CIP — Collaborative for Implementation Practice — UNC School of Social Work

Implementation Stages

Best Practices and Tools to Use a Stage-based Implementation Approach

Introduction

Implementation is process, not an event— it cannot happen instantly, despite common expectations and pressures to demonstrate rapid change and improved outcomes for the focus population. Implementation stages are the developmental phases a program or practice proceeds through in an effort to achieve equitable outcomes. All efforts proceed through discernable phases from identification of needs and assets and exploration of potential solutions to adoption and sustainability.[1,2,3]

What are Implementation Stages?

Implementation stages are the phases that commonly occur during an implementation process. Although implementation stages are often labeled differently, the concept is found across implementation frameworks and models. For the purposes of this guide, the implementation process is organized into four stages: exploration, installation, initial implementation and full implementation:[4]

- During exploration, the needs and assets of a focus population are explored and compared to potential programs' fit and feasibility within the organizational and system context and a program or practice is selected.

- Installation is a planning and preparatory period dedicated to developing infrastructure that will support the program or practice, including building practitioner and organizational capacity.

- Initial implementation — beginning when staff initiate the use of the program or practice — is a time of learning, with attention to using data and information for continuous improvement.

- Finally, full implementation occurs when the majority of practitioners can skillfully deliver the program or practice, and the focus population experiences improved outcomes.

Advancing from exploration to full implementation takes between three to five years.[5] This timeline is affected by several factors. First, building the capacity of practitioners and changing organizational structures to implement a program or practice is an incremental, developmental process. For example, it is unlikely that a social worker who just learned a new behavioral health strategy would immediately demonstrate high fidelity to the strategy. Rather, developing a social worker's competency takes place over months and years — initially through training and then

through ongoing coaching, fidelity monitoring and feedback as they work with individuals and families to strengthen their practice.

Second, developing trusting and authentic relationships with stakeholders such as community partners, individuals and families is critical to ensuring implementation efforts are relevant and sustainable. This also takes time, as many public agencies and institutions may be viewed as untrustworthy and unresponsive by individuals, families and community partners who have experienced inequitable treatment or have been historically overlooked or ignored. Fostering trusting relationships and partnerships must be done incrementally, with great respect and awareness of historical and current contexts and the priorities and values of the community.

Building trust with stakeholders is another process. Many practitioners experience change fatigue as they are often asked to adjust to new ways of working without sufficient support. A demonstrated commitment over time is needed to build the trusting relationships that are foundational to implementation success. It is important that community partners, individuals and families, practitioners, and organizational and systems leaders give and receive in ways they agreed upon during the implementation process to ensure equitable and sustained implementation.

Finally, it must be acknowledged that change can require adaptation. Asking people — whether organizational staff or community or institutional partners — to take up a new practice or way of work might cause them to experience a sense of loss of what is familiar. Similarly, implementation of a new program or practice may alter the culture of an organization, and changing organizational culture takes time. Allowing time to surface and address adaptive issues that might arise, especially in the exploration and installation stages, can ultimately prevent setbacks in the later stages of implementation.

Progression through implementation stages is not always linear.[6] Implementation is fluid and can be affected by internal and external environmental factors, and efforts may progress and retreat across stages. For example, an organization in initial implementation of a new program might discover that unexpected legislative budget cuts require them to return to exploration to identify a new, less expensive alternative. Implementation efforts can also be in more than one stage at the same time when different aspects of a new program or different programs included in a broader initiative move forward at different rates. For example, practitioners may begin using a new family engagement strategy after being trained (initial implementation), while an implementation team is still trying to determine a process of ongoing coaching and supervision for practitioners to reinforce their use of the strategy with quality and fidelity (installation). An implementation team might also purposely sequence different parts of an initiative for implementation to reduce the burden on practitioners of starting multiple new programs and practices at the same time. Though not ideal, some stage-based activities may take more time or need reconsideration because of unexpectedly changing contexts and environments during implementation.

What Are Best Practices for Stage-based Implementation?

Implementation support practitioners may use the following best practices in supporting a stage-based approach to implementation:

- **Identify the implementation stage(s).** Use the implementation stages to assess a program or practice's status and identify its current stage of implementation. Implementation may be in more than one stage at the same time; this is particularly true for initiatives implementing more than one practice or program.

- **Use stage-based implementation activities.** At each stage of implementation, key implementation activities are necessary to ensure continued progress.[7] Once a program or practice's stage has been determined, teams can use this information to identify implementation activities that are necessary and appropriate for the stage or stages they are in. Benchmarks related to each of these activities can also be used to assess implementation progress within and across stages. Each implementation stage requires attention to identifying, building and refining infrastructure and to the use of data to support communication and improvement.

