Scaling Up Effective Health Interventions for Impact

Challenges and strategies

By:
Joseph Dwyer
Management Sciences for Health

www.LMGforHealth.org
Funding was provided by the United States Agency for International Development (USAID) under Cooperative Agreement AID-OAA-A-11-00015. The contents are the responsibility of the Leadership, Management, and Governance Project and do not necessarily reflect the views of USAID or the United States Government.
Introduction

Effective practices and programs to reduce illness and save lives are abundant. The application of these practices or the implementation of proven programs, however, continues to lag in many countries and, when they are implemented, it’s often not at the scale needed to achieve optimal impact. To scale up appropriately requires a purposeful and systematic approach. Fortunately, tested pathways and valuable resources are now available to guide health teams in successful scale-up of effective practices and programs.

This technical brief builds on a previous Leadership, Management, & Governance (LMG) Project newsletter article on the change management process. That newsletter had addressed why leading change is an important part of every health manager’s role. Stressing that change is not easy, it demonstrated how following a tested pathway can help. It further introduced a Guide to Fostering Change to Scale Up: Effective Health Services, which was published in November 2013; it is also referenced in the Annotated Resources List at the end of this brief.

Building on that initial discussion of the change management process, this technical brief focuses on scale-up, and presents these four important considerations for achieving impact through systematic scale-up:

1. Developing effective solutions as well as identifying and clarifying the problem to be addressed.
2. Achieving optimum health impact and implementing effective interventions at scale-up.
3. Recognizing that planning for scale-up must start at the very beginning of project design, even at the pilot or demonstration stage.
4. Knowing that sustaining the gains achieved as a result of effective interventions requires scale-up that is vertical—i.e., within organizations or institutional structures and systems—as well as horizontal, which involves expanding coverage.

We are mostly likely to be familiar with successful pilot or demonstration health interventions showing good outcomes on a small scale. However, success in systematically scaling up these demonstrations to achieve a measurably greater impact on the community’s health is less commonly seen. Where scale-up has been implemented, the focus has usually been on what ExpandNet/the World Health Organization (WHO) often calls “horizontal scale-up, or expanding coverage.”

To sustain the gains and truly integrate the interventions into the DNA (structures and systems) of whole organizations or institutions, vertical scale-up, as described by ExpandNet/WHO, is also critical. This outline of a pathway for systematic and purposeful scale-up is focused on vertical scale-up—i.e., sustaining the changes in behaviors and practices as well as integrating support into systems and policies.

---

ExpandNet, in collaboration with the WHO, has decades of experience with scale-up, including research on what works. Their definition of scale-up below highlights that this must be done deliberately; scale-up does not happen spontaneously. They emphasize this: *To ensure an intervention’s sustainability, the scale-up plan must encompass not only the expanded availability of an innovation, but also its institutionalization in policies and programs.*

---

**Definition: Scale-up**

*Scale-up is the deliberate set of efforts to increase the impact of health innovations whose merit has been established in pilot or experimental studies, to benefit more people and to foster policy and program support on a lasting basis.*

— ExpandNet/WHO

---

We will present more on these key aspects of achieving impact through scale-up in the sections below, starting with Section I, which focuses on the need to clearly understand the problem to be addressed.

### Section I.

**Developing effective solutions requires identifying and clarifying the problem to be addressed.**

As described in the LMG Project newsletter article “Change Management for Health Leadership Teams,” the vast majority of health managers and health providers want to improve the lives of the people and communities they serve. In many service delivery systems, however, interventions that have been implemented for years continue with no effort to analyze whether they are making an impact on the health status of the population. Alternatively, managers and providers introduce new interventions proposed for scale-up and expect health status to improve, yet they fail to conduct appropriate analysis to ensure that result.

An example from Liberia illustrates these problems. To meet its goal of reducing under-5 mortality, the ministry of health planned a program to strengthen under-5 services at health clinics. The program trained clinic-based providers to better meet the needs of the under-5 population, and its performance-based indicators were aligned accordingly. However, deeper analysis later showed that the vast majority of the children affected needed interventions that were community-based, not clinic-based, because very few of them actually went to the medical clinics.

