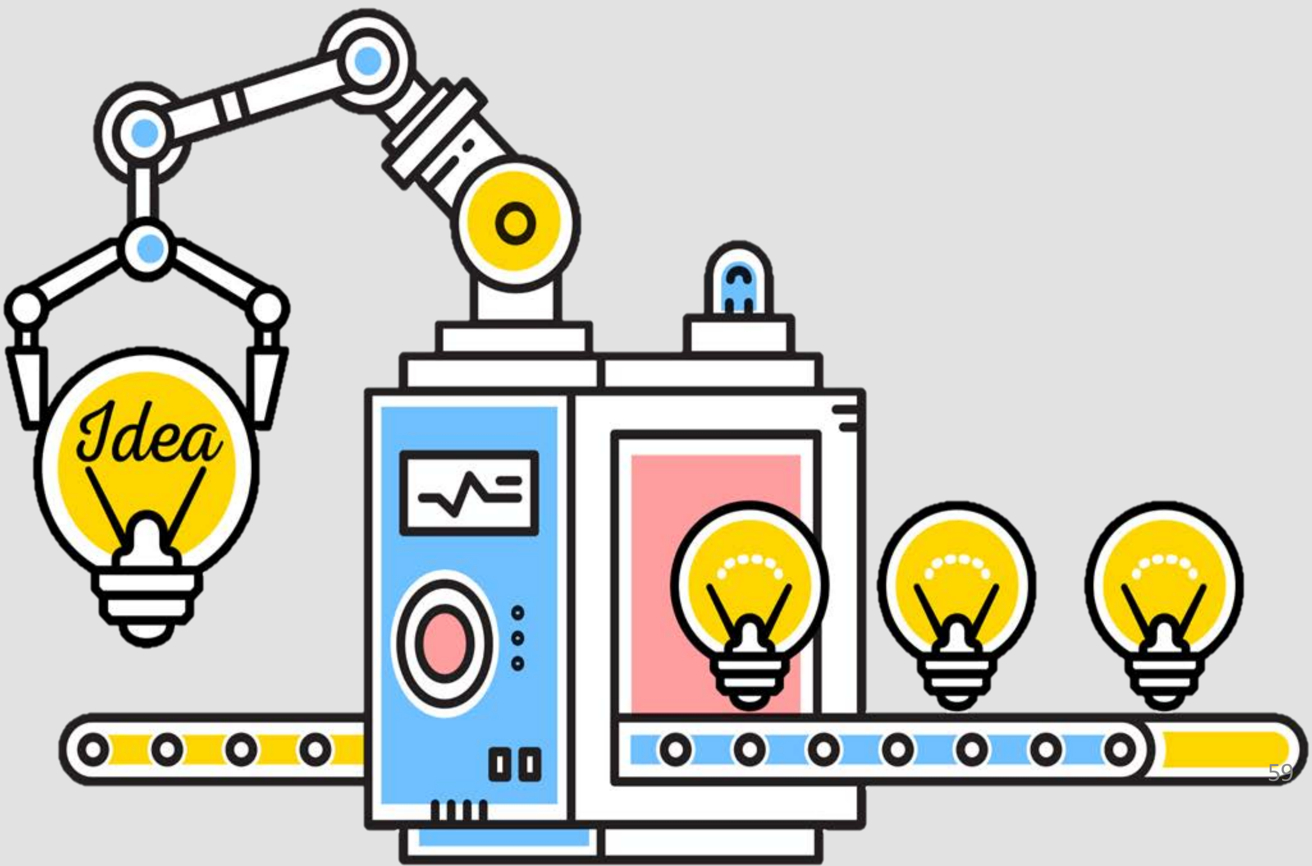
Doing Implementation

4

In this module

Your organization might be at a place where you implemented an initiative and it’s not working as expected. Regardless of what stage your agency is in, you most likely will face implementation problems. Implementation science helps agencies maximize change by thinking about the process of moving through the organization in stages and it calls for people and processes in the organization to be part of the change process, however it doesn't really describe *how* to do that and solve problems.

