

# Scaling Checklists: Assessing Your Level of Evidence and Readiness (SCALER)

### A Guide for Practitioners

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#### **Abstract**

Successfully scaling effective interventions can help organizations improve lives for larger numbers of individuals and communities than they could have reached before scaling. Organizations can maximize this potential by ensuring that the interventions that they scale have shown evidence of improving participant outcomes and by putting in place intervention-level and organizational procedures and processes to successfully scale. This guide describes a framework developed from implementation science research—Scaling Checklists: Assessing your Level of Evidence and Readiness, or SCALER—that identifies how organizations can improve both their readiness to scale an intervention and the intervention's readiness to be scaled, so that intervention services are best positioned to improve outcomes for a larger number of participants. The SCALER includes checklists that organizations can use to determine if they have (1) evidence of their intervention's effectiveness that meets industry standards for rigorous evaluation research and (2) the procedures and processes in place that will enable them to successfully scale an intervention.



#### I. Scaling Effective Interventions

Successfully scaling effective interventions can help organizations improve lives for larger numbers of individuals and communities. Successful scaling—defined as maintaining or surpassing the beneficial impacts of an intervention that has been documented to have evidence of effectiveness—is contingent on implementing the intervention as it was intended (that is, with fidelity). (See the sidebar for a definition of scaling.) AmeriCorps has been interested in building a process that it can use to help its grantees engage in successful scaling. 1 It funded Mathematica to conduct the Scaling Evidence-Based Models (SEBM) project, which is intended to help deepen the agency's understanding of the interventions it funds and its knowledge base on scaling them.

As part of this project, Mathematica designed and implemented the Scaling Programs with Research Evidence and Effectiveness, or SPREE, which provides a comprehensive methodology for funders to use when they want to help organizations scale effective interventions (Maxwell and Richman 2019). SPREE was grounded in implementation science research that identified how organizations might scale interventions so they improve desired outcomes for a larger number of participants (Miller et al. 2006; National Implementation Research Network [NIRN] 2018). SPREE was further informed and refined by the lessons learned when applying the SPREE process to a group of organizations that received AmeriCorps funding that was to be used for scaling.

Although the SPREE process was initially developed for funders to help organizations scale

#### What is scaling?

Scaling involves replicating, expanding, and/or adapting an intervention to improve lives for larger numbers of individuals and communities. It is considered successful when the intervention maintains or surpasses its beneficial impacts for participants after the scaling has occurred. The types of scaling are:

Expansion extends the intervention to more people in the same target population in the same location. An example would be increasing the number of unemployed adults served at a work center by hiring five more job search specialists who will each serve 20 more adults.

Replication extends the intervention for the same target population to a new location. An example would be implementing a reading program designed for 5th graders in a new school district, city, and state, but serving the same target population of 5th graders.

Adaptation extends the intervention to a different target population in either the same or different location or modifies the intervention for the same population in either the same or different location. An example would be modifying a parent training curriculum designed for mothers to include language that is more inclusive of fathers.

effective interventions, Mathematica has adapted it so that organizations can use it directly. In this guide, we describe the Scaling Checklists: Assessing your Level of Evidence and Readiness, or SCALER, which organizations can use to increase their likelihood of successfully scaling an intervention that increases the desired outcomes of participants. Funders can also use the SCALER to help communicate expectations to their grantees about scaling readiness and inform how to provide technical assistance or training to one or more grantees to help them prepare for scaling. This guide discusses the SCALER framework, describes each of its components, and provides checklists that organizations can use to assess their level of

<sup>&</sup>lt;sup>1</sup> Prior to September 29, 2020, AmeriCorps operated under the name Corporation for National and Community Service.

preparation in each component or that funders can use in helping organizations prepare for scaling. It also provides guidance for how organizations might fill out these checklists, including who should fill out the SCALER, when and how often it should be completed, and how to use the results to identify next steps.

#### A. The SCALER framework

The SCALER framework can help organizations

who should fill
often it should be
sults to identify

This guide was designed to help
organizations scale their interventions
successfully. It describes the Scaling
Checklists: Assessing your Level of Evidence
and Readiness (SCALER) tool, which can
help organizations assess how ready they
and their interventions are for scaling.

The purpose of this guide

improve the lives of more people by preparing them to successfully scale effective interventions. The SCALER's two-part process (1) ensures that the intervention to be scaled is likely to produce desired outcomes and is therefore worthy of being scaled and (2) identifies whether the effective intervention and the organization are ready to scale.

Figure I.1. The SCALER framework

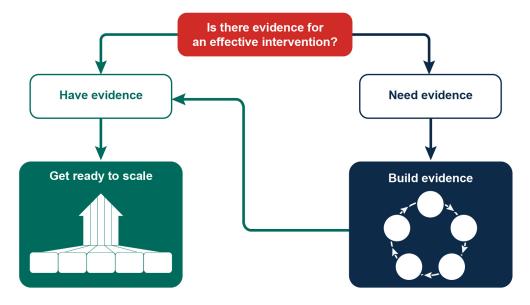


Figure I.1 outlines the SCALER framework. As the figure shows, the organization wanting to scale an intervention should first ask, "Is there evidence that this is an effective intervention?" The answer to this question is not always straightforward, in part because different entities might hold different opinions on what constitutes evidence (as will be discussed in Chapter II). Still, the answer to the question is critical because it determines what needs to be done to prepare an organization to scale an intervention. If the organization does not have evidence that its intervention is effective, it should build that evidence before scaling. If the intervention has evidence that it is effective, the organization needs to ensure there is a readiness to scale before scaling.

Building evidence. The SCALER framework includes a five-step process to build evidence that the
intervention is effective. That evidence is built by showing that the intervention alone—and not other
factors—has an impact that improves desired participant outcomes. The SCALER framework

suggests that building this evidence involves a process to continuously improve the intervention; it does not use evidence to make a "thumbs up/thumbs down" decision about whether to continue offering an intervention (Austin and Claassen 2008b). This potential need to tweak an intervention until it is shown to be effective is represented by the circular flow depicted in Figure I.1 and discussed extensively in Chapter II. This process begins with clearly defining the intervention and the path it takes to affect outcomes, and then consistently following the articulated path. Once the intervention is implemented consistently and has suggestive evidence that participants' outcomes improve after receipt of intervention services, the process moves to designing and implementing an evaluation that meets standards for effectiveness and that demonstrates the intervention's effectiveness. If the evaluation shows evidence of effectiveness, the intervention gets ready to scale. If it does not, the intervention is tweaked in ways to increase its likelihood of being effective, and the evidence-building process begins again.

• Getting ready to scale. The SCALER framework specifies five conditions that should be present for both an intervention and an organization for successful scaling, as discussed in Chapter III. Having these five conditions in place helps ensure fidelity after scaling, which can be critical to successful scaling, as both fidelity and effectiveness often deteriorate as adjustments are made during scaling (Larson et al. 2017). Three of the conditions in the framework are meant to ensure the intervention has features that allow it to be implemented with fidelity after scaling—namely, the intervention needs to have its core activities and target population clearly specified, and needs to have supports for implementation in place so they can be implemented in a manner that will achieve the same positive outcomes after scaling. The other two conditions are intended to ensure the organization can support scaling the intervention: (1) the organization has an infrastructure that can provide the resources and support the scaling.

#### B. Purpose of guide

This guide was designed to help organizations scale their interventions successfully. The next two chapters discuss the conceptual underpinnings of the SCALER framework as well as checklists that organizations can use to assess how prepared they and their interventions are for scaling. Chapter II discusses and provides checklists for both identifying and building evidence of effectiveness, and Chapter III provides the discussion and checklists for getting ready to scale the intervention. It also provides guidance on how organizations might use the SCALER—how to fill it out, who should be involved, how often it should be completed, and how to use the checklist scoring results to identify next steps for getting ready to scale. Both chapters present an idealized version of what organizations need for successful scaling. Chapter IV examines scaling when either of the two parts outlined in the SCALER framework is

# Considerations as you read this guide

- The SCALER framework is based on successful scaling principles that have emerged from implementation science research.
- The checklists in this guide were developed from rubrics used to assess AmeriCorps grantees' evidence of effectiveness for funded interventions and readiness to scale.
- The discussion and checklists in this guide were developed for AmeriCorps grantees to use when scaling their funded interventions, though they may also be useful to a broader audience.

difficult to achieve. This chapter discusses constraints that organizations might face when seeking to establish evidence of their interventions or encounter opportunities to scale an intervention before the organizations are ready to do so. The appendix compiles all the checklists that appear throughout this guide.

### II. Identifying or Building Evidence of Effectiveness

Before an intervention is scaled to reach a larger number of people, it should have demonstrated effectiveness for the population it initially targets. An organization can draw on rich information from external sources, such as research clearinghouses, to understand if existing research shows that an intervention it wants to scale has already been proven effective. But suppose an intervention has not been rigorously evaluated, or the existing research does not show evidence of effectiveness (because the research design lacked rigor or no impacts were found). In such cases, organizations must build evidence of the intervention's effectiveness and demonstrate that it has the desired effects on anticipated outcomes. This chapter provides organizations with a framework and checklists for identifying evidence of effectiveness—or, if no such evidence exists, for building that evidence to ensure that the steps an organization is taking will likely result in research that meets the standards for showing evidence of effectiveness.

