Testing and piloting a new program or intervention helps agencies identify possible roadblocks, assess the target population's reactions, and make needed adjustments before large-scale implementation. Staging (introducing interventions incrementally) enables agencies to target resources strategically and learn from earlier results. These processes create feedback loops to make improvements and lay a foundation for successful and sustainable implementation.

This brief can help child welfare agency leaders, managers, and implementation teams test, pilot, and stage an intervention to address an identified problem. The brief begins with background information and definitions and then describes a three-part, step-by-step process.

Change and Implementation in Practice Series
Child welfare agencies continually undertake efforts to implement new programs and practices to produce better outcomes for children, youth, and families. Effectively implementing new approaches and achieving sustainable change can be challenging. The Capacity Building Center for States (the Center) has developed the Change and Implementation in Practice series to support agencies in applying a structured approach to implementation and overcoming common challenges.

Briefs in this series provide user-friendly guidance on implementation concepts to strengthen child welfare systems' ability to implement change. These “how to” guides explain key steps in the Child Welfare Capacity Building Collaborative's (the Collaborative's) Change and Implementation Process, a synthesis of several implementation and continuous quality improvement (CQI) frameworks and tools (Collaborative, 2015). The Change and Implementation Process describes overlapping phases and steps that guide organizations from problem exploration through sustainable implementation. While the briefs align with the Collaborative's process, they can be used with similar implementation frameworks.

This brief discusses intervention testing, piloting, and staging. At this point in the change and implementation process, your agency should have:

- A team to guide the change and implementation process
- A clearly identified and researched problem and an analysis of the root cause(s) of the problem
- A theory of change that reflects a clear pathway from the problem to a desired outcome
- An appropriate intervention to address the root cause(s) of the problem
- A completed readiness assessment and strategies to address readiness gaps and build capacity

If your team has not achieved these milestones yet, review related briefs on these topics, available at https://capacity.childwelfare.gov/states/focus-areas/cqi/change-implementation/.

Plans, activities, and results of testing, piloting, and staging your intervention will both inform and be informed by plans and activities described in two companion briefs, “Change and Implementation in Practice: Implementation Planning and Capacity Building” and “Change and Implementation in Practice: Monitoring, Evaluating, and Applying Findings.”

1 This series uses the word “problem” to refer to what needs to change to meet agency priorities. Problems may reflect identified needs or opportunities to improve agency functioning or outcomes.
Key Considerations and Definitions

Testing and staging help agencies make improvements to the implementation process or the intervention itself and allocate resources strategically, which ultimately improves the likelihood of success. Before delving into “how to,” this brief begins with a few key questions to build a shared understanding of definitions and key concepts.

What Are Some Different Types of Testing and Why Are They Important?

Teams may benefit from one or more ways of introducing and testing an intervention and its implementation—including usability testing and pilot testing.

Usability Testing

Usability testing is a process that helps teams quickly try out critical intervention elements, assess their functionality, and then refine or clarify, as needed.

The term “usability testing” comes from business practices of testing new technology with customers. Similarly, implementation teams can test interventions or implementation processes or tools (e.g., assessment processes or data collection forms) with small groups of individuals who deliver services (e.g., caseworkers, contracted service providers) or those who receive them (e.g., foster parents, youth in care).

Usability testing follows a “Plan, Do, Study, Act” cycle in which teams quickly prepare, implement, monitor, and gather feedback about a process or tool and then make corrections (see https://deming.org/explore/p-d-s-a). The subsequent improved version of the process or tool may then be reexamined through repeated cycles.

Usability testing may occur before or during a pilot test (early implementation). It provides a valuable opportunity to analyze and improve procedures and sets a foundation for CQI (Akin, Bryson, Testa, Blase, McDonald, & Melz, 2013).

Specific steps for conducting usability testing are described in “How to Plan for and Conduct Intervention Testing, Piloting, and Staging, Part 1.”

Pilot Testing

Pilot testing, or piloting, is a trial run of the implementation of a whole intervention (or significant parts of it) on a small scale (e.g., a single county or an agency division). Implementation science supports trying an intervention on a small scale to identify problems and work out issues before launching on a larger scale (Durlak, 2013). Piloting informs decisions on whether implementation of the intervention is the right course and, if so, how implementation should occur.

Definitions of Key Terms

- **Problem** – what needs to change to meet agency priorities. Problems may reflect identified needs or opportunities for building on successes to improve agency functioning or outcomes.
- **Intervention** – any specific practice, service, policy, strategy, program, practice model, or combination that is clearly defined, operationalized, and distinguishable.
- **Implementation** – a specified set of activities designed to put into practice an activity, program, or intervention.
- **Implementation supports** – key aspects of capacity and organizational infrastructure associated with successful implementation (also referred to as “implementation drivers”).
- **Implementation plan** – a document that describes key steps and activities for putting an intervention in place.
- **Usability testing** – process of trying out processes or tools with small groups of potential users to assess functionality and refine as needed.
- **Pilot testing** – a trial run of the implementation of an intervention on a small scale to make implementation decisions and adjustments before larger-scale implementation.
- **Staging** – sequencing the introduction of one or more interventions (or selected intervention components) to multiple locations or groups over time.
- **Scaling up** – increasing the number of sites or locations implementing a successfully tested intervention to benefit a larger population (also referred to as “expansion”).
- **Readiness for implementation** – the extent to which an organization is willing and able to put in place and sustain a selected intervention.
- **Fidelity** – the degree to which programs are implemented as intended by program developers and core components are maintained.
Piloting serves several interrelated purposes, including that it (Office of Adolescent Health, n.d.):

- Allows teams to identify obstacles and make adjustments to the intervention or the implementation plan before large-scale implementation
- Provides an opportunity to gauge the target population’s reaction to the intervention
- Supports teams in making decisions about allocating time and resources
- Prepares teams for evaluating and measuring results

In addition, a pilot can be used to generate support and buy-in for the intervention by demonstrating early successes in making progress toward desired outcomes.