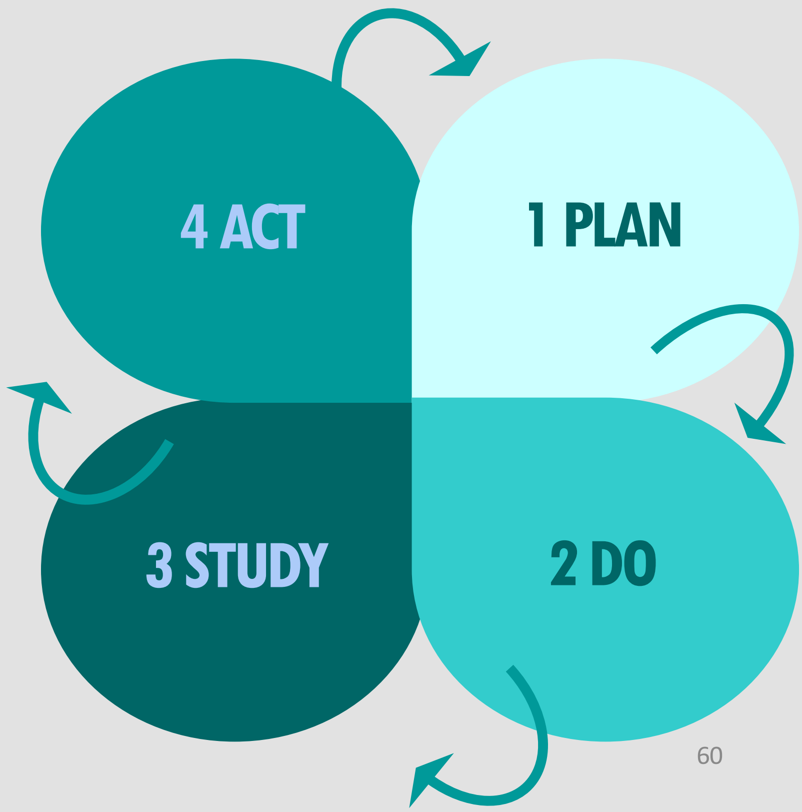
This module focuses on developing a problem-solving process by using a modified Plan-Do-Study-Act (PDSA) framework that incorporates the six implementation science domains highlighted in module two. Adopting this framework will help your organization at the local level identify issues associated with the initiative and develop solutions.



Quality Improvement Models

Implementation typically overlooks the importance of micro-processes and work flow. Improving the quality of initiatives means offices must look at smaller units of cultures and processes to better understand *where exactly* problems occur and how the local level can best respond to them. This approach is known as the Quality Improvement (QI) Model.

There are several different kinds of quality improvement models but in this toolkit we are highlighting Plan Do Study Act (PDSA). This model was chosen because of its rapid cycle approach, the cycle is influenced by data, relies on a scientific method to determine next steps, and is small scale. Essentially PDSA is a way for your agency to solve a problem so your implementation process can be more efficient.



The “P” in PDSA:

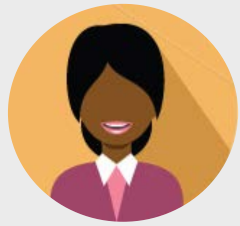
Planning

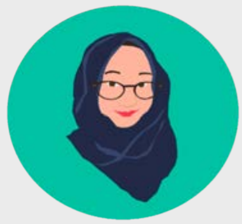
The first stage in a PDSA cycle is *planning* which involves assembling a team, determining a problem, brainstorming solutions, and developing a solution plan. There are multiple parts to these steps which require staff members and data.

Step 1

Assembling the team.

The PDSA process is not a one-person show nor should the process only include local upper management or supervisors. Staff at all levels should be included. Taking a vertical slice of your staff means that you will have people with different roles providing their perspective toward the workings in the office. They might all notice a problem that is happening but feel that it is happening for different reasons. In an ideal PDSA cycle a team will include between six to ten local staff members: mid-level managers, frontline supervisors, frontline workers (of all ranks), and other staff.





