# Scaling-up and Spreading Innovations in Healthcare: An Overview of Best Practices

## **Literature Review**

December 2019



## Literature review request

Description of information	A literature review was conducted to provide an overview of best practices regarding successful scale and spread of innovations in healthcare settings.
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## Introduction

The majority of healthcare improvement initiatives fail to move from adoption to sustained implementation (Counte & Meurer, 2001). This is especially apparent in large scale initiatives that aim to cross organizational boundaries and involve multiple sectors (NHS England, 2018). Failure to implement and sustain innovations can result in a misuse of staff, resources, and leadership effort (Ilott et al., 2013). Many promising innovations are abandoned or not adopted due to a failure to scale and spread (Greenhalgh et al., 2004). This failure can lead to the creation of "pockets of excellence" or "improvement islands" where successful efforts are usually localized, and their benefits are limited in scope (Massoud et al., 2006; Healthcare Improvement Scotland [HIS], 2013). Developing effective measures to scale and spread innovations can increase their benefits and have a greater impact across areas and settings (HIS, 2013).

### Purpose

This document was prepared in response to a request to provide an overview of best practices regarding successful scale and spread of innovations in healthcare settings.

It is recommended that readers consult Appendix B in this document for a list of resources that provide specific details to assist with spreading and scaling healthcare innovations.

### Methods

Searches for academic literature were conducted in the following electronic databases: PubMed, MEDLINE, CINAHL, Embase, and PsycINFO. A variety of search terms related to scale and spread were used. These were coupled with terms related to best practice and healthcare. The search was limited to English language, peer-reviewed research articles from the last 10 years (2009-2019); however, in exceptional cases, articles published prior to 2009 were considered. For a detailed list of search terms, see Appendix A.

A search for grey literature was also undertaken. A number of websites of relevant organizations were searched; these included: the Agency for Healthcare Research and Quality, the National Guideline Clearinghouse, the National Institute for Health and Care Excellence, the Institute for Healthcare Improvement, Kaiser Permanente, the U.S. Department of Veteran Affairs, and a number of government websites in Canada and abroad. In addition, a Google search was conducted using the same search strategy used in the electronic database search.

Literature items were evaluated for relevance based on their title and abstract or introduction. Full text copies of relevant items were retrieved and appraised, the results of which are presented in this report.

### Limitations

Due to time constraints, a systematic review of the literature was beyond the scope of this report. As the purpose of this report was to provide an overview of current literature, the included studies were not thoroughly assessed for quality.

## Findings

### What is scale and spread?

There are no universally accepted definitions of the terms "scale" and "spread." The terms are occasionally used interchangeably, or used as synonyms for dissemination, diffusion, or implementation. Scale and spread, and related terms, can mean different things to stakeholders, therefore it is important to clearly communicate the definitions of these concepts within the context of a project so that stakeholders understand the language being used (Shiell-Davis & Wright, 2015).

Spread, or spreading, is commonly defined as extending widely over an area (Mittman, 2014). For example, spread is when an innovation is disseminated consistently across an area, and the innovation is adopted by others, often replacing existing practices or procedures within a health system (Barker, Reid & Schall, 2016; Albury et al., 2018).

Scale, or scaling-up, usually means delivering an innovation "in a way that increased the number of people benefiting from it while ensuring the original design and measures were maintained" (Shiell-Davis & Wright, 2015, p. 5). ExpandNet, a World Health Organization (WHO) initiative focused on reproductive health, defines scaling-up as "deliberate efforts to increase the impact of health service innovations successfully tested in pilot or experimental projects so as to benefit more people and to foster policy and program development on a lasting basis" (WHO, 2010, p. 2).