While similar concepts, usability testing and pilot testing differ in focus and scope (see exhibit 1).

### Exhibit 1. Usability Testing and Pilot Testing Comparison

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Usability Testing</th>
<th>Pilot Testing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus</td>
<td>A particular aspect of an intervention or implementation process, such as a tool or procedure.</td>
<td>Implementation of the entire intervention (or core components) as designed, sometimes under carefully chosen conditions.</td>
</tr>
<tr>
<td>Questions answered</td>
<td>Does the procedure work? Does it make sense to staff? Is it used as expected?</td>
<td>Is implementation successful? What effect did the pilot have on selected short-term outcomes or interim milestones? What conditions and supports are needed for effective implementation?</td>
</tr>
<tr>
<td>Features</td>
<td>Typically quick and targeted.</td>
<td>More comprehensive; may take a longer time to complete.</td>
</tr>
</tbody>
</table>

Specific steps for piloting are described in the section, “How to Plan for and Conduct Intervention Testing, Piloting, and Staging, Part 2.”

### What Approaches Do Teams Take to Roll Out, Stage, and Scale Up an Intervention?

After usability and/or pilot testing, teams may take different approaches to implementing their intervention. “Scaling up” refers to increasing the number of sites, locations, or units implementing a successfully tested intervention in a deliberate, sustainable way. By scaling up, the intervention can benefit a larger population.

Change is most effectively achieved when it occurs in manageable pieces. Often, teams will stage their interventions incrementally over time. Staging may reflect strategically rolling out an intervention to identified geographic areas (e.g., by county, region, or cluster). Or, staging may reflect rolling out different intervention components gradually over a specified period of time (e.g., introducing family group meetings first and then changes to permanency reviews). Staging allows for strategically allocating resources, gradually adjusting to new ways of doing things, and learning along the way.

In some cases, teams chose a statewide launch rather than staging incrementally. This may occur when states are working under tight mandated timeframes or with interventions of limited scope.

### Will All Agencies Implementing a New Intervention Go Through All Forms of Testing and Scaling Up?

Exhibit 2 presents a sequence of processes supported by implementation science. As shown on the left side, prior change and implementation tasks—including intervention selection and design/adaptation, readiness assessment, implementation planning, and capacity building—inform the subsequent testing and scaling up processes. Ideally, agencies will move from adaptation or design of an intervention to usability testing and then piloting before beginning to stage and scale up more widely. Such testing provides important opportunities to make needed changes and address potential obstacles that otherwise might hamper implementation and drain limited resources.

---

2 These tasks are described in other Change and Implementation in Practice briefs found at https://capacity.childwelfare.gov/states/focus-areas/cqi/change-implementation/
The most appropriate entry point into the testing and scaling up process, however, may depend on different factors, including the purpose of the change process and the existing evidence base for the intervention (Akin et al., 2013). For example:

- If an intervention is newly designed or does not already have a strong evidence base, then usability testing is the logical starting place.
- If an intervention is well supported but adapted for a different population or context, then usability testing and/or pilot testing is recommended.
- If an intervention is well supported by research evidence and is being replicated with a similar population in a similar environment, then the agency may consider pilot testing and then staging/scaling up or moving directly into staging the intervention.

Some circumstances—federal, state, or legislative mandates, perceptions of low risk, or tight timeframes—may prompt decisions to move more quickly from identification of an intervention to launching on a large scale.

### Exhibit 2. Overview of Testing, Piloting, Staging, and Evaluation

<table>
<thead>
<tr>
<th>Prior Change and Implementation Tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Intervention selection/adaptation/design</td>
</tr>
<tr>
<td>• Readiness assessment</td>
</tr>
<tr>
<td>• Implementation planning</td>
</tr>
<tr>
<td>• Capacity building</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Testing, Piloting, and Staging</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Usability Testing</strong></td>
</tr>
<tr>
<td>• Quick tests of functionality</td>
</tr>
<tr>
<td>• Tools, processes, activities</td>
</tr>
<tr>
<td>• Leads to rapid fixes and improvements</td>
</tr>
<tr>
<td><strong>Piloting</strong></td>
</tr>
<tr>
<td>• Trial run of implementation on a small scale</td>
</tr>
<tr>
<td>• Complete intervention or significant components</td>
</tr>
<tr>
<td>• Informs implementation decisions and modifications to intervention or implementation</td>
</tr>
<tr>
<td><strong>Staging and Scaling Up</strong></td>
</tr>
<tr>
<td>• Gradual roll out</td>
</tr>
<tr>
<td>• Full intervention</td>
</tr>
<tr>
<td>• Increases and expands the intervention to benefit a larger population</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Monitoring, Evaluating, and Applying Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fidelity Assessment</strong></td>
</tr>
<tr>
<td><strong>Formative Evaluation</strong></td>
</tr>
<tr>
<td><strong>Summative Evaluation</strong></td>
</tr>
</tbody>
</table>

### How Do Testing, Piloting, and Staging Relate to Evaluation?

Usability testing, pilot testing, and evaluation are all parts of important, data-driven feedback loops. Testing helps agencies make needed improvements, prepare for staging the intervention on a larger scale, and conduct evaluations.