As you develop your PDSA team consider different types of personalities. It might seem more productive to pick your high performers but they probably don’t represent all the personalities in your office. As you choose the team consider having an individual who is resistant to change or believes that nothing ever works. The “nay-sayer” can provide an opinion that a high performer may not be able to provide and furthermore including this type of person might help them feel that they are part of a solution that included their opinion. Other individuals you might consider include the individual who is versed in the policies and procedures because they can help the team anticipate facilitators and barriers to implementation. Also consider a consensus builder. This person can help navigate and mediate brainstorming discussions.

The "P" in PDSA:

Planning

Step 2

Deciding the problem.

This next step consist of four parts 1) brainstorming the problem, 2) narrowing the problem, 3) brainstorming a solution, and 4) developing a solution.

Brainstorming the problem: Once you have assembled your team you need to have a brainstorming meeting. During this session you should think about issues that are causing problems in your local office/jurisdiction. The goal of brainstorming is to come to a consensus. Make sure that when you decide on a problem it is clear and focused this will help you narrow down why it is a problem in your office.

Using data to confirm the problem: You will need to use data twice during the planning stage. First, you will use data to determine if the initial/original problem that the team decided on during the brainstorming meeting is really a problem in the office. The second time will take place after you have narrowed the problem. Depending on the nature of the problem, there are several ways to collect data. Your office may already have data that can help confirm or deny the magnitude of the problem. If your office does not have data that you believe will test the problem consider developing a survey for staff or conducting direct systematic observation.

Here's a tip…

After the data is collected have the team evaluate the data and decide what they believe is the biggest concern (according to the data).

The data you use to evaluate your original problem will be used as your baseline data. At the end of the PDSA cycle, you will collect data again and compare it with your baseline data. Improvement between the data indicates that your solution helped the problem.

The "P" in PDSA:

Planning

Step 2 continued

Narrowing the problem: Now that you have your original problem that is grounded in data you need to evaluate that problem and assess if it is nuanced enough to develop a specific solution. Oftentimes the initial problem is rarely narrow or specific enough to solve during a PDSA cycle. Problems are similar to the Russian nesting dolls where a narrower or more specific problem is found within a larger one and it is this narrower problem that is more manageable to craft a solution around.

Brainstorming solutions. At this point you have narrowed problems and chosen a specific problem that is supported by data and created an action statement. Now it is time to brainstorm a solution. As you go through this process consider whether the office/agency has the capacity to solve the problem, when the timing is right to address the problem, and what other factors are happening in the office. Considering organizational capacity, timing, and context helps guide the type of solution that is feasible to implement.

Developing a solution. When planning the solution consider what materials/resources are needed, what people need to accomplish, who is needed to accomplish the solution, and a timeline. Remember a PDSA is a rapid cycle quality improvement model and therefore should not take substantial time to complete. Consider timelines that currently exists in your office. If your office has preexisting data collection points (i.e. quarterly or bi-monthly) consider aligning your PDSA with your data collection timeline. Don't forget about fidelity checks. You might have a start and end date but you should determine times to spot check the processes and/or data.

How to
Narrow the problem

As stated earlier, this module adopted a modified Plan-Do-Study-Act framework that incorporates the six implementation science domains from module two. When your team narrows their original problem they need to consider inner setting factors and the six domains.

1 Have each team member individually determine what factors inside the office might contribute to the problem.—note: the team can consider outer setting factors. Focusing on an internal issue, tends to be more manageable in developing and implementing a solution.

2 Once each member lists the possible contributing factors, the list should be discussed as a group with a consensus regarding the one factor that is believed to carry the most weight—this inner setting issue should be considered the first "narrow problem".

3 Now that the first narrow problem is identified, it's time to consider what implementation domain is associated with the problem. Not all members of the team might be familiar with Implementation Science domains. If you ask the members why they believe the problem exists, the answers can lead to a specific domain.