  Implementation support practitioners support implementation teams who should lead and carry out the work across stages. Organizations might require external support in forming an implementation team, and teams in the early stages of implementation might not be well equipped to carry out all of the stage-based activities. The implementation team might need ongoing support from organizational leaders, purveyors of the program or practice and/or external facilitators or technical assistance providers.

  Identifying an effort's implementation stage will help ensure the use of appropriate stage-based activities. For example, a public agency interested in better serving those who have experienced domestic violence may feel pressure to send all practitioners to a new training that happens to be available; however, the training may not be well matched to the focus population's needs and assets. Given that this is a new effort, the agency should begin with the exploration stage and start by engaging key stakeholders — including practitioners, community partners, individuals and families — to develop an understanding of the specific needs and assets of those who have experienced domestic violence in the community. Stakeholders can then use this shared understanding to select a program or practice that best meets the focus population's needs. At this point, the agency can consider which training might best support practitioners who will deliver the program or practice. Skipping necessary stage-based activities (in this example, stakeholder engagement) can result in mismatched strategies and resources that can compromise the effort's relevance and sustainability.

  Stage-based implementation activities can also be used to build implementation plans, define a scope of work for an implementation team or develop a workplan or Gantt chart. When an implementation effort straddles more than one stage, consider activities from each of the identified stages.

Stage-based Implementation Activities

Exploration – Engage and explore	• Develop an implementation team (identify members and build buy-in) to support the work as it progresses through the stages. • Identify needs and assets within a community and focus population. • Identify and learn about programs or practices that potentially align with the community's needs and assets. • Grow relationships with practitioners, organizational and systems leaders, community partners and the focus population to support implementation. • Assess practitioner, organizational and community readiness for implementation, and foster readiness for change. • Develop communication processes to support the work. • Learn what it takes to implement the program or practice effectively, including what is needed for: 1) optimizing community buy-in; 2) developing staff competency for the program or practice; and 3) instituting organizational and systems changes needed for implementation (such as policies). • Make a decision to proceed with selected program or practice or not.
Installation – Plan and develop	• Convene the team regularly to gather and use data to assess implementation. • Ensure the implementation team has the appropriate knowledge, skills, functions and authority to support infrastructure development and improvement of the program or practice. • Develop timely feedback loops among community partners, practitioners, leaders and the focus population to ensure two-way, inclusive communication. • Gather feedback on how the program or practice will be implemented from stakeholders including community partners, individuals and families, practitioners and leaders. • Identify what data will be used to measure implementation progress. • Discuss how data will be used to support communication, decision making and continuous improvement. • Assess, secure and develop the necessary implementation infrastructure to put the program or practice in place as intended.
Initial Implementation – Initiate and refine	• Convene the team regularly to gather and use data to assess implementation. • Gather data and feedback through multiple sources including individuals and families to check in on how implementation is going. • Develop improvement strategies through the implementation team's analysis of data and feedback. • Communicate with practitioners, leadership, community partners and the focus population about progress, improvement strategies and successes. • Use data to refine the implementation infrastructure.
Full Implementation – Sustain and scale	• Convene the team regularly to gather and use data for ongoing improvement. • Plan for and secure necessary resources to sustain the implementation team and the use of the program or practice. • Collect and analyze fidelity and outcomes data. • Communicate with and gather feedback from practitioners, leadership, community partners and the focus population about implementation progress, improvement strategies and successes. • Monitor and improve infrastructure as needed.

- **Examine evidence of implementation outcomes to assess progress.** In addition to having different developmental activities, each implementation stage also has different outcomes. While success is often defined as achieving measurable improvements for focus populations, exclusively focusing on individual or family-level outcomes data can limit our understanding of interim implementation successes and challenges and focusing on population-level results is unrealistic prior to full implementation. Implementation support practitioners help teams select expected outcomes to assess progress and identify necessary improvements at each stage. Although stages often overlap, sufficient progress should be made at each stage to be adequately prepared for the next stage. When working with a well-defined and operationalized program or practice, teams can examine evidence in the form of completed activities or products to assess progress between stages. Setting performance measures and targets for each implementation stage is another way of tracking progress and determining readiness for the work ahead. Teams can also use logic models to assess whether program outputs such as staff trainings are achieved in the installation stage, and whether short-term outcomes, interim outcomes and population-level results are achieved, as expected, during initial and full implementation stages.