The purpose of a **formative evaluation** is to use information and feedback to guide improvements to the intervention and the implementation process. Before an intervention is fully implemented, a formative evaluation helps ensure that a program and its processes are feasible, explores whether implementation occurs as intended, and assesses whether intervention outputs and short-term outcomes appear to be on track. Usability testing and piloting can contribute to a formative evaluation. For example, usability testing may improve evaluation data collection protocols. Additionally, a pilot test may reveal barriers that prevent delivery of program services to the target population as planned. A formative evaluation can explore those barriers and proposed solutions to address them before staging the intervention on a larger scale.
The purpose of a **summative evaluation** is to assess the effectiveness of the intervention in achieving desired outcomes. Usability testing and piloting improve the likelihood of the intervention's success and prepare the intervention for a summative evaluation. While testing leads to adjustments and refinement, at the point of beginning a summative evaluation, the intervention should be “stable” (i.e., teams are no longer making adjustments to the intervention's core components). This is important so that the evaluation can reach conclusions about the intervention's impact. Ongoing program changes can make it difficult to accurately identify and describe exactly what was effective or not. Once the evaluation of a stable intervention is complete, findings may inform later decisions about sustainability of the intervention and continuous improvement.

**Fidelity assessment** examines whether the intervention's core components are delivered as intended. Fidelity assessment can strengthen implementation as a standalone activity, contribute to formative and summative evaluations, or occur as part of ongoing CQI efforts.

While addressing many interrelated concepts, a separate brief in this series covers monitoring, evaluating, and applying findings (see [https://capacity.childwelfare.gov/states/focus-areas/cqi/change-implementation/monitoring-evaluating/](https://capacity.childwelfare.gov/states/focus-areas/cqi/change-implementation/monitoring-evaluating/)).
How to Plan for and Conduct Intervention Testing, Piloting, and Staging

Exhibit 3 shows the essential functions¹ (tasks) recommended for intervention testing, piloting, and staging, divided in three parts.

Exhibit 3. Essential Functions

| PART 1 Usability Testing | 1. Create usability testing plan  
|                         | 2. Conduct usability testing, analyze results, and make adjustments |
|                        | 3. Determine approach and develop plan  
|                        | 4. Identify and recruit sites  
|                        | 5. Conduct pilot  
|                        | 6. Assess results, review progress, and make adjustments |
| PART 2 Piloting        | 7. Develop/refine plans for staging the intervention and scaling up  
|                        | 8. Identify sites and sequencing  
|                        | 9. Build capacity and scale up  
|                        | 10. Review progress and benchmarks |
| PART 3 Staging and Scaling Up |

While the functions are presented as distinct steps that occur in a linear fashion, in practice, some steps may overlap, and teams may need to loop back and forth between functions as they test, pilot, and stage. Not all teams will complete all three parts of the process if agency circumstances or needs prompt decisions to move forward more quickly (see earlier section, “Will All Agencies Implementing a New Intervention Go Through All Forms of Testing and Scaling Up?”).

Teams are encouraged to integrate their plans for usability testing, piloting, and staging and scaling up into their implementation plan. An implementation plan is a document that describes key steps and activities that are needed before and during implementation of a selected intervention in order to set the groundwork for achieving desired outcomes (see the Center’s “Change and Implementation in Practice: Implementation Planning and Capacity Building” brief).

The following sections describe each essential function in three parts.

¹ In this series, essential functions are tasks that lead to achieving key milestones in a change and implementation process.
Part 1: Usability Testing

Usability testing allows teams to try out critical intervention components and implementation procedures and see how they work. It may be particularly helpful to test tools, forms, and processes that are being used or adapted for the first time so that they can be refined and finalized, as needed. Teams may apply usability testing to:

- Intervention core components or activities (e.g., assessment practices)
- Implementation activities, particularly new ways of doing things (e.g., fidelity assessment tools)
- Implementation supports (e.g., new coaching guidelines)
- Data collection processes (e.g., completing data entry forms)

As an initial test, usability testing provides insights into user experiences with the process or tool and whether modifications are needed. This early testing can pave the way for implementation and later evaluation. The following sections describe the processes of creating a usability testing plan and then carrying it out.

1. Create Usability Testing Plan

The usability testing plan sets a course to learn, detect challenges, revise, and retest improvements.

To guide usability testing, teams should create plans that describe the following:

- Testing purpose and goals (what the team hopes to get out of testing)
- The focus and scope of the test (what the team is testing, e.g., one curriculum module)
- Testing approach (how the process or tool will be tested)
- Testing participants (who and how many participants will test the process or tool or how many cases will be reviewed and how they will be selected)
- Data and measures to be assessed
  - Quantitative data (e.g., counts of parents contacted)
  - Qualitative data (e.g., caseworker responses to prepared questions about their experience)
- Data collection approaches (e.g., focus groups, surveys, case review)
- Criteria for revision of the process or activity
- Individuals or groups responsible for testing, reporting results, collecting data, making decisions, and acting on the results
- Timeframes and schedules

Questions to Consider

- What aspects of the intervention and/or implementation process will benefit from usability testing?
- What processes or tools are being introduced for the first time or are being used with new target populations?
- What is the purpose of the usability test?
- What is the scope of the test?
- Who will serve as testers?
- What data will be collected and how?
- What are the criteria for revising the process, tool, or activity?
- Are multiple cycles of testing anticipated?
- Who is responsible for conducting the test?
- Who is responsible for acting on the results?
- What are the expected timeframes?

Review a sample usability testing plan:
2. Conduct Usability Testing, Analyze Results, and Make Adjustments

As noted earlier, usability testing reflects a “plan, do, study, act” cycle. Based on the plan, the team then (PII-TTAP, 2016):

◆ Puts the process, activity, or tool into place (“do”)
◆ Gathers data and feedback about the process or tool and examines results (“study”)
◆ Decides whether and where to make improvements (“act”)

Depending on the changes needed, more than one round of usability testing may be beneficial. Multiple rounds of testing improved processes can address a greater number of issues and allow for additional adjustments. Teams may continue with usability testing until they believe that they have found and resolved most major problems and they have met the criteria set in their plan. Exhibit 4 presents additional tips for usability testing.