# A. Identifying evidence of effectiveness through use of research clearinghouses

It can be tricky for organizations to understand whether an intervention can be considered effective. Simply assessing participant outcomes does not demonstrate whether an intervention is effective because outcomes can change due to a variety of factors, including the economic context in which the intervention was implemented or participant-specific characteristics. Rigorous research can be difficult to conduct because it requires isolating whether the intervention itself contributed to changes in participant outcomes. Yet, knowing that an intervention and not some other factor changed participant outcomes provides the evidence that the intervention is effective and warrants scaling. Organizations therefore need to ensure that their interventions are effective before investing resources in scaling them.

#### **Research Clearinghouses**

- What Works Clearinghouse (WWC, <u>https://ies.ed.gov/ncee/wwc/</u>) reviews the existing research on educational programs, products, practices, and policies to help educators make evidence-based decisions.
- Clearinghouse for Labor Evaluation and Research (CLEAR, <a href="https://clear.dol.gov/">https://clear.dol.gov/</a>) reviews studies of labor programs to inform decisions about employment-related policies and programs.
- Home Visiting Evidence of Effectiveness (https://homvee.acf.hhs.gov/) reviews research on home visiting models that serve pregnant women or families with children up to kindergarten age.
- Pathways to Work
   (<a href="https://pathwaystowork.acf.hhs.gov/">https://pathwaystowork.acf.hhs.gov/</a>)
   reviews studies of interventions
   designed to help low-income job
   seekers succeed in the labor market.
- Results First
   (https://www.pewtrusts.org/en/researc
   h-and-analysis/data visualizations/2015/results-first clearinghouse-database) centralizes
   information from nine national
   clearinghouses on the effectiveness of
   social policy programs.
- For information on other research clearinghouses, see AmeriCorps' "Clearinghouses and Evidence Reviews for Social Benefit Programs" (<a href="https://www.nationalservice.gov/sites/default/files/documents/Clearinghouses%20and%20Evidence%20Reviews.pdf">https://www.nationalservice.gov/sites/default/files/documents/Clearinghouses%20and%20Evidence%20Reviews.pdf</a>).

The ability to find external information about interventions' effectiveness has increased dramatically over the past decade. Most prominently, research clearinghouses such as those listed in the sidebar provide information to help organizations and funders identify research on the effectiveness of a wide variety of interventions. When considering scaling an intervention and looking for evidence of its effectiveness, organizations can:

1. Seek to understand what is needed to conduct rigorous research to demonstrate an intervention's effectiveness. Understanding whether a research study can establish a causal beneficial impact on participants' outcomes is critical because the quality of evaluation research varies greatly. Although different clearinghouses use slightly different criteria for making this determination, they use common principles (Table II.1). These standards define the level of rigor that needs to be demonstrated in an evaluation study to show with confidence that an intervention caused beneficial outcomes for participants.

Table II.1. Standards to identify effective interventions

Evidence standards	Definition
Evaluator independence	The evaluator is external to the organization or intervention with no vested interest in the evaluation findings.
Design has a counterfactual	The research design has a counterfactual, generally meaning a comparison or control group that is ideally developed through random assignment and that is used to provide evidence about participant outcomes in the absence of the intervention.
Design has no confounding factors	The research design enables the evaluators to distinguish between outcome changes that are due to the intervention and changes that are due to other factors.
The research has:	Few people in the treatment or comparison group left the study.
<ul> <li>Low attrition</li> </ul>	No people in the comparison group switched to the treatment group or vice versa.
<ul><li>No reassignment</li><li>Baseline equivalence</li></ul>	The final treatment and comparison groups used in the outcomes analysis did not differ on key characteristics, other than one group was given access to program services.

- 2. Determine whether an intervention they want to scale has research showing that it is effective. For example, an organization helping high schools implement a career and technical education (CTE) intervention could use both CLEAR and the WWC to determine which CTE interventions have evidence of effectiveness. This information can help an organization decide whether it wants to pursue scaling of a particular intervention, though it may still want to weigh additional information or seek out other studies on intervention effectiveness. Organizations must decide if the current amount and rigor of the research on their intervention is adequate for them to consider the intervention effective, or if more evidence of effectiveness is needed.
- 3. Learn about the context or environment in which the intervention they want to scale was evaluated. This information can help organizations decide if the research is relevant to the context in which their intervention will be scaled. Showing that an intervention was effective 25 years ago or that it was effective for 1st- and 2nd-graders in inner city schools, for example, does not necessarily

<sup>&</sup>lt;sup>2</sup> All clearinghouses provide explicit criteria for meeting each of these standards. In addition, two practitioner guides developed for the SEBM project (Anderson and Maxwell 2018; Anderson and Maxwell 2019) are resources that organizations can use to understand this terminology: "Baseline Equivalence: What It Is and Why It Is Needed," <a href="https://nationalservice.gov/impact-our-nation/evidence-exchange/baseline-equivalence-what-it-and-what-it-needed;">https://nationalservice.gov/impact-our-nation/evidence-exchange/what-makes-well-designed-well-implemented-impact-study.</a>

mean it will be effective if scaled today for 4th-graders in rural America. Therefore, organizations can learn about the locations or populations that were used to establish evidence for their intervention's effectiveness and determine the extent to which these contexts apply to the plans the organizations have for scaling their interventions.

The sidebar provides Checklist 1, which organizations can use to assess whether their intervention has evidence of effectiveness. The first four categories align with the clearinghouse standards that guide evaluation research. If a research clearinghouse has identified evaluations of the intervention in which it has confidence in the results, the first four categories would be rated "yes." An organization must then decide if that research meets its needs for evidence of the intervention's effectiveness and if the research is relevant to the environment in which it is planning to scale. Should one or more of the answers be a "no," meaning the organization does not have evidence of the intervention's effectiveness, then such evidence should be built, as discussed in the next section. If all answers are a "yes," the

Checklist 1. Identifying an effective intervention

	Check one		
Components	Yes	No	
1. Research rigor			
Research conducted by a third party	0	0	
Research includes a counterfactual	0	0	
Research has no confounding factors	0	0	
Research has low attrition, no reassignment, and baseline equivalence with final sample	0	0	
2. Intervention effectiveness			
The research showed evidence of effectiveness	0	0	
3. Intervention relevance			
The research is appropriate to the context or environment in which scaling is planned (the research is generalizable or the intervention will be scaled within the specific environment studied)	0	0	

If "no" in one or more categories, there is a continued need for evidence (see Chapter II, Section B)

If "yes" in all categories, determine readiness to scale (see Chapter III)

organization should next determine its readiness to scale the intervention (Chapter III).

#### B. Building evidence

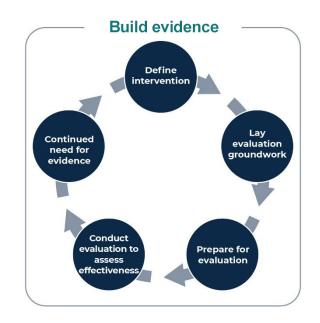
When rigorous evidence about an intervention's effectiveness does not exist or does not meet the needs of

an organization interested in scaling that intervention, evidence of effectiveness must be built. The SCALER framework (Figure II.1) includes a five-step process for building evidence of an intervention's effectiveness that is grounded in the use of research and evaluation to gain knowledge about an intervention's implementation and impact. Such a process can also become a powerful tool for improving intervention design, as organizations use the results from research to test and retest the assumptions underlying the intervention (the intervention's core components that are deemed necessary to cause beneficial outcomes for participants).

#### 1. Define the intervention

Research and evaluation can help an organization continuously improve their intervention and

Figure II.1. Building evidence



provide evidence of its effectiveness. A well-articulated theory of change (TOC) is central to this effort. It defines an intervention by demonstrating how the intervention's resources and activities are structured with the intent of changing participant knowledge, attitudes, behaviors, and/or conditions in ways that improve outcomes. Developing a TOC with this level of detail generally begins with thinking about the desired outcomes that the intervention will affect and then identifying all the assumptions about how the intervention might do so (Hernandez and Hodges 2003; Yampolskaya et al. 2004). Articulating the assumptions for how the outcomes will be affected is critical for the intervention's success because it helps establish the inputs, activities, outputs, and outcomes needed for the intervention to succeed.

Such a TOC provides a road map that identifies the human, financial, and physical resources (inputs) required to implement the intervention's core components (activities). These activities result in services provided (outputs) that ultimately yield the desired outcomes. It is important that the desired outcomes be shown as measurable changes that are expected to occur as a result of the intervention—this designates them as goals for the organization to achieve. These four components of a TOC (inputs, activities, outputs, and outcomes) are often influenced by situations, forces, or circumstances that may exist within or outside the organization (contextual factors).

Identifying these components in a TOC provides a clear sense of what is needed to produce outputs and what needs to be measured to determine that the intervention improves participant outcomes (Hodges et al. 2002). In addition to **helping the organization ensure that the intervention is being implemented as planned**, this clarity will show what measures, as reflected in the outputs and outcomes, are needed for monitoring and evaluating the intervention.

In addition to providing clarity about the intervention and its implementation, **the intervention must be** "**mature and stable**" when it is evaluated. This means that the inputs and activities identified in the TOC must be implemented and supported as part of a regular routine, that personnel implementing the intervention must be proficient and skilled and have managerial and administrative support, and that output and outcome goals must be met (Bertram et al. 2011). Conducting an evaluation before an intervention is mature and stable might not provide an accurate assessment of its potential to improve participant outcomes (Macallair and Males 2004).