In this case, the problem of high under-5 mortality was correctly identified, but a deeper analysis of where and how the population could be reached was not conducted. The measures and incentives the
ministry developed for the program focused on demonstrating improved performance at the clinics, but because poor clinical skills weren’t necessarily the main factor affecting the high mortality rate, the ministry was measuring the wrong thing. By improving clinic performance, the ministry was not moving closer to its goal of reducing under-5 mortality.

For a health intervention to have an impact, its scale-up plan must be based on a systematic analysis of the problem, thus aligning the intervention with the root(s) of the problem and, at implementation stage, ensuring that the monitoring and evaluation system is measuring the right things. *Causal pathway thinking*, as described below, is a valuable approach for conducting a deep analysis of the problem to be addressed; it provides a method for aligning activities and indicators as a part of planning for scale-up.

**Causal Pathway Analysis**

Causal pathway analysis is an analytic process that focuses on achieving maximum attributable health outcomes. For example, its application in project design maximizes the probability that projects and programs will achieve desired health outcomes by helping managers make appropriate choices among competing technical interventions, programmatic approaches, inputs, processes, and outputs. It helps managers focus on the most important health system strengthening (HSS) efforts and identify the most appropriate indicators for monitoring progress.

A defined causal pathway links key programmatic inputs to measurable health impacts. Developing this causal chain requires working backwards. It begins by first defining the measurable health goal, then using a critical thought process to determine the linkages between the causes of poor health, the populations affected, and where the population can be reached. After those steps have been completed, systems-strengthening actions that will allow selected interventions to be successful are designed.

Management Sciences for Health has developed a 6-Step Process for tracing the causal pathway from intervention to health impact.5

---

Critical path is “at the heart of causal thinking.” Through the causal chain, programs can identify the high-impact problems, causes, risk factors, target populations, geographic areas, interventions, and HSS actions that have the greatest potential for impact on goal attainment. The combination of the high-impact program components and the causal chain constitute the critical path to health impact, which can guide primary project focus. Prioritizing high-impact interventions uses the Pareto Principle (also known as the 80/20 rule), which holds that some problems cause more mortality than other problems.  

<table>
<thead>
<tr>
<th>Health impact</th>
<th>Clear rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Each technical strategy, project or program should be driven by and contribute in a measurable way to achieving an ultimate health impact. Even if a project does not call for a focus on health outcomes (e.g., a project about management and leadership), we must be able to show a link between what we do and the health outcomes we achieve. Leadership for leadership’s sake would only be useful if that leadership improves some aspects of system performance necessary for improved health outcome (e.g., more appropriate deployment of staff, improved procurement of needed medicines, better allocation of financing).</td>
<td>There must be a clear rationale guiding the choice of program inputs, processes, health systems strengthening actions, and outputs based on their contribution to an ultimate health goal. Project activities should be logically and systematically constructed along a causal chain of programmatic action so that the relative contribution of each project activity along that causal chain is apparent in advance.</td>
</tr>
</tbody>
</table>

Evidence-based. Within each technical strategy, project, or program, the choice of program inputs, processes, outputs, and HSS actions must be evidence-based. We must use data and evidence as the basis for our decision-making. We must be able to clearly articulate why a choice in one direction is better than alternatives and understand how each choice will move us in the direction of achieving our goals.

### Section II.
### Achieving optimum health impact requires implementing effective interventions at scale.

The Institute for Reproductive Health at Georgetown University did a literature review in preparation for their study on scaling up the evidence-based Standard Days Method of family planning. They found that hundreds of pilot studies of health innovations had been conducted around the world and that the evaluations of many of these yielded positive results. Yet they found that few had been taken to scale, and fewer still had been scaled up sustainably. Their study found that this was partially due to inadequate understanding of the scale-up process and gaps in knowledge of how to monitor and evaluate the scale-up process.

---


Our experience at Management Sciences for Health indicates that pilot or demonstration projects are often approved provisionally. This provides the initial benefit of not needing to make policy changes or integrate changes to the institutional systems, while also dedicating enough resources for the pilot to be successful. In the scale-up phase, this high level of resources is rarely available, and going to scale and sustaining the change usually requires implementing policy and systems changes at various levels of the health system.