Exhibit 4. Usability Testing Tips

◆ Remember that the goal is to develop and improve processes, NOT to create perfect processes (National Implementation Research Network [NIRN], n.d.).
◆ Choose a limited number of elements to test that are clearly articulated and important to obtaining good outcomes.
◆ Recruit participants that reflect the ultimate users of the process or tool.
◆ Offer participants similar conditions to the real use.
◆ Identify data and measures that can be collected and analyzed quickly.
◆ Use feedback to inform improvements, work out the “bugs,” and test again as needed.

For more information and tools to support teams in conducting usability testing, see:

- PII-TTAP’s “Section 8: Initial Implementation and Testing,” available through CapLEARN (registration required) at https://learn.childwelfare.gov/

Questions to Consider

◆ What are participants’ experiences using the process or tool?
◆ Is the process or tool implemented as expected? Are results as expected?
◆ Do feedback and data suggest that the process or tool should be adjusted?
◆ Is there confidence in the results of the usability test?
◆ What resources are needed to make improvements?
◆ Is further testing needed?
Example: Usability Testing in KIPP Project

The Kansas Intensive Permanency Project (KIPP) turned to usability testing to examine selected intervention processes and data collection procedures. As a grantee in the Children’s Bureau’s Permanency Innovations Initiative (PII), the Kansas public-private partnership identified an evidence-based parenting program (Parent Management Training—Oregon) for use in a new context (i.e., with families of children with serious emotional and behavioral problems who are in foster care). Usability testing helped the partnership explore functionality of processes and procedures in this new environment.

The usability test focused on three questions:
1. Could KIPP implement new practices in a timely manner to intervene early in the life of a case?
2. Could KIPP effectively engage parents of children recently removed from their custody and placed in foster care to participate in new in-home services?
3. Could KIPP obtain parental consent for a randomized evaluation of the intervention?

The answers to these questions were central to KIPP’s project and evaluation success.

KIPP’s implementation team, supported by technical assistance providers and evaluators, conducted usability testing following these steps:

- **Developed a plan.** The usability plan identified three processes to be tested, related measures, and usability targets. Measures included:
  - Timeliness – the percentage of assessments of child functioning that workers completed by day 7 of the child’s foster care episode
  - Engagement – the percentage of parents that participated in video recordings of the KIPP intervention
  - Consent – the extent to which the agency gained signed consent from parents randomly assigned to participate in the in-home parent training program or a comparison group

  The team set targets of 70 percent for each measure.

- **Conducted usability testing and analyzed results.** The KIPP team collected data on randomly selected cases and analyzed frequencies and percentages for each measure.

- **Made adjustments.** The usability assessment demonstrated which procedures were feasible and which ones needed more attention; seven of nine tested processes met or exceeded the 70 percent target and two fell short. For example, results indicated that timeframes for initial assessments of child functioning needed more than 7 days. So, the project leaders adjusted the measure to 14 days for further monitoring.

The KIPP team found usability testing to be a valuable opportunity to analyze and improve intervention and evaluation processes before wide-scale implementation.

Source: Akin et al., 2013.
For more information on KIPP, see [https://www.acf.hhs.gov/cb/resource/pii-kipp](https://www.acf.hhs.gov/cb/resource/pii-kipp)
Part 2: Piloting

Piloting helps agencies try out a program or practice with a small subgroup of workers and families to inform decisions about expanding, adjusting, or discontinuing its implementation. By using lessons learned from the trial run to make improvements to the intervention or the implementation approach, agencies improve their chances for sustainable success. Four essential functions that lead teams from developing a plan to making decisions and adjustments are described below.

3. Determine Approach and Develop Plan

As with most change and implementation steps, thinking through the best approach and developing a plan are the starting points.

Determine an Approach

Teams need to first decide whether they can commit to conducting a pilot. Piloting is particularly important when one or several of the following statements are true:

- The intervention is new or does not have a strong evidence base
- The intervention has been adapted for a new target population or setting
- The agency has concerns about the fit of the intervention with the child welfare system and its current culture
- The agency is unsure about its readiness for the intervention
- The scope of the ultimate implementation is large and requires extensive resources
- The impact of the intervention could be far reaching
- The price of failure is high

Not all interventions will undergo a pilot test. When working with an evidence-supported intervention with a strong research base, a limited implementation scope, and/or tight timeframes, teams may choose to move more directly into staging and scaling up (see Part 3).

Develop a Plan

Teams should develop a clear plan for pilot testing. The plan should be written so as to:

- Build on the intervention’s existing research base and implementation history
- Reflect the agency’s experiences with implementation of other interventions (e.g., if an agency has had trouble with a certain aspect of implementation, such as engaging community partner support, then the pilot plan should address ways to test new engagement approaches during the pilot)
- Promote flexibility to accommodate learning over time (i.e., the pilot test should allow for quick adjustments in implementation, as appropriate)
- Inform decisions about scaling up and spreading the intervention

To be successful, the piloted intervention should be doable and manageable. Selected pilot sites should have sufficient capacity to implement the intervention or capacity should be developed as part of the pilot process. Plans should reflect engagement of site staff and key stakeholders and anticipation of potential roadblocks.

Questions to Consider

When determining an approach:

- Is there a strong evidence base for the selected intervention? Will it be heavily adapted? Is it a new design?
- What are the potential risks of moving directly into staging?
- What priorities, as well as internal and external factors, affect the implementation approach and timing?
- Is pilot testing preferable to moving directly to incremental staging?