Does the problem exists because……

Staff are unclear how the initiative supports the agencies goals and other programs—DK (Develop Knowledge)

Staff do not know the evidence behind the initiative or its effectiveness--DK

Staff do not have the proper training—BF (Build Foundation)

There are a lack of resources to accomplish certain procedures--BF

Staff do not know what is expected of them—SE (Set Expectations)

Staff do not know how performance measures relate to the principles of the initiative or organizational goals—SE

Local office norms (formal and informal) and policies and procedures were not considered when the initiative was adopted by the agency—A (Align)

Components of completing the process of the initiative as intended need refining to fit with local office norms, policies and procedures—R/F (Refine/Fit)

Staff are not continually using the initiative as intended even if processes are working well—S (Sustainability)

...continue

Wait...the team might have to do that process over again. Depending on the *narrow* problem it might have to be narrowed further. Even though each domain is related to each other, the distinctions among the factors can help to determine what implementation issue is associated with the problem. The narrowing process is about teasing out why something is an issue and the nuances within the problem. The final narrow problem can lead to a different IS domain then the original problem and a different solution.

Once the team has decided on a narrow problem and the domain has been determined, the problem needs to be rephrased into an action statement.

The “D” in PDSA:

Doing

Step 1

Buy-in and selling. Prior to “doing” you need to let your staff know what solution that the PDSA team devised. This is to gain buy-in regarding the solution. The only way you will know if your solution is the right fix you will need the staff to participate in implementing the solution. If not, this this will affect your data and skew your perspective regarding the solution. In the next module “communicating change” you will learn some tools to help you sell and gain buy-in among your staff.

Step 2

Fidelity checks and data. During PDSA is underway, you should be collecting data and checking to make sure that the staff are participating in the new process. You don’t want to get to the end of the cycle and realize that your staff was not participating.

The "S" in PDSA:

Study

Step 1

Analyze. This is the time that you evaluate the data. Remember that during the planning phase you need to confirm the problem with data, now you have to use data to evaluate whether the solution worked.

The "A" in PDSA:

Act

Decide. Now that you have analyzed the data you need to decide what to do.

Adopt. The solution improved things such that you want to Adopt it as a new practice or procedure in your office. Congrats!

Adapt. This is where most solutions fall. During the PDSA cycle, you will have gathered a lot of information and likely come up with more ideas about how to make the solution better. Here, you may refine the problem, modify the solution, consider new data and outcomes, and then try again. This is the nature of the PDSA cycle!