An organization may seek to make modifications to an intervention in the hopes of improving upon the outcomes for the individuals they serve (based on prior evaluations of those efforts) or to maximize buyin from communities where the intervention might take place. **Ideally, these adaptations would be informed by other existing research and evidence** to illustrate how the adapted intervention can produce the desired outcomes for participants. Once the evaluation is underway, the organization can assess whether the modifications were implemented as intended and whether they improved the intervention's effectiveness. (For more information about considerations for adaptation, see Chapter IV.)

#### 2. Lay evaluation groundwork

Building research evidence and using it to improve an intervention requires a culture of measurement, learning, and evaluation. In such a culture, **stakeholders have a common understanding about the value of and need for research and evaluation in decision making** (Austin and Claassen 2008a). In practice, this means that stakeholders understand the value of using a TOC to improve the design and

<sup>&</sup>lt;sup>3</sup> The W.K. Kellogg Foundation has developed a Logic Model Development guide (W.K. Kellogg Foundation 2004) that organizations can use to construct or strengthen the logic model for their interventions. See <a href="https://www.wkkf.org/resource-directory/resources/2004/01/logic-model-development-guide">https://www.wkkf.org/resource-directory/resources/2004/01/logic-model-development-guide</a>.

implementation of an intervention and, subsequently, generating estimates of the intervention's impact. This culture might take time to develop, but the value of this process is often highest when developed over time rather than imposed in the short term (Walker and Soule 2017).

Even within such a culture, an organization needs to build a consensus among **key stakeholders, such as organizational leaders and board members, on the outcomes the intervention is trying to influence and the goals for how much outcomes should be improved.** For example, a funder might want to see a study that compares participant outcomes to those of a similar group of individuals who did not participate in the program. The organization's board of directors might want to see that the benefits of the program outweigh its costs. To identify the goals of an evaluation, the organization should first determine how its stakeholders define the effectiveness that the intervention must display, which will help determine what resources and personnel would be necessary for evaluating the intervention.

All stakeholders, including organizational leaders and personnel involved in implementing the intervention, must support research and evaluation efforts before they are designed and begin (Fixsen et al. 2005). Agreement must exist on the TOC components, implementation goals for the intervention (outputs and outcomes), and what constitutes evidence of effectiveness. Such agreement not only determines the design of the research but also its ability to obtain accurate information about the intervention, including background and context. Personnel implementing the intervention—or managing those who are—are critical for providing this information. If organizational leadership, personnel, or other key stakeholders implementing the intervention are not willing and able to participate in an evaluation, the evaluation will likely not be feasible—or as useful as possible, even if it is conducted.

#### 3. Prepare for evaluation

Research and evaluation require **financial resources** and **personnel**. AmeriCorps found that evaluations that can provide evidence of effectiveness tend to cost 15 to 25 percent of a grant's budget depending on the scope of the evaluation (Zandniapour and Vicinanza 2013). Costs include infrastructure expenses for implementing the evaluation (such as preparing systems to record data that will be analyzed for the evaluation), fees for experts in research design and implementation, and personnel time in collecting data for the evaluation. Not allocating sufficient funding to evaluation activities could lead to less rigorous or poorly implemented research that does not meet the standards of rigor for showing an intervention is effective (as discussed in the previous chapter). The latter scenario might arise because money is not spent to fully engage personnel in the evaluation. For example, personnel are not trained about the specifics of their assigned evaluation tasks or do not carry out evaluation tasks because they have concerns that have not been addressed about collecting evidence for causal research (Despard 2016; Gondolf 2015).

#### 4. Conduct evaluation to assess effectiveness

Once it has prepared for its evaluation, an organization can move on to conducting its study, which would ideally be rigorous enough to allow the organization to assess whether its intervention has evidence of effectiveness (see Checklist 1). AmeriCorps refers to this type of rigorous evaluation study as an impact

<sup>&</sup>lt;sup>4</sup> AmeriCorps has developed an Impact Evaluability Assessment Tool (Zandniapour and JBS International 2014) that organizations can use to determine their readiness to engage in a rigorous impact evaluation of their interventions. See

 $<sup>\</sup>underline{\text{https://www.nationalservice.gov/sites/default/files/resource/Laying\_the\_Groundwork\_Before\_Your\_First\_Evaluation_n_Tool.pdf.}$ 

evaluation. Impact evaluations should be conducted by an objective third party; this tends to bring greater objectivity because there is less risk of a real or perceived conflict of interest and, as a result, stronger evidence of an intervention's effectiveness. However, an organization's internal personnel are also critical for the measurement, evaluation, and learning undertaken almost every day. For example, during the evaluation design phase, organizational personnel must work with evaluators on three key tasks: (1) clarify the intervention's TOC so that evaluators understand the inputs, activities, outputs, and outcomes; (2) ensure that the evaluation explores the essential components in the TOC; and (3) create processes to translate information from the evaluation into organizational learning and improvement. In addition, when the evaluation is being implemented, organizations and evaluators will work together to make sure the research tasks are carried out as planned.

#### 5. Continued need for evidence

Upon completing its evaluation, an organization may find that its intervention did not improve participant outcomes, or it may be unable to establish evidence of effectiveness due to lack of rigor. In those instances, the **organization is faced with the continued need for evidence, and it should start over with the five-step process for building evidence of an intervention's effectiveness** (see Figure II.1). Three reasons might explain why research and evaluation efforts do not show evidence of effectiveness (Stame 2010): method failure, implementation failure, and theory failure. How the organization proceeds with building evidence of effectiveness depends on the type of failure (also highlighted in Table II.2).

- Method failure occurs when an evaluation does not show evidence of effectiveness because its design or implementation was flawed. For example, the evaluation might not have contained a large enough sample to demonstrate statistical significance (Lipsey 2000), or issues may have arisen when the evaluation was carried out—such as random assignment was not properly conducted—that inhibited the evaluators from adequately assessing the intervention's effectiveness (Greene et al. 1989). In such cases, another evaluation might be in order.
- Implementation failure occurs when an intervention is not implemented as intended. For example, personnel might find it

Table II.2. Types of evaluation failure and potential solutions

Туре	What it is	Potential solution
Method failure	Occurs when an evaluation does not show evidence of effectiveness because its design or implementation was flawed	Conduct a new evaluation
Implementation failure	Occurs when an intervention is not implemented as intended	Improve intervention implementation to ensure fidelity
Theory failure	Occurs when the intervention is not actually linked to the desired outcome	Revisit the design of the intervention or its key components

- challenging to implement the intervention as designed (Donkoh et al. 2006), are intentionally adapting the intervention to their own context (Patton 2010), or disagree on what the intervention's core components are or define the intervention in a variety of ways (Lipsky 1980). In all cases, the intervention would not be implemented with fidelity to the intended model, and the evaluation would not be able to capture its potential impact. In such cases, intervention implementation would need to be improved to ensure fidelity.
- **Theory failure** occurs when the intervention is not actually linked to the desired outcome. In some cases, this causal link might not exist, and the intervention or key components need to be revisited.

This can occur when organizations implement and test adaptations to an existing intervention to serve a new target population of participants or to deliver services in a new type of setting. In other cases, the causal link might be dependent on another intervention (Rogers 2008). For example, an evaluation of a complicated intervention with multiple components might assess only some components and not others and might show no impacts, but the intervention as a whole, if evaluated, might generate an impact. The intervention might also work in conjunction with other interventions and might not show an impact when evaluated alone.

# C. Checklist for building evidence of effectiveness

The sidebar provides Checklist 2, which organizations can use as they seek to build evidence of effectiveness for their interventions. An organization can use the first group of checklist items to ascertain whether it has an appropriately defined intervention. If it does, it moves on to laying the groundwork for the evaluation (that is, gaining stakeholder agreement). Once the organization lays the groundwork, it can start preparing for the evaluation by ensuring adequate resources are in place. After all of the resources are in place, the organization can conduct the evaluation and assess the intervention's effectiveness. Should the intervention be shown to be effective, the organization would get ready to scale (Chapter III). Should the evidence not indicate effectiveness, such evidence must be

Checklist 2. Building evidence of effectiveness

	Chec	k one
Components	Yes	No
1. Define intervention		
Defined theory of change (TOC) for the intervention	0	0
Intervention mature and stable	0	0
Intervention implemented as described in TOC (with fidelity)	0	0
Intervention, including any modifications, informed by research	0	0
If "yes" in all categories, lay groundwork		
2. Lay evaluation groundwork		
Agreement among organization, partners, and funders on need for evidence	0	0
Agreement among organization, partners, and funders on outcomes and measures	0	0
Agreement among organization, partners, and funders on evaluation goals	0	0
Organization partners, and funders support evaluation	0	0
If "yes" in all categories, prepare for evaluation		
3. Prepare for evaluation		
Financial resources available	0	0
Personnel available to work with evaluators	0	0
If "yes" in all categories, conduct evaluation		
4. Conduct evaluation and assess effectiveness		
Research conducted in a manner that meets standards for rigor (see Checklist 1 for an effective intervention and standards to identify effective interventions)	0	0
The research showed beneficial results for participants	0	0
The context or environment in which the research was conducted is generalizable to the organization's plans for scaling its intervention	0	0
If "yes" in all categories, get ready to scale		
5. Continued need for evidence		
If "no" in one or more categories, make corrections and repeat process, as needed		

built through a process that identifies and corrects any failures or weaknesses that emerged along the way.