When developing a plan:

- What is the purpose of the pilot?
- What will be piloted?
- How will the team select sites?
- Are potential sites already engaged in the change and implementation process?
- What structures will be put in place to support staff during the pilot period? Have potential barriers been identified and removed?
- What is the anticipated timeframe? Is it realistic?
- What are appropriate methods and measures to assess implementation processes during the pilot? What measures can explore short-term outcomes?
- How can lessons learned be shared?
In the pilot plan, teams answer the questions: What is being tested? Why? Where? How? and When? Exhibit 5 presents typical plan elements.4

**Exhibit 5. Pilot Plan Elements**

- Purpose and goals
- Scope of the intervention to be tested
- Pilot sites (criteria, selection process)
- Key activities
- Data collection and evaluation of measures and processes (and costs, as appropriate)
- Available and needed resources and capacity building supports
- Communication of pilot plan, progress, results, next steps, and lessons learned
- Expected challenges and strategies to address
- Timeframes, including clear start and end dates for the pilot
- Roles and responsibilities

Plans should address available resources, including technical assistance and capacity building for participating sites. Supports may include funding as well as training, materials, tools, access to coaches or experts, and communities of practice among pilot sites. These supports may serve as incentives for participation among potential sites. Teams are cautioned, however, that resources available to pilot sites should be sustainable and realistic for wide-scale implementation.

Before finalizing the pilot plan, teams should discuss the plan with leadership and other stakeholders.

### 4. Identify and Recruit Sites

Decisions regarding pilot sites will reflect various factors, including the pilot’s purpose, the data and evaluation plans, potential site characteristics, and site readiness.

**Develop Selection Criteria and Processes**

Teams need to think critically about site selection and recruitment. The following are key considerations (National Center on Response to Intervention, 2012):

- Desired number of pilot sites, to reflect:
  - The number of sites needed to achieve pilot goals
  - The number of sites that will adequately represent the target population and its diversity (e.g., one site per geographic region or a rural and urban setting)
  - The number of sites that can be adequately supported by available resources
- Appropriate selection criteria, which may include such factors as:
  - Site willingness to pilot and staff motivation
  - Strong leadership and local implementation team
  - Sufficient organizational capacity to implement the selected intervention and participate in data collection (or the potential to build such capacity)
  - Agreement with pilot site requirements
- Processes for selecting sites, which may reflect:
  - Open applications, nominations, or team identification based on selection criteria

4 The pilot plan may be integrated into the team’s larger implementation plan, as discussed in the “Change and Implementation in Practice: Implementation Planning and Capacity Building” brief.
Communicate Selection Processes and Site Expectations

Clear communication with potential and selected sites is critical during the recruitment period and over the course of the pilot test. Teams should identify and clearly communicate the benefits of serving as a pilot site, as well as the costs and potential challenges.

In addition, teams should clearly outline their expectations for pilot sites as they relate to expected activities, responsibilities, available supports, and connections to other initiatives that may be underway. It is particularly important that pilot sites understand that pilot tests are for a specified period with a definitive end. When a pilot ends and there is a decision to move forward with large-scale implementation, the pilot sites will need to be integrated into the staging plans for the finalized intervention.

See an example of a statement of site expectations from the National Quality Implementation Center Adoption & Guardianship Support and Preservation at https://qic-ag.org/wp-content/uploads/2017/05/SiteExpectationsMar6.pdf

For more information on piloting and pilot site selection, see:


5. Conduct Pilot

Next, teams will implement the pilot according to their plan.

Launch Pilot

As teams prepare to launch their pilot, startup activities may include:

◆ Preparation of implementation processes
◆ Development of data collection tools
◆ Meetings to introduce sites to activities and supports
◆ Design and delivery of procedures, tools, and training and coaching model
◆ Development of communication channels for sites to learn from each other

Exhibit 6 presents additional tips for pilot testing based on experiences in the social services and health fields (including Carpenter, 2010; Hussey et al., 2013; Office of Adolescent Health, n.d.; World Health Organization, 2011).

Exhibit 6. Pilot Testing Tips

◆ Create a safe learning environment.
◆ Start with the end in mind—that is, take steps to design the pilot in ways that will inform and enhance future large-scale implementation.
◆ Engage stakeholders in planning and develop consensus on expectations.
◆ Keep the intervention and pilot test manageable.
◆ Clearly define roles and responsibilities in the pilot test.
◆ Conduct the pilot in the type of settings where it will be scaled up.
◆ Provide similar resources to the pilot sites that you expect to offer later sites to test real-world conditions.
◆ Have a system in place to capture, monitor, and assess feedback and other data.
◆ Fine tune over time rather than waiting until the end of the pilot.
◆ Make minor adjustments as needed, but remember that early findings may be preliminary and don’t prematurely overhaul an intervention.
◆ Have clear end dates—a pilot should not be everlasting.
◆ Remember that pilot testing is not the same as initial implementation; pilot sites will need to be revisited once staging and full implementation begins.

Questions to Consider

◆ What do sites need to begin the pilot and to continue effectively?
◆ What infrastructure supports are needed (training, coaching policy changes, tools, other)?
◆ How will implementation be monitored?
◆ What data will be collected and how?
◆ How will pilot data be analyzed and reported?
Collect Data

As part of the planning process, teams should identify site data to be collected, how, by whom, and when. The ability to participate in data collection should be considered in the selection criteria for pilot sites.

Teams should find “measures that matter” to assess pilot results and define them consistently for use across sites (Hussey et al., 2013). Data should provide insight into what's working and what's not and under what circumstances. This may include both quantitative data to track activities and outcomes, as well as qualitative data from provider or participant feedback.