### Rogers' diffusion of innovations model

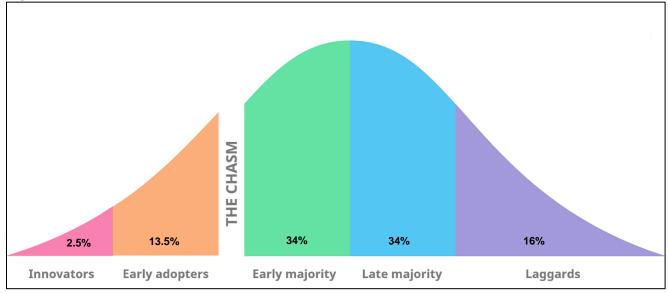
The modern concept of scale and spread comes from Rogers' diffusion of innovations theory (Rogers, 2003; Health Quality Ontario [HQO], 2013). The model explains the process by which innovations are accepted or rejected by an organization or individuals (HQO, 2013; Shiell-Davis & Wright, 2015). According to the theory, successful spread and sustainability of innovations often possess the following five factors:

- 1. clear advantage compared to current ways
- 2. compatibility with current systems and values
- 3. simplicity of the innovation and its implementation
- 4. ease of testing before making a full commitment
- 5. observability of the change caused by implementation and its resulting impact (HQO, 2013; HIS, 2014; Shiell-Davis & Wright, 2015).

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Rogers describes five adopter groups (see Figure 1) based on their level of motivation to adopt new innovations:

- **Innovators** are willing to adopt an innovation simply because it is new. Innovators have a tendency to take risks and are often the first to develop new ideas.
- **Early adopters** are typically opinion leaders that act as role models for others. Similar to innovators, they are quick to adopt an innovation.
- **Early majority** are a part of the critical mass that ensures adoption. They are deliberate and need to see practical benefits of an innovation before adoption.
- Late majority are also a part of the critical mass that ensures adoption. Compared to the early majority, they are more skeptical and conservative and will only adopt an innovation after it has been implemented by the majority.
- **Laggards** are very conservative and traditional. They are the final group to adopt a new innovation. (Rogers, 2003; Nykiforuk, 2011)



#### Figure 1: Diffusion of innovations model

Source: Adapted from Everett Rogers' diffusion of innovations model

In many cases, failure to adopt an innovation is not a result of content or poor planning, but rather the proposed changes do not "connect and engage with people" (NHS England, 2018, p. 71). When this occurs, change can be perceived as "must do" rather than "want to do" as the changes are not connected to stakeholders' own goals and values (NHS England, 2018). This serves as a major impediment to successful scale and spread and can take many different forms, including what is called the "chasm," which signifies the space between the innovators and early adopters that create new ideas and the rest of the system (early and late majority, laggards) (see Figure 1) (NHS England, 2018). This phenomenon represents the point where many innovations fail to scale and spread successfully (Enhancing Alberta Primary Care Research Networks, 2018). The "chasm" needs to be crossed so that an innovation can achieve

a tipping point and reach its intended audience (Enhancing Alberta Primary Care Research Networks, 2018).

Despite the "chasm," there is often widespread desire to improve services and care for patients, and spread effective practices across teams, departments, organizations, and systems (Shiell-Davis & Wright, 2015). Although the desire for improvement is present, identifying and explaining the factors that make scaling-up and spreading innovations possible are often unclear (Shiell-Davis & Wright, 2015).

### Key factors for successful scale and spread

An increasing amount of literature has focused on why innovations succeed in one place but then fail to have the same impact when spread and scaled up (WHO, 2016). Scale and spread often happens in complex systems, so it is difficult to provide a single approach that is applicable to every case or setting (Greenhalgh et al., 2004; Ovretveit, 2011; Paina & Peters, 2012). Much of the success of scaling and spreading an innovation depends on the unique characteristics of where the innovation is being implemented. While it is important to keep the main features of the innovation intact, the approach must be tailored to the local context (Greenhalgh et al., 2004; Ovretveit, 2011; Paina & Peters, 2012). Although there may not be a universal approach, there are several key factors that can help facilitate successful scale and spread.

#### Evidence-based innovation

The first step in a scale and spread initiative is to identify an appropriate innovation. The innovation needs to present obvious benefits in comparison to existing practices, and should address an identified problem or gap (HQO, 2013; Centre for Addiction and Mental Health [CAMH], 2014; NHS England, 2018). It should be based on evidence and should be credible and relevant.

The features of the innovation that are vital for successful outcomes should be described. It is also important to describe how the outcomes stemming from the innovation's implementation can have a meaningful impact on people (CAMH, 2014; NHS England, 2018). The benefits of the innovation need to be applicable and strongly stated to stakeholders (Nieva et al., 2012). The core features of the innovation should be defined in order to preserve them when implementing the innovation in other areas (Nieva et al., 2012). Other features that can be modified to the needs of each intended implementation area should also be identified (Nieva et al., 2012).