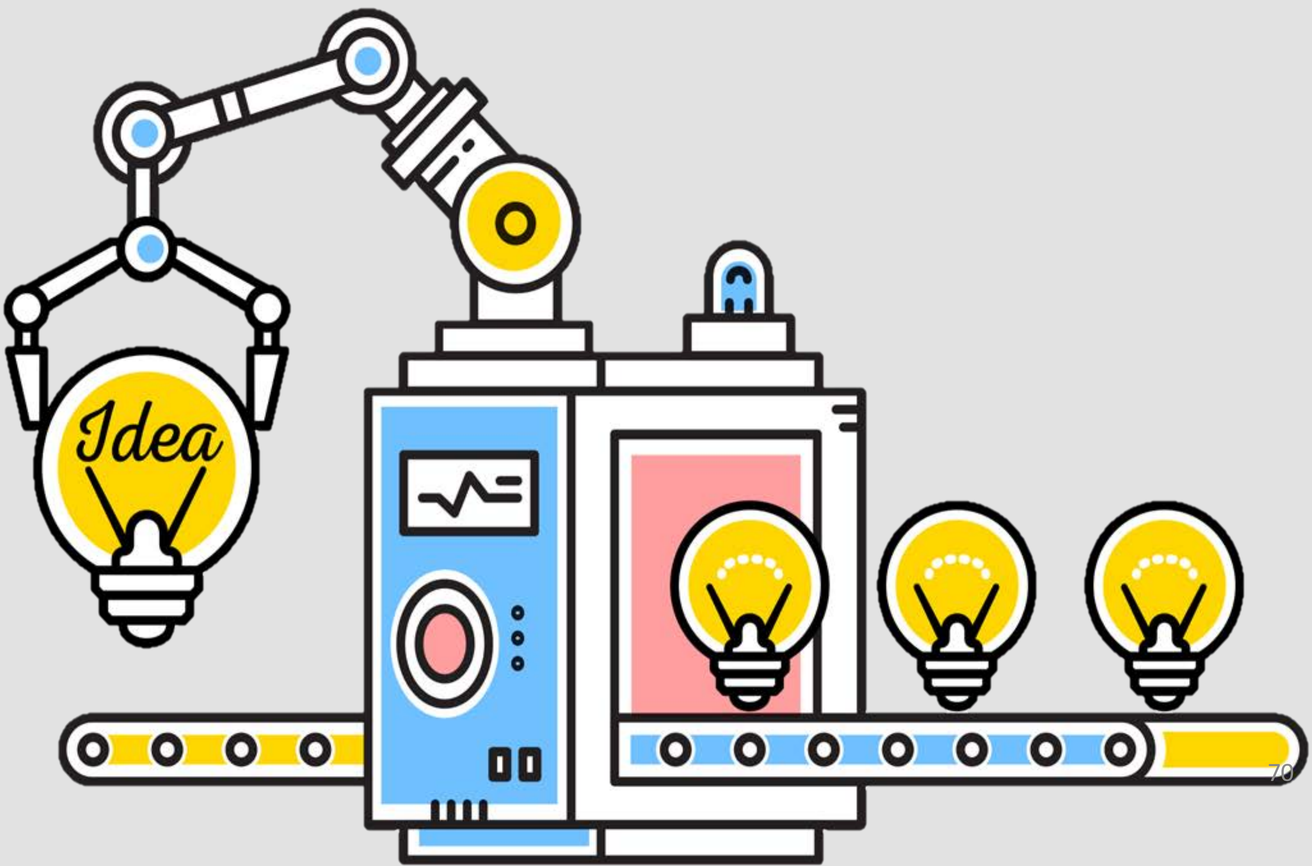
Abandon. Sometimes, things do not go as intended. That's okay!! Failure is the best educator, and seeing a solution fail can be incredibly informative. If you decide to abandon your problem, solution or both, consider all the reasons it may have failed.

Measuring Implementation

5

In this module

This module is designed to identifying how well you have implemented your initiative along with the foundation and/or skills needed to support your initiative. Measuring implementation can be used to recognize areas of organizational capacity that are needed to sustain your efforts. Building sustainability involves assessing the knowledge and skills that managers and staff will need as well as the organizational supports to achieve continued impact. Sustainability and organizational supports are not simply about funding; they are about maintaining the fidelity, leadership, momentum, and infrastructure required to continue the initiative in a manner that it can produce results.