Depending on its purpose, the pilot may collect data to monitor and assess one or more of the following:

- Implementation outputs (e.g., number of staff trained, number and types of services provided)
- The degree to which the intervention was delivered as intended (fidelity)
- Feedback from staff, service recipients, or other stakeholders on intervention components or implementation activities and supports
- The effectiveness of implementation processes and implications for scaling up
- The impact of the pilot on selected short-term outcomes or interim milestones

Creating a system and tools to collect and monitor data is an important team activity early in the pilot. Supporting sites with data collection and capturing and assessing that data will be ongoing.

6. Assess Results, Review Progress, and Make Adjustments

While assessing results, reviewing progress, and making adjustments are described as the final essential function for piloting, these activities can be ongoing throughout the pilot period and revisited at the end.

Assess Results

Based on the data collected and analyzed, teams should assess results and use the findings to inform recommendations on whether to move forward with the intervention and how.

In particular, teams will want to pay attention to findings related to:

- The ability of pilot sites to meet expectations and achieve their objectives
- What worked and should be continued
- What didn't work and under what conditions
- Adaptations that may be needed to the intervention or the implementation plan for wide-scale implementation
- Current or additional supports or capacity building that may be needed for scaling up (e.g., training, coaching, changes to practice profiles, information management system design changes, additional funding)
- Benefits or incentives that can be leveraged to promote buy-in from new implementation sites

Questions to Consider

- What indicators suggest that piloting is going as planned?
- Have the piloting objectives been met?
- What do data and findings suggest about whether or not to stage and scale up the intervention?
- What do data and findings suggest about needed modifications before staging and scaling up?
- What are the key messages for stakeholders?

Review Progress With Stakeholders

Teams should prepare and discuss summaries of key findings with leadership and other stakeholders. They will want to anticipate and address decision-makers’ critical questions to inform decisions about whether and how to proceed with staging and scaling up the intervention. While small-scale pilot results on short-term outcomes should be viewed as preliminary, they can be revealing.

In addition, teams should discuss progress and findings with stakeholders, including staff, community members, and service partners. It is important to keep pilot site participants and future sites informed of pilot findings. Be sure to share successes to help strengthen motivation, engagement, and momentum.

Questions to Consider: Change and Implementation in Practice: Intervention Testing, Piloting, and Staging
Finally, teams may want to discuss feedback and ideas for adaptation with program developers or other subject matter experts. These experts may be able to offer additional insights into making appropriate changes and what has been effective elsewhere. They also can help teams ensure that adaptations still maintain the integrity of an intervention's core components. When a team makes adjustments to an evidence-supported intervention, they may risk not maintaining fidelity and not achieving expected outcomes.

**Make Adjustments and Plan Next Steps**

Based on pilot findings and input from decision-makers, other stakeholders, and program experts, teams will identify:

- Potential changes to implementation strategies
- Recommended adjustments to the intervention's core components or related activities (as appropriate while preserving integrity and effectiveness)
- New initiative champions that can support implementation and promote buy-in
- Plans for staging and scaling up

At this point, teams may revisit their implementation plans and integrate related changes.6

Once the pilot has demonstrated that the intervention can work as intended and the team has made needed adjustments, teams will turn their attention to staging and scaling up the intervention on a larger scale.

---

**Example: Practice Model Pilot Test**

To strengthen implementation of a new child welfare practice model, Washington State conducted a pilot of two core components—training and coaching—prior to a statewide rollout. The three pilot sites represented small, medium, and large populations.

The implementation team held pilot planning meetings with child welfare staff at each site prior to beginning training and coaching. These meetings were used to:

- Present an overview of the pilot
- Identify office strengths and challenges
- Discuss training and coaching plans
- Introduce plans for quality assurance and evaluation
- Answer staff questions

The team also held a planning meeting shortly after the conclusion of pilot training to review feedback, evaluation findings, and next steps.

The piloting plan schedule was designed to maximize the impact of training and coaching. The plan consisted of a 7-week cycle. The first week was classroom training. Separate trainings were offered for supervisors/managers and field staff. The second, fourth, and sixth weeks were designed for workers to apply practice model principles to their day-to-day work. During the third, fifth, and seventh weeks, each worker and supervisor partnered with a practice model coach to discuss their experiences applying the practice model, get additional input, and practice skills.

As part of the pilot, supervisors and coaches used fidelity tools to assess skill application and develop individualized learning plans for staff.

During the pilot test, a partner university conducted an evaluation. The evaluation included interviews, focus groups, tests before and after training, surveys, and observations. Based on evaluation findings, the implementation team modified the training curriculum and the training and coaching processes. In addition, caseworker and supervisor assessments and tools were tested, and following the pilot, were modified and integrated into a case management system.

After a 3-month pilot period (including training and analysis of evaluation findings), the state was better prepared for launching the practice model in other locations statewide.


---

6 The team's implementation plan is discussed in the "Change and Implementation in Practice: Implementation Planning and Capacity Building" brief.
Part 3: Staging and Scaling Up

Part 3 addresses tasks and activities that support staging and scaling up a tested intervention.

7. Develop/Refine Plans for Staging the Intervention and Scaling Up

Learning from the pilot experience (if there was one), teams develop plans for staging an intervention and scaling up. This is best done using data to inform decision-making, recognizing strengths and needs, and targeting implementation supports effectively (Fisher, Maciolek, Mills, & Williams, 2016).

Consider Options

As noted earlier, teams may take different paths for rolling out and scaling up an intervention, including:

- **Staging**, which may reflect incremental introduction of the intervention by:
  - Geographic area (e.g., by regions, counties, clusters)
  - Phase (e.g., by core components or aspects of the intervention)
- **Statewide launch** of a full intervention in all locations at once

In choosing a direction, teams should take into account the intervention’s scope and complexity, related mandates and timeframes, the intervention’s implementation history and evidence base, and available capacity (including the workforce’s ability to take on new practices). Generally, teams should consider staging to effectively manage implementation and allow for gradual adjustments.