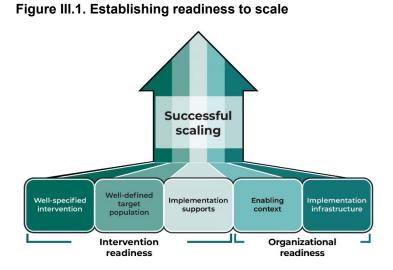


#### III. Getting Ready to Scale

The SCALER framework includes five conditions that should be met for both an intervention and the organization implementing it to be ready to scale successfully (Figure III.1). Having these five conditions in place before scaling begins helps ensure that organizations can implement the intervention with fidelity

to the TOC after scaling. This advantage is critical, as both fidelity and effectiveness often flounder when adjustments are being made while delivering intervention service during scaling (Larson et al. 2017). Maintaining fidelity to the intervention model after scaling helps ensure that the intervention will generate the same beneficial participant outcomes that occurred before scaling.

Each of the five conditions includes guidance for components, processes, and procedures that need to be in place for an organization and its intervention to be ready to scale. This chapter provides



organizations with a framework for why each of these conditions is essential for scaling, as well as a checklist to assess whether the components, procedures, and processes within each condition are in place to foster scaling readiness.

Each checklist in the SCALER provides summary scores to reflect how ready an intervention and organization might be for scaling. The closer a score is to the maximum total for a particular condition, the more ready for scaling the intervention or organization is, with regard to that condition. Lower total scores indicate the intervention or organization might not be as ready for scaling. To strengthen their scaling readiness, organizations can examine each row in the checklist to identify the components (or specific areas) within the conditions that they may need to better define or put into place.

In this chapter, we first present the checklists associated with intervention readiness for scaling (Section A) and the checklists associated with organizational scaling readiness components (Section B). Scoring instructions and explanations of the components within the conditions accompany the checklists. We then include a summary checklist (Section C) that allows organizations to assess scaling readiness across all five conditions. We close this chapter by offering guidance on how organizations might approach using the SCALER (Section D).

#### A. Is my effective intervention ready to scale?

The first three conditions for successful scaling indicate whether *the intervention* has the features that could allow it to be implemented with fidelity after scaling. Meeting these first three conditions indicates an intervention is ready to be scaled with fidelity.

#### 1. Well-specified intervention

A well-specified intervention clearly identifies the core set of activities that are critical for achieving beneficial outcomes (Fixsen et al. 2005). Typically, core activities are identified in an intervention's theory of change, as the mechanisms by which an intervention produces the expected outcomes (Blase and Fixsen 2013). For example, for a school-based intervention seeking to increase elementary-age students' reading scores, a core activity might be delivering one-on-one tutoring using a specific reading curriculum in the classroom whereas a non-core, or supplemental, activity could be disseminating monthly newsletters to parents or caregivers with book recommendations that could be read to children during non-school hours. Each core activity must have a description of what it takes to produce the intended outcomes, including its content (for example, the service focus or curriculum topics); how it is to be delivered; how much of it participants should receive; the requirements for the personnel delivering it; and the setting in which it will take place (Blase and Fixsen 2013). These details provide structure that ensures the intervention is delivered with fidelity both before and during scaling. Without such specificity, new organizations, personnel, or sites may not be able to implement core activities consistently and with fidelity to the TOC. Such a scenario would decrease the likelihood that the intervention will improve participants' outcomes to the extent expected given the intervention's prior success. Four components are needed to ensure that the organization's specification of the intervention is enough to facilitate successful scaling:

- Clearly identifies core activities
- Clearly defines personnel roles
- Clearly defines the setting
- Clearly defines completion

Furthermore, the specifications of the intervention's core activities, personnel roles, setting, and completion should be aligned to the research that showed evidence of the intervention's effectiveness. If an organization defines these components in a way that differs from how they were defined when the intervention produced beneficial outcomes, then the organization might not be able to produce the same beneficial results when scaling the intervention. (In some cases, organizations might choose to adapt their interventions, which means the intervention could be different from the one that produced evidence of effectiveness. See Chapter IV for more information on considerations for adapting interventions.)

Organizations can use Checklist 3 to assess whether they have a well-specified intervention. For each row, organizations should circle the response option that best characterizes their status: a 0 indicates that the organization has not yet defined this aspect of its intervention; a 1 indicates that a definition does not exist but the organization has plans for developing it; a 2 indicates that the organization is actively working on defining this aspect of the intervention; and a 3 indicates that a definition for this aspect of the intervention is already in place. Organizations can then sum their scores for each of the four conditions to gauge their status with respect to having a well-specified intervention.

<sup>&</sup>lt;sup>5</sup> A practitioner guide developed for the SEBM project (Maxwell 2019) is a resource organizations can use for more information on how to thoroughly describe their intervention: "How to Fully Describe an Intervention," <a href="https://nationalservice.gov/impact-our-nation/evidence-exchange/how-fully-describe-intervention">https://nationalservice.gov/impact-our-nation/evidence-exchange/how-fully-describe-intervention</a>.

Checklist 3. Specifying the intervention

Components	Not yet defined	No, but making plans to develop a definition	No, but actively developing a definition	Yes, this Is defined	Summary score
Identifying core activities					
Core activities (services) of the intervention	0	1	2	3	/9
The mode of delivery (for example, in person or online, one on one or small group) for each core activity	0	1	2	3	
The intensity (that is, amount, frequency, and duration) of each core activity	0	1	2	3	
Clearly defining personnel roles					
The number of personnel needed to offer core components of the intervention as they are intended to be offered	0	1	2	3	/9
Roles for personnel (at the lead organization and its partners) implementing the intervention	0	1	2	3	
Qualifications for personnel (at the lead organization and its partners) implementing the intervention	0	1	2	3	
Clearly defining the setting					
The geographic setting (for example, rural/urban, geographic region) where the intervention will be implemented during scaling	0	1	2	3	/6
The venue for service delivery (such as a community center, participants' homes, nonprofit organization, or school) where the intervention will be implemented during scaling	0	1	2	3	
Clearly defining participation and completion					
Who is considered a program participant (for example, is everyone who enrolls considered a participant, or is there a minimum length of time that a person must be in the program to be considered a participant?)	0	1	2	3	/6
Participant completion of the intervention (for example, minimum services completed, certification acquired, particular score achieved on an assessment)	0	1	2	3	

#### 2. Well-defined target population

When scaling, an organization might want to offer an intervention to the same population for whom the intervention was designed and shown to be effective. Doing so makes it more likely that the organization will be successful in scaling, because interventions might not be as effective when used with populations or groups that are different from the target population for which the intervention demonstrated evidence. (At the same time, organizations might choose to target an intervention to a different population from the one that was targeted when the intervention produced evidence of effectiveness. For more information on adaptation, see Chapter IV.) To do so, the population must be well-defined. This definition must be specific and include the characteristics people must have to participate in the intervention (Garg 2016; McElroy and Ladner 2014).

Organizations can use Checklist 4 to assess whether they have a well-defined target population. The checklist should be completed in the same manner as the checklist for having a well-specified

intervention. Within each row, organizations should circle the response option that best characterizes their status of defining various aspects of the target population for the intervention.

Checklist 4. Defining the target population

		Circl	e one		
Components	Not yet defined	No, but making plans to develop a definition	No, but actively developing a definition	Yes, this Is defined	Summary score
The characteristics of the population to be served by the intervention (target population)	0	1	2	3	/9
The criteria for determining who is eligible to participate in the intervention (inclusion criteria)	0	1	2	3	
The criteria for determining who is not eligible to participate in the intervention (exclusion criteria)	0	1	2	3	

#### 3. Implementation supports

An organization must have supports in place to ensure that an intervention can be implemented with fidelity during scaling (Breitenstein et al. 2010; NIRN n.d.). An intervention that does not have such supports might not be able to produce beneficial outcomes when scaled.<sup>6</sup> These six supports will help an organization implement the intervention with fidelity:

- A monitoring system
- Performance goals
- Continuous quality improvement processes (a systematic process for improving implementation service delivery, processes, and outcomes)
- Preservice and in-service training
- Communication systems
- Data systems

Organizations can use Checklist 5 to assess the status of these implementation supports in place. Within each row, organizations should circle the response option that best characterizes their status of setting up these supports: a 0 indicates that the organization has not yet set up that aspect of the implementation support; a 1 indicates that the organization is making plans to set up that aspect; a 2 indicates that the organization is actively setting up that aspect; and a 3 indicates that the organization already has that aspect in place. Organizations can then sum their scores to gauge their status with respect to having the implementation supports needed for scaling their intervention.

<sup>&</sup>lt;sup>6</sup> Two practitioner guides developed for the SEBM project (Eddins and Needels 2019; Friend and Needels 2019) are resources that discuss considerations organizations should be mindful of when developing implementation supports for their intervention: "How to Structure Implementation Supports," <a href="https://nationalservice.gov/impact-our-nation/evidence-exchange/how-structure-implementation-supports">https://nationalservice.gov/impact-our-nation/evidence-exchange/making-most-data</a>.

https://nationalservice.gov/impact-our-nation/evidence-exchange/making-most-data.