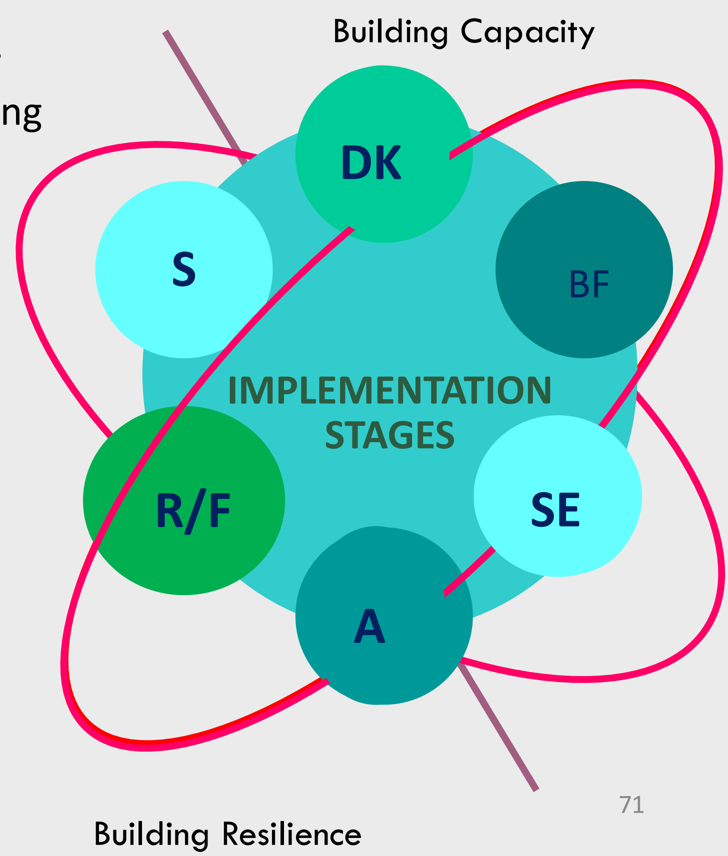
Measuring change

Developing a strong foundation and putting your initiative into action are part of implementation science. A key component is determining how well you have implemented your initiative by measuring: building capacity and building resilience. This will help you focus on specific areas of your implementation efforts.

Recap

Building Capacity consist of three domains: (1) developing knowledge [DK]; (2) building foundation [BF], and (3) setting expectations [SE]. Together, these domains help clarify the research, develop skills associated with the new initiative, link organizational values with the organization's expectations of staff as it relates to the initiative, and solidify resources.

Building Resilience stage includes: (4) aligning practices [A]; (5) renovating or fitting initiatives [R/F], and; (6) sustaining change [S]. These domains consider how local formal and informal routines and protocols may impact utilization of the initiative, provide guidance for assessing how often and how well staff are using the initiative, and modify the initiative to fit the environment.



How well did you adhere to building capacity

When you focus on building capacity you should measure early in the process and often. You can develop questions that target whether you have successfully developed knowledge, built a foundation, and/or set expectations. If you answer "no" to any of the questions you should revisit that domain. Here are some examples of questions you should answer to assess how well you adhered to the building capacity stage.

Did You Describe…	YES	NO
The problem your organization is trying to solve?		
Why this initiative was selected and how it is connected to the problem?		
The theory and translate why the practice looks the way it looks?		
The guiding principles to your staff and use these to explain *how the initiative works*?		
What the research says about how effective this initiative is in achieving the outcome(s)?		
Compare your organization to the research sites in the studies you read to your own organization?		
How differences between the research sites and your jurisdiction have been addressed?		

How well did you adhere to building resilience

When you measuring building resilience you are making sure the initiative is woven into the fabric of the organization. Policies and protocols need to be evaluated and possibly altered to make sure the initiative is not a one-time event. You can develop questions that target whether you have successfully aligned the initiative, fit the initiative into your local setting, and sustained the practice. If you answer "no" to any of the questions you should revisit that domain. Here are some examples of questions you should answer to assess how well you adhered to the building capacity stage.

Did You…	YES	NO
Provide concrete examples of how existing practices can be used together?		
Implement policies and protocols necessary for staff and stakeholders to use the new initiative?		
Identify formal organizational processes operating as implementation barriers?		
Implement renovations within the local office, across the organization and with external partners, as necessary?		
Develop and measure relevant conditions under which the initiative is used in full or part?		
Implement an auditing process reviewing staff evaluations of other staff?		

Outcome measures

The outcome measures below help you know how well you are moving the initiative into routine practice within your agency. These outcomes can be measured through a number of different methods including organizational surveys, management information systems, focus groups, and other strategies. Lower scores or results indicate that more attention is needed to achieve this milestone. Higher scores or results indicate that the implementation progress is solid. If your data shows that your staff does not see the appropriateness, acceptability, feasibility, or adoptability, then you will have to revisit one or all of the domains.

Acceptability

Staff perception that the initiative is useful and that it is easy to understand.

Adoptability

Staff perception that there is willingness to use the initiative in daily practice.

Appropriateness

Perception by staff that the change addresses the problem as the reason for reform and the solution appears to fit within the values or norms of the organization.