Develop a Plan to Stage and Scale Up

Staging and scaling up require thoughtful and systematic planning for how a tested intervention can be implemented on a larger scale in a sustainable way. As with usability testing and piloting, teams should develop a plan to guide the process (and integrate it into the overall implementation plan). Plans may need to be adapted over time.

Expanding implementation beyond pilot sites requires consideration and strategic choices related to the following (Boller et al., 2014):

- **Site selection and sequencing** – How many sites are expected to adopt the intervention? Which ones should begin implementing first? What is the process for expansion? Over what time period?
- **Organizational processes** – What implementation supports (protocols, training, coaching, etc.) are needed to support staging and sustain sites over time? Will experts or new partners provide assistance?
- **Capacity** – Are resources and capacity for expansion available? Are local implementation teams in place to support implementation? How will knowledge and skills be developed? Are there achievable economies in scaling up?
- **Monitoring and evaluation** – How will fidelity, processes, and outcomes be monitored and evaluated?

As teams move beyond a pilot environment, they often have to balance their desired outcomes with practical realities and constraints (World Health Organization, 2010). Plans must take into account both external factors (e.g., legislation, policies, funding availability, networks and relationships) and internal factors (e.g., readiness for change, agency culture, and staff attitudes toward the intervention) that may influence implementation (Aarons, Hurlburt, & Horwitz, 2011).

In addition, teams should recognize that new sites will experience the intervention as new even if it has been piloted (Fisher et al., 2016). As such, levels of readiness should be considered, particularly as they relate to motivation. (Do staff view the new program as addressing a pressing need? Are new practices seen as better than the existing...)

---

7 Additional information on monitoring and evaluation is presented in “Change and Implementation in Practice: Monitoring, Evaluating, and Applying Findings” at [https://capacity.childwelfare.gov/states/focus-areas/cqi/change-implementation/monitoring-evaluating/](https://capacity.childwelfare.gov/states/focus-areas/cqi/change-implementation/monitoring-evaluating/)
approach? Are they easy to understand and apply? Does the program align with agency values? Are outcomes visible?)

Representatives from the pilot site can help promote motivation in new sites by sharing experiences and success stories.

Lessons Learned in Scaling an Intervention

The experiences with staged implementation in two child welfare title IV-E waiver demonstration sites point to several lessons learned:

- Develop a strong infrastructure to support scaling up, involving staff at all levels and community partners.
- Promote consistent leadership/management commitment.
- Be very specific and detailed in presenting the overall vision and the plan for scaling up.
- Develop relationships with local site leadership and enable their voices in rollout and staging.
- Think about sustaining capacity over time and being equitable with resources for all sites beyond the pilot sites.
- Promote cross-site sharing of information, experiences, and success stories.
- Use a strong CQI process to address barriers and incorporate evaluation findings into ongoing improvements.

Source: Fisher et al., May 4, 2016 Webinar

8. Identify Sites and Sequencing

Staging and scaling up the intervention will require strategic choices about where to implement the intervention and how expansion should occur. Strategies may be relatively simple (e.g., launch the program in three regions in 6-month intervals) or more complex (e.g., stagger implementation by phases and location, so that new assessment tools are first introduced county by county and then practice changes are subsequently introduced county by county).

Successful scaling will require thinking about (World Health Organization, 2010):

- Horizontal scaling – moving into new areas
- Vertical scaling – introducing changes at different levels of the organization, such as changes in leadership functions, introduction of new policies, shifts in supervisor expectations, and new caseworker practices

Readiness is generally a key consideration in sequencing. Jurisdictions often will prioritize those sites that have sufficient capacity and motivation to stage the intervention successfully. This may require thinking about such things as the availability of resources, knowledge of new practices, leadership stability, manageability of caseloads to integrate changes, buy-in among staff and the community, and other capacity issues (see exhibit 7). While initial sites are staging the intervention, capacity may be built elsewhere (e.g., through a hiring plan or shifting staff to needed areas) so that other sites will be ready, in turn, to implement. Early implementation sites may serve as supports and models for later sites.

In addition to readiness, teams also may consider the following factors in planning how best to scale up and sequence sites:

- Target population numbers – teams may prioritize those areas where needs are greatest and the intervention can have the largest impact
- Diversity – selecting early sites that reflect the diversity of the population will support efforts to learn about implementation in different types of settings
- Availability of supports – access to training, technical assistance, and capacity building services also may be a factor in deciding how many and which sites are staged at one time

8 For more information on readiness, motivation, and related factors, see “Change and Implementation in Practice: Readiness” at https://capacity.childwelfare.gov/states/focus-areas/cqi/change-implementation/readiness/
Exhibit 7. Considerations on Organizational Capacity

While staging and scaling up an intervention, teams will find it useful to keep in mind five dimensions of organizational capacity and related considerations.

- **Resources:** Do selected sites have sufficient fiscal and staff resources in place for staging the intervention? Do program materials and guidance need to be developed and distributed?
- **Infrastructure:** What changes in infrastructure are needed to support implementation of the intervention? Does the pilot test point to needed changes in organizational structure, policies, protocols, or information management systems to support implementation? What needs exist for recruitment, selection, training, and coaching systems?
- **Knowledge and skills:** Do selected sites have staff with necessary knowledge and skills for implementation? Do recruitment, training, and coaching plans adequately support knowledge and skill building?
- **Culture and climate:** Do local leaders and staff support the intervention and its implementation? Do the agency culture and prevailing attitudes support new practices? Are the existing climate and staff morale conducive to change?
- **Engagement and partnership:** Are child welfare system partners and community stakeholders engaged in planning and staging the intervention?