Along with the challenges noted above, institutions often underestimate the amount of funding and staff support needed to go beyond successful pilot projects and actually scale up for impact. Significant challenges are often overlooked at the start of scale-up. It is critically important to anticipate and plan for those challenges from the beginning of the pilot phase. Those who wait until the pilot is ended often find that they hadn’t anticipated the real costs and challenges of scaling up and that it is too late in the process to identify and cultivate stakeholders who can support the scale-up effort. Strategies for planning for scale-up from the beginning of a pilot are described in the “Guide to Fostering Change to Scale up Effective Health Services” (introduced below). This includes a valuable resource from ExpandNet/WHO, called “Beginning with the End in Mind.”

**Definition: Impact**

_Impact essentially is the measurable difference made by the scale up of the selected health interventions. Impact goes beyond typical measures of outcomes, such as the number of people served or trained._

The Health Millennium Development Goals provide examples of health impact:

**MDG 4:** Between 1990 and 2015, reduce by two-thirds the under-5 mortality rate.

**MDG 5:** By 2015, reduce by three-fourths the maternal mortality ratio, and achieve universal access to reproductive health.

**MDG 6:** By 2015, halt or reduce the spread of HIV and AIDS.
Section III.

Sustaining the gains requires vertical scale as well as horizontal scale up.

Sustainable scale-up of a health innovation requires efforts along two axes. Perhaps the most obvious is the expansion of services—i.e., horizontal scale-up. Equally important, however, is the institutionalization, or vertical scale-up, of the innovation within organizations or institutional structures, systems, and policies.

—ExpandNet/WHO

Vertical Scale Up from Institute of Reproductive Health (IRH) Rwanda Staff Member Perspective

“I remember in Rwanda at the beginning, we talked a lot about ‘extension.’ Extension in 13 sites, and extension in 15 new sites, and in 39 sites, and at that time, I never thought of institutionalization. I thought more about the geographic coverage and horizontal integration than I did about vertical integration. But with the ExpandNet framework, I realized that what we were doing was not enough; it was only one aspect.”

—IRH Rwanda Staff

An effective lens for institutionalizing scale-up within an organization, such as an NGO or CSO, or institution, like a ministry of health at the district or national level, is the WHO 6 Building Blocks for Health Systems. Each of the six building blocks plays a critical role in health systems at all levels, and all of these areas come into play to sustain scale-up. We have included the six building blocks below with a description from Management Sciences for Health, offering a health systems strengthening (HSS) perspective.

Six Health System Strengthening Building Blocks

The contribution of each of the HSS building block to achieving sustained high coverage of the interventions(s) you are planning to scale up depends on the problem being addressed and the services that need to be delivered by the health system and used by clients. The systems part of the analysis (Steps 4 and 5 of the Six Steps to Achieving Greater Impact from Section I above) includes identifying the priority systems barriers to scaling up your selected intervention and engaging those decision makers in early planning. The Management Sciences for Health approach to scale-up and HSS description of the building blocks is included here to assist in planning for systems improvements and resources that will be needed in successful scale-up.

Note: Activities and strategies for addressing needed systems interventions are included in Phase IV of the “Guide to Fostering Change to Scale Up Effective Health Services” presented in Section IV of this technical brief by Joseph Dwyer.⁸
Six Building Blocks

1. **Leadership and governance**: This includes strategic direction, plans and policies, effective oversight, regulation, motivation and partnership. The leadership and governance building block is over-arching, as this work is critical for integrating and aligning efforts in all of the others to achieve results.

2. **Service delivery and demand**: This includes quality, evidence-based, preventative, and curative health interventions, which are delivered effectively and efficiently at maximum coverage.

3. **Human resources**: This includes sufficient and fairly distributed staff—including management, administration, and service providers—who are skilled, equipped, supported, and motivated to provide quality health services.

4. **Medicines, vaccines, and technologies**: This includes essential medical products, vaccines, and technologies of assured quality, safety, efficacy, and cost-effectiveness that are procured, distributed, delivered, and used in a cost-effective and scientifically sound manner.

5. **Financing**: This includes adequate funds for health that are collected and allocated to ensure universal access to health services and are used efficiently and cost-effectively.

6. **Information**: This includes reliable, comprehensive, and timely reporting, surveillance, and response that is generated, analyzed, synthesized, and disseminated effectively.