Feasibility

Staff perception that the initiative is logistically practical for use in day-to-day decisions.

Fidelity

Adhering to the core components of an initiative, that is that the implemented practice is consistent with the literature on what is needed to achieve desired outcomes.

Pervasiveness

Indication of whether the initiative is spread throughout the organization, or that it is becoming routine activities—the scope/depth of when/how staff are using the initiative.

Review & Worksheets

Measuring change

It is important that you continually measure change throughout the implementation process. If you decide to measure how well you adhered to the initiative months after it was adopted you might find yourself in a situation where you have to fix process issues or address the staff understanding of why the initiative is needed and a better practice. Measure change during the building capacity stages and the building resilience stages provides feedback on how well the initiative is doing in the organization. This then provides outcome measures early in the process. These outcomes help you know how well you are moving the initiative into the fabric of your agency.

Use the following worksheets to measure how will the implementation process if going within your agency.

Diagnosing if you need to revisit the developing knowledge stage

Use this worksheet to see how well you developed knowledge of the initiative and whether you need to revisit this stage in the implementation process.

Did You Describe…		
The problem your organization is trying to solve?	YES	NO
Why this initiative was selected and how it is connected to the problem?	YES	NO
The theory and translate why the practice looks the way it looks?	YES	NO
The guiding principles to your staff and use these to explain how the initiative works?	YES	NO
What the research says about how effective this initiative is in achieving the outcome(s)?	YES	NO
Compare your organization to the research sites in the studies you read to your own organization?	YES	NO
How differences between the research sites and your jurisdiction have been addressed?	YES	NO

Diagnosing if you need to revisit the building foundation stage

Use this worksheet to see how well you built the foundation for the initiative and whether you need to revisit this stage in the implementation process.

Did You Describe…		
Identify the hard and soft skills necessary to use the initiative – including those from previous trainings?	YES	NO
Assess the current skill set of staff and identify areas of improvement needed to use the initiative?	YES	NO
Identify physical materials needed?	YES	NO
Write all applicable protocols necessary to use the initiative (both internally and with other organizations)?	YES	NO
Define terms that will be partnered with standard operating procedures?	YES	NO
Consider external networks and how they may impact your organization's ability to use the initiative?	YES	NO

Diagnosing if you need to revisit the setting expectations stage

Use this worksheet to see how well you set expectations to the staff and the agency for the initiative and whether you need to revisit this stage in the implementation process.

Did You Describe...		
Identify and articulate office and individual level expectations?	YES	NO
Connect expectations to both the initiative and to the office and organizational goals?	YES	NO
Identify and articulate office and individual level performance measures?	YES	NO
Connect performance measures to the guiding principles?	YES	NO
Connect performance measures to office and organizational goals?	YES	NO
Craft a timeline to assess performance measures that are timed with the initiatives design and processes that already exist in the office/organization?	YES	NO

Measuring Outcome Measures: Appropriateness

Use this worksheet to assess whether your agency/staff feel the initiative is appropriate to address the problem.

The Questions Staff Should Answer	Yes	No	If No, Stage to Revisit
I believe the problem identified by the organization is a problem.			DK
I believe the problem identified by the organization is a problem at the local level and affects my office.			DK
I believe it is part of the organization's role to solve the problem identified by the organization.			SE
I believe my office should contribute to solving this problem			SE
I believe the proposed solution is the right way to handle the problem.			DK
I believe it's part of my job to help solve the problem identified by the organization by using the initiative.			SE
I believe the initiative chosen to solve the problem is consistent with the expectations the organization has of me.			SE
I believe my performance measures for using this initiative accurately reflect how I should be evaluated.			SE
I believe my performance measures reflect office and organizational goals.			SE

Measuring Outcome Measures: Acceptability

Use this worksheet to assess staff perception the initiative is easy to understand.