**Checklist 5. Establishing implementation supports** 

	Circle one				
Components	No plans	No, but making plans to set up	No, but actively setting it up	Yes, this	Summary score
Monitoring					
Personnel who will monitor the intervention (the monitoring team) are identified	0	1	2	3	/9
Monitoring team will assess whether core intervention components are implemented as specified	0	1	2	3	
Monitoring team will report on implementation issues or challenges to leadership and personnel delivering the intervention	0	1	2	3	
Establishing performance goals					
Benchmarks for service delivery are clearly established	0	1	2	3	/6
Benchmarks are monitored for achievement	0	1	2	3	
Engaging in continuous quality improvement (CQI)					
Processes for engaging in CQI are clearly articulated	0	1	2	3	/9
The intervention will be part of conducted CQI efforts	0	1	2	3	
The intervention procedures will be updated based on results of the CQI process	0	1	2	3	
Conducting preservice and in-service training					
Training to be taken before scaling the intervention begins is clearly articulated (preservice training)	0	1	2	3	/12
All personnel needing preservice training will receive it in a timely manner	0	1	2	3	
Training needed by individuals working on the intervention is clearly articulated (in-service training)	0	1	2	3	
All personnel needing in-service training will receive it in a timely manner	0	1	2	3	
Establishing communication systems					
A communication system exists that supports coordination among personnel working on the intervention	0	1	2	3	/9
A process exists to ensure that communications will function smoothly and as intended	0	1	2	3	
A process exists to resolve communication problems shortly after they occur	0	1	2	3	
Establishing data systems					
A data system supports collection, analysis, and decision making about the intervention	0	1	2	3	/12
A process exists to ensure that data are entered into the system in a timely manner and are of high quality	0	1	2	3	
A process exists to ensure that data are analyzed appropriately	0	1	2	3	
A process exists to ensure that data are used in decision making	0	1	2	3	

#### B. Is my organization ready to scale?

Even if the intervention is ready to be scaled, *the organization* might not be able to support the scaling. As a result, scaling might not be successful. For an organization to support successful scaling, it must have an environment that is conducive to scaling and have sufficient supports in place. Meeting these final two conditions for scaling readiness indicates that an organization is ready to successfully scale an intervention.

#### 1. Enabling context

To foster successful scaling of effective interventions, an organization's leadership and culture must support innovation, learning, and improvement (Metz 2016). (External context can also play a role in scaling; considerations related to external context are discussed in Chapter IV.) For example, organizations with a history of engaging in efforts to improve upon their intervention can apply those experiences to adjust how intervention services are being delivered as the intervention is scaled. Although an organization's enabling context can develop in different ways, having successfully tackled challenges in the past is one way a supportive context can develop. The organization's structures, roles, and functions should also facilitate (rather than hinder) service delivery as well as the achievement of beneficial participant outcomes. Two components will enable an organization to scale an intervention:

- Support by organization leaders and key stakeholders
- A culture of innovation and learning

Organizations can use Checklist 6 to assess whether their context will likely enable successful scaling. Within each row, organizations should circle the response option that best describes the extent to which they meet the characteristic: a 0 indicates that the aspect of enabling context is not at all present at the organization; a 1 indicates that the aspect somewhat describes the organization; a 2 indicates that the aspect mostly describes the organization; and a 3 indicates that the aspect fully describes the organization. Organizations can then sum their scores to gauge their organizations' status with respect to having the enabling context needed for scaling their intervention.

<sup>&</sup>lt;sup>7</sup> A practitioner guide developed for the SEBM project (Jones and Needels 2019) is a resource organizations can use for more information on the enabling context and implementation infrastructure conditions organizations needs to implement their intervention: "Build Organizational Capacity to Implement an Intervention," <a href="https://nationalservice.gov/impact-our-nation/evidence-exchange/build-organizational-capacity-implement-intervention">https://nationalservice.gov/impact-our-nation/evidence-exchange/build-organizational-capacity-implement-intervention</a>.

Checklist 6. Having an enabling context

	Circle one				
Components	Not at all descriptive of the organization	Somewhat descriptive of the organization	Mostly descriptive of the organization	Fully descriptive of the organization	Summary score
Supporting the intervention					
Organizational leaders demonstrate support for the intervention	0	1	2	3	/6
Key stakeholders demonstrate support for the intervention	0	1	2	3	
Engaging in innovation and learning					
The organization has an established history of innovation	0	1	2	3	/12
The organization is innovative in finding ways to improve the intervention model	0	1	2	3	
The intervention's successes are discussed among personnel involved with the intervention	0	1	2	3	
The intervention's challenges are discussed among personnel who can help to overcome them	0	1	2	3	

#### 2. Implementation infrastructure

An organization's infrastructure must ensure that it has sufficient financial, human, and physical resources to support the intervention (Bernfeld 2006; Fixsen et al. 2009; Klingner et al. 2003) and its successful implementation (Mihalic and Irwin 2003) during scaling. To effectively support the scaled intervention, the organization's infrastructure must facilitate hiring the personnel necessary for scaling, support supervision and personnel development through a human resources management system, and provide funding and other needed resources for implementing the intervention (for example, materials and physical space). Of note, infrastructure could include resources external to the organization. For example, if partners play a key role in implementation, their policies, priorities, and systems must also support successful scaling of the intervention. Two support components will help an organization implement the intervention with fidelity:

- Financial and human resources
- Materials and physical space

Organizations can use Checklist 7 to assess whether they have the infrastructure in place to support scaling. The checklist should be completed in the same manner as the checklist for having implementation supports for the intervention.

Checklist 7. Establishing an implementation infrastructure

	Circle one				
Components	No plans in place	No, but making plans to set up	No, but actively setting it up	Yes, this is in place	Summary score
Procuring financial and human resources					
The organization has adequate funding for the intervention	0	1	2	3	/9
The organization provides enough dedicated personnel for the intervention	0	1	2	3	
A human resource system is in place to hire, supervise, and develop personnel implementing the intervention	0	1	2	3	
Providing materials and physical space					
A thorough description of the materials and physical space needed to implement the intervention exists	0	1	2	3	/9
The materials needed to implement the intervention are available	0	1	2	3	
Enough physical space exists for implementing the intervention	0	1	2	3	

#### C. Summarizing across checklists

Checklist 8, a summary checklist for scaling readiness, can help organizations quickly identify areas in which such assistance might be needed. This summary checklist uses information from each scaling readiness condition checklist (listed in bold in the summary checklist) and the various components within each condition. As a reminder, Checklist 8 and the other checklists in this chapter are appropriate for organizations that are seeking to scale an intervention that already has rigorous evidence of effectiveness. Organizations that are seeking to establish evidence of effectiveness for their intervention should complete the process and checklist described in Chapter II.

To complete this form, organizations should enter the summary score they received for each of the various components within each scaling readiness condition. Organizations should then tally these scores to create a total summary score (which can be entered into the box highlighted with a border) for each condition. The closer a summary score is to the maximum total for that condition, the more ready for scaling the intervention or organization appears to be, in that condition.

These scores can quickly identify the intervention or organization conditions in which an intervention or organization might not yet be ready to scale. Organizations can then develop the needed procedures or processes to build their capacity in these areas or look to identify new partners to help gain this capacity.

#### Checklist 8. Summary checklist

Evidence of effectiveness	Guidance	
For identifying an effective intervention, are all items under research rigor,	Yes: Proceed to scaling readiness conditions	
intervention effectiveness, and intervention relevance marked yes?	No: Proceed to building evidence	
For building evidence of effectiveness for your intervention, are all items	Yes: Proceed to scaling readiness conditions	
under define intervention, lay evaluation groundwork, prepare for evaluation, and conduct evaluation and assess effectiveness marked yes?	No: Continue building evidence for your	
·	intervention	
Scaling readiness conditions	Summary scores	
Intervention		
Well-specified intervention	10	
Identifying core components		
Clearly defining personnel roles	/9	
Clearly defining the setting	/6	
Clearly defining completion	/6	
TOTAL SUMMARY SCORE	/30	
Well-defined target population		
TOTAL SUMMARY SCORE	/9	
Implementation supports		
Monitoring implementation	/9	
Establishing performance goals	/6	
Engaging in continuous quality improvement	/9	
Conducting preservice and in-service training	/12	
Establishing communication systems	/9	
Establishing data systems	/12	
TOTAL SUMMARY SCORE	/57	
Organization		
Enabling context		
Supporting the intervention	/6	
Engaging in innovation and learning	/12	
TOTAL SUMMARY SCORE	/18	
Implementation infrastructure		
Procuring financial and human resources	/9	
Providing materials and physical space	/9	
TOTAL SUMMARY SCORE	/18	

#### D. Completing and using the SCALER

When using the SCALER, organization personnel should seek to capture full and complete information on each of the conditions for scaling readiness. Because personnel at all levels can be involved in intervention scaling, organizations might want to involve multiple personnel members in the process of completing the SCALER and discussing its results, including identifying and resolving, through discussion, any differences of opinion. Organization members who might be well-positioned to help complete the SCALER include:

• Executive directors, who might be most knowledgeable about implementation supports and the enabling context

- Program managers or frontline supervisors, who could have most familiarity with how the intervention and target population are defined, in addition to the other conditions
- Measurement, learning, and evaluation personnel (such as data managers or internal evaluation specialists), who might have the most knowledge of existing evidence of an intervention's effectiveness, or building evidence of effectiveness, as well as the implementation supports related to monitoring, CQI, performance goals, and data systems
- Administrative personnel, such as human resources, development, or purchasing personnel, who might have firsthand knowledge of the organization's implementation infrastructure

Although it might be prudent to have multiple personnel involved in completing the SCALER, to ensure that someone has ownership over the tool, we recommend designating one personnel member or role to be in charge of the SCALER—such as the intervention's program manager or the measurement, learning, and evaluation personnel member. That person would track whether and when the SCALER needs to be completed, identify and bring together the appropriate personnel to complete it, have personnel complete it, synthesize the scores and produce output to share with personnel on action steps to address the SCALER results, and then determine when the tool should be filled out again. Exhibit III.1 offers a suggested process that organizations can take to complete the SCALER on an ongoing basis or as needed.