An additional resource for tested approaches to strengthening the health system building blocks, *Health Systems in Action: an eHandbook for Health Leaders and Managers*, brings over 10 years of experience together from all of the technical centers of Management Sciences for Health. It specifically addresses interventions for individual building blocks and how all building blocks need to function together through good leadership and governance to achieve impact.

**Section IV.**

**Pathways and valuable resources for successful scale-up now available.**

In this section, we share a tested pathway for scale-up—the over-arching Guide to Fostering Change to Scale-up Effective Health Services. We encourage readers to adapt and use the lessons, strategies, and resources found within the guide for purposeful and systematic scale-up of health interventions to reduce unnecessary illness and save lives.

The Guide is based on the recognition that change is inevitable for survival and that directed and planned change has a much greater chance of success than ad hoc attempts to introduce new practices. Everyone working to improve health is in the business of *fostering, leading, or implementing change*. But

---

not everyone involved in this work has a clear pathway that links proven change practices with evidence-based clinical and programmatic innovations.

The Guide, originally produced in 2007, was updated in 2013 to include lessons learned from several countries in Asia, Africa, and Latin America. It is available electronically on the website of the USAID-funded Knowledge for Health (K4Health) Project and was officially launched in December 2013 at the Implementing Best Practices Consortium Annual Meeting in Washington D.C. The Guide includes valuable learning from ExpandNet/WHO, as discussed earlier in section III, as well as approaches influenced through the work of Management Sciences for Health, The MEASURE Evaluation Project, University Research Corporation, WHO, USAID, and other organizations on the IBP Task Team, which coordinated the process of revising and updating the Guide and making it available electronically through the K4Health Website.

**Purpose of the Guide**

Recognizing that successful change is a means of improving the availability and quality of services, expanding utilization and, ultimately, improving health outcomes, the Guide links effective change practices with proven clinical and programmatic practices to achieve results by:

- Describing principles fundamental to effective change.
- Increasing awareness of proven approaches to effective change.
- Providing “how-to” steps for successful change including scale-up.
- Describing key challenges of scaling up, causes for the challenges and recommended activities or strategies for meeting those challenges.

*Since this technical brief has a focus on Scale Up, we include selected parts of Phase IV – Scale-Up below. (All of the Phases and Steps are in the Guide to Fostering Change along with information, lessons and resources/tools.)*

The five steps described in the Phase IV Scale Up section specify typical challenges faced in each step and offer recommended activities/strategies to overcome the respective challenges.

To reach Phase IV, teams must go through several other phases described in the Guide, including: a preliminary Phase—forming the change coordination team; Phase I: defining the need for change; Phase II: planning for demonstration and scale-up; and Phase III: supporting the demonstration.

**Phase IV: Scale Up Steps and Related Issues**

*Step 1. Evaluate, consolidate, and disseminate lessons learned from the pilot, and decide whether the practice warrants scale-up.*

The results of the pilot will inform the decision of whether to scale up and will lend credibility to the practice.
Typical challenges faced during this step include:

- Evaluating the results of the change effort systematically, honestly, and objectively so that plans for scaling up are realistic.
- Shaping messages that will convince selected audiences to support the new practice(s).
- Knowing and using the most effective communications channels for each audience.
- Having sufficient information to assess whether the capacity exists to implement the change in routine program settings.
- Feeling pressure to scale up the change, even in the absence of conclusive results.

Note: Some change efforts fail and are not appropriate for scale-up. In such a case, the coordination team should objectively analyze the reasons for failure and share the findings with stakeholders. An effective team can encourage the organization to learn from the failure and try again.

Key activities or strategies to address the challenges include:

- Evaluating and documenting lessons learned, results, and adaptations for different audiences.
- Sharing the documented process and benefits with stakeholders to engage them in identifying resources for scaling up.
- Acknowledging that ignoring negative factors will result in unrealistic plans for scale-up, with a higher likelihood of failure.
- Sharing with decision makers the benefits of a systematic review of the chances of success in order to avoid a premature decision on whether to scale up the practice.
- Using both personal (for example, peer exchanges) and impersonal (for example, reports and websites) means of dissemination.

Step 2. If the pilot succeeded, use a systematic approach and participatory process involving key stakeholders to (1) develop a scaling-up strategy and (2) secure resources to support implementation of the strategy.