Stage-based Implementation Outcomes[8]

Exploration – Engage and explore	Installation – Plan and develop	Initial Implementation – Initiate and refine	Full Implementation – Sustain and scale
Acceptability: Perception among stakeholders that the given program or practice is satisfactory because it addresses the identified needs and strengths of the focus population *Appropriateness:* Perception among stakeholders that the program or practice is good fit and relevant for the focus population and the practice setting	*Adoption:* Intention and action to support uptake of the new program or practice including building practitioner and organizational capacity to begin the program or practice	*Feasibility:* Extent to which the program or practice can be used within the given setting *Reach:* Extent to which the program or practice is integrated in the practice setting *Fidelity:* Degree to which the program or practice is being delivered as intended *Implementation cost:* Cost impact of implementing the program or practice	*Sustainability:* Extent to which the program or practice is institutionalized in the implementing site

- **Use implementation stages to communicate with stakeholders.** By sharing information about implementation stages with internal and external stakeholders, implementation teams can establish and effectively communicate realistic expectations for progress at each stage, including when contributions to population-level outcomes or results might

reasonably be expected to be seen. They can also provide anticipatory guidance about how long implementation will take and potential pitfalls to avoid.

What Principles and Competencies are Needed to Engage in Stage-based Implementation?

Implementation support practitioners help implementation teams to plan for and engage in core activities across stages such as stakeholder engagement, data collection and ongoing improvement, and bi-directional communication. Through such planning, teams can anticipate and address potential barriers to implementation. Specific principles and competencies[9] relevant to identifying and supporting stages-based activities are described below.

Principles

Principles guide and underpin implementation support practitioners' work.

- **Be curious:** Ask questions, tolerate uncertainty and ambiguity while seeking clarity on relevant stage-based activities.

- **Advance equity:** Integrate equity components into assessment of stage(s) and progress.

- **Use critical thinking:** Assess context and contributing factors thoughtfully.

- **Be committed:** Demonstrate resilience in the face of implementation challenges across the stages.

Competencies

Competencies are the necessary knowledge, resources and skills for the implementation support practitioners' work.

- **Co-learn:** Understand the system, organizational context and culture to effectively assess stage(s) and progress.

- **Understand context**: Continuously identify and respond to changes in the system.

- **Use implementation strategies:** Select the appropriate set of strategies to achieve progress at each stage.

- **Conduct improvement cycles:** Help to identify and gather relevant stage-based data about the progress of implementation.

- **Build capacity:** Work with stakeholders to assess capacity strengths and needs emerging during the implementation process.

- **Grow and sustain relationships**: Build trust with stakeholders by modeling transparent assessment of stage(s) and progress.

- **Tailor support:** Provide support that matches the implementation goals at each stage

- **Communication:** Communicate progress at each stage.

What Tools or Resources Are Available to Engage in Stage-based Implementation?

Implementation Support Practitioners can use the following resources to support a stage-based approach to implementation:

1. **Implementation Stages Flowchart:** This handout can be used for a basic assessment of a program or practice's current implementation stage.

2. **Implementation Stages Planning Tool:** This worksheet identifies stage-based activities throughout implementation and can be used to gauge implementation progress and make decisions regarding sustainability of an implementation effort.

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[3] Aarons, G.A., Hurlburt, M., & Horwitz, S.M. (2011). Advancing a conceptual model of evidence-based practice implementation in public service sectors. *Administration and Policy in Mental Health Services Research, 38*(1), 4–23. doi: 10.1007/s10488-010-0327-7

[4] Metz, A., & Bartley, L. (2012). Active Implementation Frameworks for program success: How to use implementation science to improve outcomes for children. *Zero to Three Journal, 32*, 11–18.

[5] Chamberlain, P., Brown, C. H., & Saldana, L. (2011). Observational measure of implementation progress in community-based settings: The stages of implementation completion. *Implementation Science, 6.* doi: 10.1186/1748-5908-6-116

[6] Aarons, G.A., Hurlburt, M., & Horwitz, S.M. (2011

[7] Metz et al. (2015).

[8] Proctor, E., Silmere, H., Raghavan, R., Hovmand, P., Aarons, G., Bunger, A., Griffey R., & Hensley, M. (2011). Outcomes for implementation research: Conceptual distinctions, measurement challenges, and research agenda. *Administration and Policy in Mental Health Services Research, 38*(2), 65–76. doi: 10.1007/s10488-010-0319-7

[9] Metz, A., Louison, L., Burke, K., Albers, B., & Ward, C. (2020). *Implementation support practitioner profile: Guiding principles and core competencies for implementation practice.* Chapel Hill, NC: National Implementation Research Network, University of North Carolina at Chapel Hill. https://nirn.fpg.unc.edu/resources/implementation-support-practitioner-profile