#### Exhibit III.1. Process for completing the SCALER

The personnel member who has ownership over the SCALER ("the SCALER owner") should take these steps to complete it as needed:

#### Who at the organization should complete the SCALER?

- The SCALER owner should consult with appropriate organizational personnel—such as leaders and the intervention program manager—to decide who should help to fill out the SCALER.
- Once these personnel are identified, the SCALER owner will let them know they are responsible for helping to fill out the tool and the deadline for doing so.
- The SCALER owner should set up a timeline for completing the tool.

#### How should organizational personnel complete the SCALER?

- We recommend that the SCALER owner have each personnel member fill out his or her own version of the tool and then set up a meeting for everyone to discuss and come to agreement on scores.
- Organizations might prefer to take different approaches, such as having several personnel fill it out together while discussing it during a meeting.

#### What happens after the SCALER is completed?

- After scoring is completed, the SCALER owner documents the scores and shares them with key stakeholders and organizational leaders involved with preparing to scale.
- Working with key stakeholders and organizational leaders, the SCALER owner can also suggest next steps—for example, defining the target population if it is found to lack a definition.

#### When should the SCALER be filled out again?

- Depending on the priorities of the organization, its interest in or plans for scaling, and any upcoming changes to the organization or its external context, the SCALER owner should identify an appropriate time to complete the SCALER again.
- The SCALER is intended to be a living document, and reflective of one moment in time. As changes or progress is being made to scaling readiness conditions, the document should be updated accordingly.

As noted in Exhibit III.1, personnel can identify next steps to strengthen scaling readiness as a result of the scores. Some discussion questions that personnel might want to discuss in interpreting their scores and identifying what actions to take as a result of completing the SCALER are:

- In what areas are we the strongest? In which areas do we appear to need work? Are there specific items (rows) on which we should concentrate our efforts for improvement? (This may include identifying evidence of effectiveness, building evidence of effectiveness, or any of the scaling readiness conditions.)
- Do we need any additional information to complete any parts of the SCALER? Are there any items that we don't know the answers to? If so, how can we go about answering those items?
- In what conditions or areas, if any, do we have differences of opinion? What information can we draw upon to resolve those differences?
- Who are the stakeholders (organization personnel or external stakeholders) with whom we should discuss these results (that is, people who were not involved in completing the SCALER)?
- What next steps should we take to identify or build evidence of intervention effectiveness, or strengthen our scaling readiness (as appropriate)? Which steps are highest and lowest priority? What is our timeline for taking action?
- What partners could we bring in to build capacity in certain components? Should we seek to identify new partners to help gain this capacity?

The frequency with which organizations complete the SCALER depends on their context and priorities. Organizations that score low in certain items might want to complete the SCALER again soon after making changes to address those low-scoring items. Organizations that have higher scores overall might want to complete the SCALER again after implementing changes, such as personnel restructuring, or after some external event, such as receiving a large grant that allows it to bolster its implementation supports and infrastructure. The frequency with which an organization completes the SCALER depends on its intervention's and organization's scaling readiness and other factors, but in general, completing the SCALER two or three times a year can allow organizations to closely track their scaling readiness and needs to strengthen scaling readiness over time.



#### IV. Ready, Set, Scale?

Successful scaling requires planning and preparation. This guide—with the SCALER framework and checklists—was developed to help organizations do both. In Chapters II and III, we discussed the hallmarks of an ideal scenario—what would happen if an organization wanted to scale an intervention that has been evaluated in a rigorous, well-designed study that shows evidence of effectiveness, and both the intervention and the organization meet all the conditions for scaling readiness. This ideal scenario is intended to help organizations understand what considerations they should weigh before scaling and determine whether scaling efforts should begin.

However, we recognize that no organization operates under ideal circumstances. In understanding the ideal, organizations will be better equipped to identify the trade-offs and compromises that must be made in a world that is far from ideal. This chapter covers practical guidance for scaling by discussing constraints that organizations might face when seeking to establish evidence of their interventions. We also discuss how the SCALER framework can be applied when circumstances might lead organizations to scale before they are ready to do so.

#### A. Establishing evidence of effectiveness may not be possible at the moment

All research and evaluation efforts include trade-offs and concessions when they are being designed and implemented. Organizations utilize these trade-offs and concessions to structure research in a way that best serves their needs within the time and resources that they have. Organizations might face some of the following scenarios, each of which inhibits them from conducting an evaluation that meets the evidence standards of rigor and objectivity required by research clearinghouses. Yet, they can still conduct research that can strengthen their interventions and prepare them for a more rigorous evaluation in the future.

- 1. The intervention is not ready for rigorous evaluation because it is not yet mature. As noted in Chapter II, research cannot accurately assess whether an intervention is effective until the intervention is mature. Indeed, new and innovative intervention models may not be ready for evaluation for years. When an organization develops and offers a new intervention model, it can build a research plan and process that includes formative and outcome evaluations to gather the information needed to refine the intervention. These types of evaluations can serve as the foundation for a subsequent, more rigorous evaluation of the intervention's impact (Bertram et al. 2011). During a formative evaluation, organizations typically seek to determine if an intervention is feasible before fully implementing it. To do so, an organization might interview a range of stakeholders about their perceptions of the intervention and how to strengthen it, and draw on data about whether participants are satisfied with the intervention as well as whether they are engaging with services as intended (U.S. Centers for Disease Control and Prevention n.d.). For an outcome evaluation, organizations can use the intervention's TOC to identify measures for each TOC component (inputs, activities, outputs, and outcomes), collect data for each measure, and use those data to monitor whether the intervention is achieving the desired outcomes (Connell and Kubisch 1998). If it is not achieving the desired outcomes, organizations can use the data collected on other components to assess what might need to change to improve outcomes. Organizations might decide that additional or different inputs are needed, or that the intervention's activities need to be tweaked, for example.
- 2. The organization does not have resources for a rigorous evaluation but wants to monitor intervention performance. An organization might have an intervention that is ready or close to ready for a rigorous evaluation but lacks the resources to carry out that evaluation. Continuing to demonstrate that the intervention is making progress toward its intended outcomes can help an

organization continue to build the intervention's proof of concept while it seeks funding for a rigorous study. For example, funders often require organizations to provide data that track their progress toward outcomes; these data can also be used to demonstrate an intervention's promise. Although these data are sometimes funder specific and may or may not be consistent with the data the organizations would otherwise choose to collect, they can still be used to generate insights for monitoring intervention performance. The trick is to convert the data into usable information (Slotnik and Orland 2010). For example, a funder might require organizations to administer periodic assessments to participants as a way of monitoring growth. In addition to reporting results of these assessments to the funder, organizations might also use them as a case management tool to discuss progress with individual participants, or use them in discussions with case managers to explain why progress is or is not as expected.

Although it may seem that directing monetary resources and personnel toward research and evaluation efforts can reduce the capacity of an organization to serve participants, using information from such efforts within a culture of data-driven decision making increases performance (LaValle et al. 2010), output, and productivity (Brynjolfsson et al. 2011). Furthermore, using data to monitor and report on performance can lay the groundwork for future scaling efforts by uncovering how the intervention might be strengthened and what types of adaptations might be appropriate in the context of scaling (Manno and Gaubert 2018).

3. The intervention is hard to rigorously evaluate because of the circumstances of the target population being served or some other ethical challenge. An intervention might be hard to evaluate in a rigorous manner because its target population is hard to reach or otherwise hard to measure using traditional techniques such as surveys. For example, an intervention that attempts to reduce drug use could face the challenge of locating people for whom the intervention did not work; as a result, the intervention's true outcomes cannot be captured. The evaluation would not meet standards for rigor because of attrition. In addition, some organizations may not be able to use random assignment to create comparison groups, which are needed for establishing causal impact. Legislation might mandate that members of a certain class of individuals receive an intervention, for instance, which precludes randomly assigning some people in that class to a comparison group. Likewise, organizations or their funders may have ethical concerns about withholding services from those who need them for the sake of using random assignment to conduct research. Under these circumstances, organizations might want to employ quasi-experimental design (QED) studies, which allow them to avoid random assignment—while maintaining rigor and objectivity—to measure intervention impact.