Creating a spread plan can help to outline the actions that need to be taken to achieve the spread goal (Massoud et al., 2006). An effective spread plan maps out how an innovation will be spread by addressing several key factors, including: communication methods to engage the target population; a system to measure progress in meeting the spread goal; and how changes



to a department, facility, or organization can be sustained. See the resources in Appendix B for more information about developing a spread plan.

#### Key points for consideration:

- What is the goal of spreading the innovation?
- What are the benefits of the innovation?
- What is the plan to explain the benefits?
- Who are the relevant stakeholders?
- What are the core features of the innovation? What are the adaptable features?
- Does the innovation align with the vision, values, and priorities of the organization? (HIS, 2014; WHO, 2016)

#### Case study: The 100,000 Lives Campaign

The 100,000 Lives Campaign was an initiative developed by the Institute for Healthcare Improvement (IHI) to improve safety in U.S. hospitals. IHI instructed participating health systems to implement six key interventions that had been shown to improve patient care and prevent avoidable deaths. Over an 18 month period, IHI shared resources and tools about the six key interventions with senior leaders in various health organizations by using newsletters, workshops, and other events. They also created networks to link participating organizations together, established clear project goals, and developed data monitoring and collection strategies. At its close, the campaign had enrolled over 3,000 hospitals and contributed to significant improvements in patient outcomes. (Berwick et al., 2006)

#### Innovation champions and spread agents

Innovations do not spread spontaneously. They require encouragement, guidance, and support in order to effectively scale and spread (Mittman, 2014). Scale and spread initiatives are generally more successful when there is strong leadership support (Greenhalgh et al., 2004; CAMH, 2014). Securing executive sponsorship and support for the innovation helps set expectations and accountability for the project (HQO, 2013). Including leadership from all areas involved in the innovation implementation will help increase influence and impact (Shiell-Davis & Wright, 2015). Recruiting organizational innovation champions is critical to help spread an innovation and to overcome the inevitable barriers that face any effort to do things in a different way (Nieva et al., 2012).

In addition to securing leadership support and finding innovation champions, it is equally as important to identify individuals that will lead and support the scale and spread initiative on a daily basis (HQO, 2013). These individuals, known as spread agents, "are responsible for carrying out the spread plan and communicating any barriers to the executive sponsor, so they may ensure that the spread plan is not delayed" (HQO, 2013, p. 8).



#### Key points for consideration:

• Who are the individuals who will lead the efforts to spread change (e.g., executive sponsors, innovation champions, and spread agents)?

#### Case study: The 100,000 Lives Campaign

One of the participating healthcare organizations in the Campaign was the Baptist Memorial Healthcare Corporation (BMHCC). Executive leadership in the health system selected an executive sponsor to manage the spread efforts. The sponsor formed a team comprised of management and senior staff to lead the implementation of the Campaign interventions. Some of the senior staff were physician champions who played a crucial role to support spread. They provided information and support to other physicians in a number of ways, including face-to-face education sessions and attending staff meetings within the health system. This approach gave the project team an opportunity to explain the rationale for the Campaign, answer stakeholder questions, and address the concerns of those resistant to the change. (IHI, 2008)

#### Multistakeholder infrastructure

A multistakeholder infrastructure is needed to support the scale and spread of the innovation (Nieva et al., 2012; HQO, 2013; Barker, Reid & Schall, 2016). A wide range of stakeholders affected by the innovation should be identified and engaged (HIS, 2014). Stakeholders may include "hospital/health system leadership, providers, patients and families, communities, employers, public entities, and private funders" (Nieva et al., 2012, p. 44). If possible, the voices and experiences from service providers, patients, and community members should be included as part of the initiative (HIS, 2014). It should be clear how the innovation will benefit each stakeholder group, and the positive impact the innovation will have on patient care (HIS, 2014). Receiving support from various stakeholders will bolster the success of spreading the innovation (Shiell-Davis & Wright, 2015).