The coordination team must advocate effectively for scale-up with new organizations and players. This will be facilitated if some members of the new organizations have been involved in the demonstration process and advocacy for scale-up was initiated early on. Scale-up should be approached systematically and should be technically and financially feasible. Capacity building for scale-up will enhance ownership, cultivate champions, and provide opportunities to mobilize resources to institute change on a larger scale.

Step 3. Monitor the process of scaling up to ensure sustainability and provide evidence-based decision making.

Monitor implementation of the practice to understand both the benefits and shortcomings of the practice in order to adapt practices midstream and address challenges.
Step 4. Implement the scaling-up strategy.

In this step, the practice is mainstreamed according to the implementation plan, fostering sustained improvement.

Step 5. Evaluate and communicate the progress of the scale-up to key stakeholders.

Evaluate the monitoring data and use the information to make decisions. Then communicate the findings from monitoring activities to key stakeholders and collaboratively plan for future iterations.

Conclusion

As noted previously, successful change is not easy, and most change efforts fail. Taking a purposeful and systematic approach to scale-up is therefore a challenge, especially when the focus is on sustaining the gains with vertical scale-up in addition to expanding coverage with horizontal scale-up. While none of this is easy, research shows that using a systematic approach is a much better use of your resources than taking an under-resourced ad hoc approach.

We also noted that scale up allows the activity to have impact, not just to expand coverage. To reiterate, we addressed these four important considerations for achieving impact:

1. Be clear on the problem to be addressed before leaping to solutions.
2. Achieving health impact requires implementing interventions at scale. Planning for scale-up must start even at the pilot or demonstration stage.
3. Sustaining the gains requires vertical scale up (within organizations or institutional structures and systems) as well as horizontal scale up (expanding coverage).
4. Tested pathways and valuable resources exist to guide successful scale-up.

Resources are now available that can significantly increase your chances of success in scaling up a selected activity to achieve impact. We encourage you to adapt and utilize the valuable resources found below in the Annotated Resource List.
Annotated Resources List

Guide to Fostering Change to Scale up Effective Health Services (includes Practical Guidance for Scaling Up Health Service Innovations)

Calls for scaling up successfully tested health service innovations have multiplied over the past several years. Many acknowledge that pilot or experimental projects are of limited value unless they have larger policy and program impact. Moreover, there is increasing recognition that proven innovations cannot simply be handed over with the expectation that they will automatically become part of routine program implementation. While there has been progress, there is still little practical guidance on how to proceed with scaling up. This document can begin to fill this gap.

Nine Steps for Developing a Scaling Up Strategy

The aim of this guide is to facilitate systematic planning for scaling up. It is intended for program managers, researchers, and technical support agencies seeking to scale-up health service innovations that have been tested in pilot projects or other field tests and proven successful.

Worksheets for developing a scaling-up strategy

These worksheets are to be used in conjunction with the ExpandNet/WHO document entitled “Nine Steps for Developing a Scaling-up Strategy.”

Guide for Monitoring Scale-up of Health Practices and Interventions

Several resources have been developed to assist program implementers with the process of scaling up. However, once scale-up is underway, few resources are available for continuous and systematic monitoring of the process to track progress toward sustainability of these innovations. This guide is intended to provide governments, donors, country organizations, and implementing partners with a low-cost and replicable approach to monitoring the process of scaling up innovations in health.


This white paper aims to support those planning to take effective health care practices from one setting or isolated environment and to make them ubiquitous across a health care system, region, state, or nation. It is a preparation tool that is meant to guide conversation and thinking prior to the launch of a large-scale improvement effort; it considers the motivations, foundations, aims, interventions, social systems, and methods for spreading change that coordinators of such initiatives must understand and select.

A key factor in closing the gap between best practice and common practice is the ability of health care providers and their organizations to rapidly spread innovations and new ideas. Pockets of excellence exist in our health care systems, but knowledge of these better ideas and practices often remains isolated and unknown to others. One clinic may develop a new way to ensure that all diabetics have their HbA1c levels checked on a regular basis, or one medical-surgical unit in a hospital may develop a consistent way to reduce pain for post-operative patients. But too often these improvements remain unknown and unused by others within the organization. Organizations face several challenges in spreading good ideas, including: the characteristics of the innovation itself; the willingness or ability of those making the adoption to try the new ideas; and the characteristics of the culture and infrastructure of the organization to support change.