The Questions Staff Should Answer	Yes	No	If No, Stage to Revisit
I understand how the guiding principles are connected to the research.			DK
I understand the flow of how to use the initiative.			DK/ BF
I understand the terms and jargon used as part of the initiative.			DK
I understand how to communicate these terms effectively to use the initiative.			BF
I understand which tools are used as part of the initiative.			BF
I believe I could teach someone how to use the initiative.			DK/ BF
I understand how performance measures reflect the guiding principles of the initiative.			SE
I believe the timeline associated with performance evaluations is compatible with how the initiative works.			BF/ SE
I believe the timeline associated with performance evaluations is compatible with local office norms and processes already in place.			BF/ SE

Measuring Outcome Measures: Feasibility

Use this worksheet to assess staff perception the initiative is logistically practical for use in their daily activities.

The Questions Staff Should Answer	Yes	No	If No, Stage to Revisit
I understand how our jurisdiction compares to the research sites' jurisdiction.			DK
I understand how my organization accounted for these differences			DK
I understand the resources, protocols and skills necessary to use the initiative.			BF
I believe my organization acquired the necessary resources to use the initiative.			BF
I believe my organization wrote the necessary protocols to use the initiative.			BF
I believe staff were trained on the necessary skills to use the initiative.			BF
I believe the necessary processes are in place to collaborate with external partners involved in the use of the initiative.			BF
I believe my office maintains the resources/processes necessary to evaluate my performance based upon the guiding principles.			BF/SE

Measuring Outcome Measures: Adoptability

Use this worksheet to assess staff willingness to use the initiative in daily practice.

The Questions Staff Should Answer	Yes	No	If No, Stage to Revisit
I believe the research regarding this initiative, specifically how the research describes the effectiveness of the initiative.			DK
I believe using research-based practices detracts from my job.			SE
I believe it would take very strong incentives for me to use this initiative.			SE
I believe the work we do may not be "research-based," but works just as well, or better.			DK/ SE
I am willing to use this initiative at least once.			SE
I am willing to incorporate this initiative into my daily routines.			SE

Diagnosing if you need to revisit the alignment stage

Use this worksheet to see how well you aligned the initiative at the office level

Did you…	Yes	No	If No, You may have an issues with
Identify current initiatives used by staff and stakeholders and draw connections between the new initiative and the existing practices?			Acceptability Feasibility Adoptability Fidelity Pervasiveness
Provide concrete examples of how existing practices can be used together?			Acceptability Adoptability
Implement policies and protocols necessary for staff and stakeholders to use the new initiative?			Feasibility Adoptability Fidelity Pervasiveness

Diagnosing if you need to revisit the renovation and fit stage

Use this worksheet to see if there are any barriers with the change process at the office level.

Did you…	Yes	No	If No, You may have an issues with
Identify informal local norms operating as implementation barriers?			Feasibility Adoptability Fidelity Pervasiveness
Identify formal organizational processes operating as implementation barriers?			Feasibility Adoptability Fidelity Pervasiveness
Identify informal/formal interagency processes operating as implementation barriers (when applicable)?			Feasibility Adoptability Fidelity Pervasiveness
Include leaders and frontline supervisors and staff in brainstorming sessions to isolate and diffuse barriers?			Acceptability Feasibility Adoptability Fidelity Pervasiveness
Compare the selected renovation(s) to the core components of the research?			Appropriateness Acceptability Feasibility Adoptability Fidelity Pervasiveness
Implement renovations within the local office, across the organization and with external partners, as necessary?			Adoptability Fidelity Pervasiveness

Diagnosing if you need to revisit the sustainability stage

Use this worksheet to see how well you aligned the initiative at the office level

Did you…	Yes	No	If No, You may have an issues with
Describe the process of doing 'it' right and include features of each of these smaller tasks			Acceptability Fidelity
Create measures for each of these smaller tasks?			Fidelity
Establish a process for repeatedly measuring these small tasks?			Feasibility Fidelity Pervasiveness
Implement the measurement process?			Fidelity
Develop and measure relevant conditions under which the initiative is used in full or part?			Pervasiveness
Implement an auditing process reviewing staff evaluations of other staff?			Fidelity

WANT TO KNOW MORE?

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