#### B. The organization might have an opportunity to scale before it is ready

Sometimes, organizations have an opportunity to scale an intervention before they are ready to do so. For instance, political pressures to scale an intervention into a new community or for a new target population might arise before the intervention is completely mature. Or funders might offer resources to scale an intervention today, and the funding may not be available next year when the organization feels it might be in a better position to scale successfully.

Under such circumstances, the checklists in this guide can help organizations identify areas in which they might need support to successfully scale the intervention. Such support may come from partnering with other organizations or from additional funding for scaling efforts. For example, an organization scaling a promising after-school intervention for youth might have limited funds and not enough physical space for all the new students it expects to enroll in the next year. The organization may want to partner with the

school district, local community-based organizations that serve youth, or other local systems to acquire that space for low or no cost. Organizations might also want to draw on outside expertise to help strengthen some of their implementation supports—for example, technical assistance providers or consultants can help to set up data systems, establish continuous quality improvement processes, and provide appropriate personnel training. Using the checklists, an organization might also realize that some aspect of its intervention or target population is not clearly defined, and it may choose to engage its personnel in an exercise to develop or refine its TOC to clarify those definitions.

Organizations can encounter many reasons for scaling before they have met all of the scaling readiness conditions. This guide should help organizations prioritize their next steps to strengthen their scaling efforts and improve their chances for success. The SCALER framework can be used to help organizations navigate their own circumstances and decide where to place resources and attention to help put them on a path to successfully scaling their interventions. After scaling, organizations should continue to evaluate their intervention's effectiveness to ensure it is maintaining benefits as expected for participants. If an organization finds that its intervention is no longer producing impacts as expected, it might draw on the SCALER to understand if it should seek to improve aspects of scaling readiness.

#### The organization is seeking to adapt an intervention

Adaptation is a type of scaling that occurs when an intervention is extended to a different target population in either the same or different location or modified for the same population in either the same or different location. An organization may seek to adapt an intervention in the hopes of improving upon participant outcomes. It might also make adaptations due to external contextual factors—for instance, funding might become available to target a new population, and an organization can seek to adapt its intervention to apply for and use that funding.

The field of implementation science has not yet come to a consensus around the limits of adaptation. In other words, we cannot readily determine when an intervention can be considered to be adapted versus when it is considered to be a new or different intervention. However, in general, when an organization changes an intervention's core activities or how they are implemented—for example, modifies the activities' dosage or intensity—it runs the risk of no longer scaling the intervention that produced evidence of effectiveness. While most adaptations should be tested to understand how they might change the effectiveness of an intervention, the following types of adaptations can typically be made while maintaining the integrity of an intervention:

- Modifying or adding non-core components to an intervention. An intervention's core activities are those that are deemed critical for achieving beneficial outcomes (see Chapter III, Section A). Using the example given in Chapter III—a school-based intervention to increase elementary-age students' reading scores—an organization might choose to supplement a core, in-school reading curriculum with sending out monthly newsletters to parents and caregivers that suggest books they can read to children at night or on the weekends.
- Making the intervention accessible to the target population. Making the intervention accessible can consist of translating materials only offered in English for non-English speakers or making modifications related to a target population's culture. Using the same example as before, the reading curriculum could be translated from English into Spanish, while keeping the content the same. Or, examples in the curriculum might be changed so they are more relatable to the new target population—for instance, changing mentions of types of foods to ones that the children in the target population are likely to eat.



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# APPENDIX The SCALER Assessment Tool



## The SCALER Assessment Tool

This appendix compiles the eight checklists included in the Scaling Checklists: Assessing your Level of Evidence and Readiness, or SCALER. Organizations can use these checklists to determine if they have (1) evidence of their intervention's effectiveness that meets industry standards for rigorous evaluation research and (2) the procedures and processes in place that will enable them to successfully scale an intervention. This appendix also offers a suggested process for implementing the SCALER as well as a guide that organizations can use to structure their discussions about the results of the SCALER and identify next steps.

## **SCALER Checklists**

Checklist 1. Identifying an effective intervention (also see p. 9)

Checklist 2. Building evidence of effectiveness (also see p. 13)

Checklist 3. Specifying the intervention (also see p. 17)

Checklist 4. Defining the target population (also see p. 18)

Checklist 5. Establishing implementation supports (also see p. 19)

Checklist 6. Having an enabling context (also see p. 21)

<u>Checklist 7. Establishing an implementation infrastructure</u> (also see p. 22)

Checklist 8. Summary of scaling readiness (also see p. 23)

Process for completing the SCALER (also see p. 24)

Discussion guide for the SCALER (also see p. 25)

# Checklist 1. Identifying an effective intervention

Organizations can use this checklist to assess whether their intervention has evidence of effectiveness. Should one or more of the answers in the checklist be a "no," meaning the organization does not have evidence of the intervention's effectiveness, such evidence must be built (see Checklist 2). Should all answers be a "yes," the organization should next determine its readiness to scale the intervention (see Checklist 3).

# Checklist 1. Identifying an effective intervention

	Chec	k one
Components	Yes	No
1. Research rigor		
Research conducted by a third party	0	0
Research includes a counterfactual	0	0
Research has no confounding factors	0	0
Research has low attrition, no reassignment, and baseline equivalence with final sample	0	0
2. Intervention effectiveness		
The research showed evidence of effectiveness	0	0
3. Intervention relevance		
The research is appropriate to the context or environment in which scaling is planned (the research is generalizable or the intervention will be scaled within the specific environment studied)	0	0

If "no" in one or more categories, there is a continued need for evidence (see Chapter II, Section B)

If "yes" in all categories, determine readiness to scale (see Chapter III)

# Checklist 2. Building evidence of effectiveness

Organizations can use this checklist as they seek to build evidence of effectiveness for their interventions. The checklist assesses four groups of conditions: (1) whether the intervention is appropriately defined; (2) whether the groundwork has been laid (that is, stakeholder agreement has been obtained) for an evaluation; (3) whether adequate resources are in place for the evaluation; and (4) whether the evaluation is conducted in a rigorous manner and produces positive effects in a relevant context. Should the intervention be shown to be effective, the organization would get ready to scale (see Chapter III). Should the evidence not indicate effectiveness, the organization should continue to build evidence (no. 5 in the checklist).

### Checklist 2. Building evidence of effectiveness

	Check one	
Components	Yes	No
1. Define intervention		
Defined theory of change (TOC) for the intervention	0	0
Intervention mature and stable	0	0
Intervention implemented as described in TOC (with fidelity)	0	0
Intervention, including any modifications, informed by research	0	0
If "yes" in all categories, lay groundwork		
2. Lay evaluation groundwork		
Agreement among organization, partners, and funders on need for evidence	0	0
Agreement among organization, partners, and funders on outcomes and measures	0	0
Agreement among organization, partners, and funders on evaluation goals	0	0
Organization partners, and funders support evaluation	0	0
If "yes" in all categories, prepare for evaluation		
3. Prepare for evaluation		
Financial resources available	0	0
Personnel available to work with evaluators	0	0
If "yes" in all categories, conduct evaluation		
4. Conduct evaluation and assess effectiveness		
Research conducted in a manner that meets standards for rigor (see Checklist 1 for an effective intervention and standards to identify effective interventions)	0	0
The research showed beneficial results for participants	0	0
The context or environment in which the research was conducted is generalizable to the organization's plans for scaling its intervention	0	0
If "yes" in all categories, get ready to scale		
5. Continued need for evidence		
If "no" in one or more categories, make corrections and repeat process, as needed		

# Checklist 3. Specifying the intervention

Organizations can use the checklist below to assess whether they have a well-specified intervention. The checklist assesses items within four components that are needed to facilitate successful scaling: (1) clearly identifies core components; (2) clearly defines personnel roles; (3) clearly defines the setting; and (4) clearly defines completion.

**Checklist 3. Specifying the intervention** 

Components	Not yet defined	No, but making plans to develop a definition	No, but actively developing a definition	Yes, this Is defined	Summary score
Identifying core activities					
Core activities (services) of the intervention	0	1	2	3	/9
The mode of delivery (for example, in person or online, one on one or small group) for each core activity	0	1	2	3	
The intensity (that is, amount, frequency, and duration) of each core activity	0	1	2	3	
Clearly defining personnel roles					
The number of personnel needed to offer core components of the intervention as they are intended to be offered	0	1	2	3	/9
Roles for personnel (at the lead organization and its partners) implementing the intervention	0	1	2	3	
Qualifications for personnel (at the lead organization and its partners) implementing the intervention	0	1	2	3	
Clearly defining the setting					
The geographic setting (for example, rural/urban, geographic region) where the intervention will be implemented during scaling	0	1	2	3	/6
The venue for service delivery (such as a community center, participants' homes, nonprofit organization, or school) where the intervention will be implemented during scaling	0	1	2	3	
Clearly defining participation and completion					
Who is considered a program participant (for example, is everyone who enrolls considered a participant, or is there a minimum length of time that a person must be in the program to be considered a participant?)	0	1	2	3	/6
Participant completion of the intervention (for example, minimum services completed, certification acquired, particular score achieved on an assessment)	0	1	2	3	

# Checklist 4. Defining the target population

Organizations can use the checklist below to assess whether they have a well-defined target population. This checklist assesses whether the definition of the target population includes the characteristics that people must have to participate in the intervention, including any inclusion or exclusion criteria, and how well the population aligns to the one for whom the intervention was shown to be effective.