For more information on dimensions of organizational capacity, see the Center for States’ online guide at https://capacity.childwelfare.gov/states/focus-areas/cqi/organizational-capacity-guide/

9. Build Capacity and Scale Up

At this point, the agency is actively engaged in staging the intervention to new locations or populations, while the team continues to monitor, offer supports, and address challenges. Successful scaling up requires building capacity and developing implementation supports at multiple levels to foster high quality implementation (Fixsen, Blase, Horner, Sims, & Sugai, 2013). This may involve activities such as:

- Developing or revising policies and procedures
- Recruiting or reassigning staff
- Designing and delivering training, coaching, and supervisory guidelines to build the knowledge and skills needed for the intervention and support their application in practice
- Introducing practice profiles and performance indicators
- Modifying data systems to collect relevant data
- Forging and strengthening partnerships for service delivery
- Developing communication channels to keep leadership and staff up to date on changes and garner ongoing support
- Ensuring quality and fidelity to program models

In addition, teams should pay close attention to fostering a culture and climate that is favorable to the new intervention. This may include promoting a shared understanding of the vision and benefits of the new intervention and its advantages over current practices, reinforcing how the new intervention fits with other agency programs and initiatives, and making sure that it seems achievable for those responsible for carrying it out. Engaging staff at all levels as well as target population members in implementation planning and decision-making can also help promote buy in and motivation.

Teams must consider differences in local context and needs across sites and tailor capacity building accordingly. As capacity is built, new needs may emerge as implementation and change set in.
As part of scaling up, teams must work to shift ownership of the intervention to implementing sites. This may mean developing local implementation teams to direct and manage implementation. Relationship building among the initial implementation team, local leaders, program developers, evaluators, and other key players will be critical for a strong, holistic approach.

Ultimately, to sustain a scaled-up intervention, it must become institutionalized at the system, agency, and practice levels (Aarons & Chaffin, 2013). Institutionalization can take time and may involve policy development or revision, contract requirements, changes to case management information systems, formal structures and processes, or line item funding streams. Teams should think about sustaining the intervention from the earliest points of planning and implementation.

10. Review Progress and Benchmarks

Routine monitoring is critical to scaling up processes. Teams should collect and review data related to:

- Progress against planned timeframes and milestones
- Implementation supports and development of capacity
- Delivery of the intervention as intended (i.e., fidelity to the program model)
- Consistency across sites
- Participant and stakeholder feedback
- Short-term outcomes
- Barriers and facilitators to success

Once teams apply early findings and make improvements, they will want to establish stable approaches so they can move forward with summative evaluations of effectiveness. These topics will be addressed in more detail in “Change and Implementation in Practice: Monitoring, Evaluating, and Applying Findings.”

Questions to Consider

- How will teams monitor implementation and progress?
- Is the scale up progressing according to schedule? Are milestones being met?
- Are core components being implemented as intended?
- Are practices consistent across sites? If not, are the reasons understood?
- What barriers and facilitators have been identified?
- Does the information collected suggest a need to make adjustments?
- Are there early indications of success?
- Is there readiness to take additional steps to support institutional change?

For more information on staging and scaling up, see:

- CB’s Strategies to Stage and Scale Up Implementation in Child Welfare Systems. [Webinar], available from https://learn.childwelfare.gov/ [in Webinar and Video Library; registration required]
Getting Help
Testing, piloting, and staging an intervention can be complex and challenging. Teams that do not have internal experience or skills in this area can seek help by:
- Exploring opportunities for assistance from the Center for States (find contact information here: https://capacity.childwelfare.gov/map/)
- Reaching out to program developers or experts
- Contacting local universities and technical assistance providers for potential assistance

Conclusion
Testing, piloting, and staging enable teams to make needed adjustments and allocate resources strategically before wide-scale implementation of an intervention. Taking a deliberate approach and using feedback loops help agencies establish a firm foundation for sustainable change.

Testing, piloting, and staging should align with and prepare an agency for related fidelity assessment and evaluation. These topics are discussed in the companion brief “Change and Implementation in Practice: Monitoring, Evaluating, and Applying Findings,” at https://capacity.childwelfare.gov/states/focus-areas/cqi/change-implementation/monitoring-evaluating/

Key Milestones for Intervention Testing, Piloting, and Staging:
- Usability testing conducted on key protocols and processes
- Intervention launched with pilot site, group, or location
- Decision reached after pilot about whether to move forward with intervention and how
- Intervention core components adjusted based on usability testing, pilot, or other findings
- Implementation strategies adjusted as needed based on usability testing, pilot, or other findings
- Plans developed and initiated for staging and scaling up implementation
Related Resources and Tools

For related videos, webinars, and other resources on intervention testing, piloting, and staging see: https://capacity.childwelfare.gov/states/focus-areas/cqi/change-implementation/intervention-testing-piloting-staging

Training Resources


Publications


References


Child Welfare Capacity Building Collaborative. (2015a). Building capacity to manage change and improve child welfare practice [Brief #2]. Available from https://library.childwelfare.gov/cwig/ws/library/docs/capacity/RecordID=51704&SearchField=Record%20ID&Filter=Native%28%28%28%22type%22%29%20%3d%20%22IA%22%29%29&order=Native%28%28%28%22sortOrder%22%29%20%3d%20%22native%27%27%29%29%29&J=1&m=2


This product was created by the Capacity Building Center for States under Contract No. HHSP233201400033C, funded by the Children's Bureau, Administration for Children and Families, U.S. Department of Health and Human Services. This material may be freely reproduced and distributed. However, when doing so, please credit the Capacity Building Center for States.