## Checklist 4. Defining the target population

	Circle one				
Components	Not yet defined	No, but making plans to develop a definition	No, but actively developing a definition	Yes, this Is defined	Summary score
The characteristics of the population to be served by the intervention (target population)	0	1	2	3	/9
The criteria for determining who is eligible to participate in the intervention (inclusion criteria)	0	1	2	3	
The criteria for determining who is not eligible to participate in the intervention (exclusion criteria)	0	1	2	3	

# Checklist 5. Establishing implementation supports

Organizations can use the checklist to assess the status of its implementation supports for scaling. The checklist assesses six supports: (1) a monitoring system, (2) performance goals, (3) continuous quality improvement processes, (4) preservice and in-service training, (5) communications systems, and (6) data systems.

Checklist 5. Establishing implementation supports

	Circle one				
Components	No plans in place	No, but making plans to set up	No, but actively setting it up	Yes, this	Summary score
Monitoring	p		- 4		000.0
Personnel who will monitor the intervention (the monitoring team) are identified	0	1	2	3	/9
Monitoring team will assess whether core intervention components are implemented as specified	0	1	2	3	
Monitoring team will report on implementation issues or challenges to leadership and personnel delivering the intervention	0	1	2	3	
Establishing performance goals					
Benchmarks for service delivery are clearly established	0	1	2	3	/6
Benchmarks are monitored for achievement	0	1	2	3	
Engaging in continuous quality improvement (CQI)					
Processes for engaging in CQI are clearly articulated	0	1	2	3	/9
The intervention will be part of conducted CQI efforts	0	1	2	3	
The intervention procedures will be updated based on results of the CQI process	0	1	2	3	
Conducting preservice and in-service training					
Training to be taken before scaling the intervention begins is clearly articulated (preservice training)	0	1	2	3	/12
All personnel needing preservice training will receive it in a timely manner	0	1	2	3	
Training needed by individuals working on the intervention is clearly articulated (in-service training)	0	1	2	3	
All personnel needing in-service training will receive it in a timely manner	0	1	2	3	
Establishing communication systems					
A communication system exists that supports coordination among personnel working on the intervention	0	1	2	3	/9
A process exists to ensure that communications will function smoothly and as intended	0	1	2	3	
A process exists to resolve communication problems shortly after they occur	0	1	2	3	
Establishing data systems					
A data system supports collection, analysis, and decision making about the intervention	0	1	2	3	/12
A process exists to ensure that data are entered into the system in a timely manner and are of high quality	0	1	2	3	
A process exists to ensure that data are analyzed appropriately	0	1	2	3	
A process exists to ensure that data are used in decision making	0	1	2	3	

# Checklist 6. Having an enabling context

Organizations can use the checklist below to assess whether their context will likely enable successful scaling. The checklist assesses two components: (1) support by organization leaders and key stakeholders and (2) a culture of innovation and learning.

# Checklist 6. Having an enabling context

	Circle one				
Components	Not at all descriptive of the organization	Somewhat descriptive of the organization	Mostly descriptive of the organization	Fully descriptive of the organization	Summary score
Supporting the intervention					
Organizational leaders demonstrate support for the intervention	0	1	2	3	/6
Key stakeholders demonstrate support for the intervention	0	1	2	3	
Engaging in innovation and learning					
The organization has an established history of innovation	0	1	2	3	/12
The organization is innovative in finding ways to improve the intervention model	0	1	2	3	
The intervention's successes are discussed among personnel involved with the intervention	0	1	2	3	
The intervention's challenges are discussed among personnel who can help to overcome them	0	1	2	3	

# Checklist 7. Establishing an implementation infrastructure

Organizations can use Checklist 7 to assess whether they have the infrastructure in place to support scaling. The checklist assesses two components: (1) financial and human resources and (2) materials and physical space.

Checklist 7. Establishing an implementation infrastructure

	Circle one					
Components	No plans in place	No, but making plans to set up	No, but actively setting it up	Yes, this is in place	Summary score	
Procuring financial and human resources						
The organization has adequate funding for the intervention	0	1	2	3	/9	
The organization provides enough dedicated personnel for the intervention	0	1	2	3		
A human resource system is in place to hire, supervise, and develop personnel implementing the intervention	0	1	2	3		
Providing materials and physical space						
A thorough description of the materials and physical space needed to implement the intervention exists	0	1	2	3	/9	
The materials needed to implement the intervention are available	0	1	2	3		
Enough physical space exists for implementing the intervention	0	1	2	3		

## Checklist 8. Summarizing across checklists

Organizations can use the summary checklist for scaling readiness to quickly identify areas in which such assistance might be needed. The summary checklist compiles information from each scaling readiness condition checklist (listed in bold) and the various components within each condition. To complete the summary checklist, organizations should (1) enter the summary score they received for each of the various scaling readiness components, then (2) tally these scores to create a total summary score (which can be entered into the box highlighted with a border) for each condition. These scores can help organizations quickly identify the conditions in which an intervention or the organization itself might not yet be ready to scale and might seek to build their capacity before scaling.

### Checklist 8. Summary checklist

Evidence of effectiveness	Guidance
For identifying an effective intervention, are all items under research rigor, intervention effectiveness, and intervention relevance marked yes?	Yes: Proceed to scaling readiness conditions No: Proceed to building evidence
For building evidence of effectiveness for your intervention, are all items under define intervention, lay evaluation groundwork, prepare for evaluation, and conduct evaluation and assess effectiveness marked yes?	Yes: Proceed to scaling readiness conditions No: Continue building evidence for your intervention
Scaling readiness conditions	Summary scores
Intervention	
Well-specified intervention	
Identifying core components	/9
Clearly defining personnel roles	/9
Clearly defining the setting	/6
Clearly defining completion	/6
TOTAL SUMMARY SCORE	/30
Well-defined target population	
TOTAL SUMMARY SCORE	/9
Implementation supports	
Monitoring implementation	/9
Establishing performance goals	/6
Engaging in continuous quality improvement	/9
Conducting preservice and in-service training	/12
Establishing communication systems	/9
Establishing data systems	/12
TOTAL SUMMARY SCORE	/57
Organization	
Enabling context	
Supporting the intervention	/6
Engaging in innovation and learning	/12
TOTAL SUMMARY SCORE	/18
Implementation infrastructure	
Procuring financial and human resources	/9
Providing materials and physical space	/9
TOTAL SUMMARY SCORE	/18

## Process for completing the SCALER

The personnel member who has ownership over the SCALER ("the SCALER owner") should track whether and when the SCALER needs to be completed, identify and bring together the appropriate personnel to complete it, have the personnel complete it, synthesize the scores and produce output to share with personnel on action steps to address the SCALER results, and then determine when the tool should be filled out again. See below for a suggested process that organizations can take to complete the SCALER on an ongoing basis or as needed.

### **Exhibit A.1. Process for completing the SCALER**

The personnel member who has ownership over the SCALER ("the SCALER owner") should take these steps to complete it as needed:

## Who at the organization should complete the SCALER?

- The SCALER owner should consult with appropriate organizational personnel—such as leaders and the intervention program manager—to decide who should help to fill out the SCALER.
- Once these personnel are identified, the SCALER owner will let them know they are responsible for helping to fill out the tool and the deadline for doing so.
- The SCALER owner should set up a timeline for completing the tool.

#### How should organizational personnel complete the SCALER?

- We recommend that the SCALER owner have each personnel member fill out his or her own version of the tool and then set up a meeting for everyone to discuss and come to agreement on scores.
- Organizations might prefer to take different approaches, such as having several personnel fill it out together while
  discussing it during a meeting.

#### What happens after the SCALER is completed?

- After scoring is completed, the SCALER owner documents the scores and shares them with key stakeholders and organizational leaders involved with preparing to scale.
- Working with key stakeholders and organizational leaders, the SCALER owner can also suggest next steps—for example, defining the target population if it is found to lack a definition.

#### When should the SCALER be filled out again?

- Depending on the priorities of the organization, its interest in or plans for scaling, and any upcoming changes to the organization or its external context, the SCALER owner should identify an appropriate time to complete the SCALER again.
- The SCALER is intended to be a living document, and reflective of one moment in time. As changes or progress is being made to scaling readiness conditions, the document should be updated accordingly.

## Discussion guide for the SCALER

After scoring their scaling readiness using the SCALER, organization personnel will likely want to identify next steps to strengthen scaling readiness as a result of the scores. See below for suggested discussion questions to help organizations assess their scores and identify actions to take after completing the SCALER.

- In what areas are we the strongest? In which areas do we appear to need work? Are there specific items (rows) on which we should concentrate our efforts for improvement? (This may include identifying evidence of effectiveness, building evidence of effectiveness, or any of the scaling readiness conditions.)
- Do we need any additional information to complete any parts of the SCALER? Are there any items that we don't know the answers to? If so, how can we go about answering those items?
- In what conditions or areas, if any, do we have differences of opinion? What information can we draw upon to resolve those differences?
- Who are the stakeholders (organization personnel or external stakeholders) with whom we should discuss these results (that is, people who were not involved in completing the SCALER)?
- What next steps should we take to identify or build evidence of intervention effectiveness, or strengthen our scaling readiness (as appropriate)? Which steps are highest and lowest priority? What is our timeline for taking action?
- What partners could we bring in to build capacity in certain components? Should we seek to identify new partners to help gain this capacity?





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