Creating networks and increasing collaboration amongst stakeholders will help to augment "sharing resources, knowledge, and experience" (Shiell-Davis & Wright, 2015, p. 4). Empowering others to lead and support the change initiative will help forge shared goals and create an infrastructure that is needed to sustain long-term change (HQO, 2013).

In addition to building a strong multistakeholder infrastructure, sufficient resources, including "staffing, skills, time, space, equipment, and funds" should be secured to support the spread of the innovation (Mittman, 2014, p. 1). A list of the resources needed to effectively spread the innovation should be developed.

The innovation needs to be adapted to local environments and specific stakeholder groups. The targeted area should see a need for change, and have the necessary resources and capacity to implement the innovation (CAMH, 2014). Areas that have the skills and support they need to scale and spread the innovation will achieve better outcomes and are more likely to have sustained change (CAMH, 2014).

#### Key points for consideration:

- Connect with stakeholders to enable them all to contribute views, expertise, and ideas.
- Help people to feel that they are part of the change and have an important role to play.
- Engage with patients and providers to hear about their experiences and ideas for improvements.
- Secure the necessary resources to spread the innovation (HIS, 2014; HQO, 2013).

#### Case study: The 100,000 Lives Campaign

The BMHCC used "Breakthrough Conversations," a series of conference calls with multidisciplinary teams at various healthcare facilities, to connect leaders and staff to share successful improvement strategies and practices. These conversations became a core component of BMHCC's effort to spread improvement and helped to expand the impact of small pockets of success to other sites and departments. (IHI, 2008)

#### Evaluation

Evaluation is a key component of scale and spread initiatives as it is important to be able to demonstrate that the innovation has had a meaningful impact (CAMH, 2014; Shiell-Davis & Wright, 2015). An evaluation should describe how the innovation was adopted and implemented, as well as the resulting outcomes (CAMH, 2014). Developing an evaluation framework in the early stages of a scale and spread initiative will help guide the project and ensure that the goals and objectives are being met. It is important to determine, at the outset, how inputs (the resources used to implement the project), activities (the actions that are designed to meet the project objectives), outputs (the products that result from project activities) and outcomes (the benefits that the innovation are designed to deliver) are connected (HIS, 2014).

The critical factors that need to be measured to demonstrate that the initiative was successful should be identified. The project outcomes should be considered when determining what data will be collected. The collected data should provide evidence regarding whether or not the outcomes were met.

Healthcare Improvement Scotland (2014) provides the following seven steps to measure impact:

- 1. Decide on your aim
- 2. Choose your measures
- 3. Confirm how to collect your data
- 4. Collect your baseline data
- 5. Analyze and present your data
- 6. Meet to decide what the data is telling you
- 7. Repeat steps four to six (incorporating learning from each test of change). (p. 6)

It is beneficial to start with small scale pilot programs to identify problems and remove barriers before implementing on a larger scale (HQO, 2013). The experiences and lessons learned during pilot programs will be invaluable during large scale rollouts. Furthermore, data should be reviewed on a regular basis to identify areas of improvement and ensure that the innovation is sustained longer term (HQO, 2013; CAMH, 2014).

Implementing effective evaluation practices will help sustain the initiative, explain why and how the innovation was successful, and provide a template for spreading the innovation to other areas (HIS, 2014).

#### Key points for consideration:

- What are the objectives of the evaluation?
- What is the evaluation trying to measure?
- How will it be determined if the innovation has resulted in an improvement?
- How will data be collected?
- How will the results be analyzed and communicated?
- Did the initiative achieve its objectives and, if so, at what cost?
- What were the factors and conditions critical for success? (HIS, 2014; HQO, 2013)

#### Case study: The 100,000 Lives Campaign

Another participating health system, Children's Minnesota, publicly displayed Campaign improvement data in their facilities. Children's Minnesota displayed a screen saver slide show on hospital computers to show Campaign intervention results. This approach allowed hospitals in the organization to create a regularly updated performance measurement system. Executives, providers, and the public could see the progress that was made and compare it to the project goals outlined by the health system. (IHI, 2008)

#### Communication

Communication is a critical component in each step of implementing the innovation. Consider the previous key factors and how effective communication can contribute towards a successful scale and spread initiative. Communication efforts should:

- Be as clear and direct as possible, and happen frequently between all partners and stakeholders.
- Highlight the advantages of the innovation and identify how they align with the values and goals of the organization.
- Ensure that the need for change and the benefits of change are easily understood.
- Create a process for open communication between individuals of the implementation team and the implementation areas.
- Clearly demonstrate evidence of the innovation's benefits.
- Communicate examples of success in previous areas when connecting with potential adopters of the innovation.
- Consider the role of new media, and other communication strategies, and how it can create awareness and demand for innovations. (Nieva et al., 2012; HQO, 2013; HIS, 2014; WHO, 2016)

#### Key points for consideration:

- Has a communication plan been developed prior to spreading the innovation?
- How will open dialogue be established between those leading the initiative and the areas that the innovation needs to spread to?
- How will any improvements that are made be communicated to stakeholders? (HIS, 2014; HQO, 2013)

#### Case study: The 100,000 Lives Campaign

Parkview Health, another participating health system, created teams for each of the six key Campaign interventions. The teams consisted of medical staff and representatives from leadership. The teams would regularly provide information about the Campaign to staff in the health system by using newsletters, hospital-wide meetings, and other events. This gave the teams an opportunity to build awareness about the Campaign and share the stories and successes of the interventions on the lives of patients and providers. Parkview Health also put their own unique spin on the Campaign by developing their own logo based on the initiative and creating branded t-shirts and other accessories (e.g., balloons, napkins). (IHI, 2008)

## Discussion

Scaling-up and spreading innovations can be difficult. It can be particularly challenging to determine the specific processes and factors that contribute to the successful scaling-up and spreading of innovations. Success is often dependent upon the local characteristics of the setting or area where an innovation is being implemented. Despite there not being a one-size-fits-all framework, there are several key factors that impact the success of scale and spread initiatives. These factors include: 1) choosing an evidence-based innovation, 2) identifying innovation champions and spread agents, 3) developing multistakeholder infrastructure, 4) evaluating impact, and 5) incorporating clear communication practices throughout the initiative.

## References

- Albury, D., Beresford, T., Dew, S., Horton, T., Illingworth, J., & Langford, K. (2018). Against the odds: Successfully scaling innovation in the NHS. London, UK: The Health Foundation. Retrieved from <u>https://www.health.org.uk/publications/against-the-odds-successfullyscaling-innovation-in-the-nhs</u>
- Barker, P. M., Reid, A., & Schall, M. W. (2016). A framework for scaling up health interventions: Lessons from large-scale improvement initiatives in Africa. *Implementation Science*, *11*, 12. doi:10.1186/s13012-016-0374-x
- Berwick, D. M., Calkins, D. R., McCannon, C. J., & Hackbarth, A. D. (2006). The 100,000 lives campaign: Setting a goal and a deadline for improving health care quality. *JAMA*, 295(3), 324-327. doi:10.1001/jama.295.3.324
- Centre for Addiction and Mental Health. (2014). *How to spread successful interventions: What does the evidence say about scaling up*? Toronto, ON: Author. Retrieved from: https://eenet.ca/sites/default/files/pdfs/Scaling-Up-Evidence-Brief1.pdf
- Counte, M. A., & Meurer, S. (2001). Issues in the assessment of continuous quality improvement implementation in health care organizations. *International Journal for Quality in Health Care*, *13*(3), 197-207.
- Enhancing Alberta Primary Care Research Networks. (2018). *Scaling up: A principled approach for primary care transformation in Alberta*. Edmonton, AB: Enhancing Alberta Primary Care Research Networks & Alberta Medical Association Toward Optimized Practice. Retrieved from <a href="https://www.primarycareresearch.ca/images/scaling\_up.pdf">https://www.primarycareresearch.ca/images/scaling\_up.pdf</a>
- Greenhalgh, T., Robert, G., Macfarlane, F., Bate, P., & Kyriakidou, O. (2004). Diffusion of innovations in service organizations: Systematic review and recommendations. *Milbank Quarterly*, *82*(4), 581-629. doi:10.1111/j.0887-378X.2004.00325.x
- Healthcare Improvement Scotland. (2013). *Guide on spread and sustainability*. Edinburgh, UK: Author. Retrieved from <u>http://www.healthcareimprovementscotland.org/about\_us/what\_we\_do/knowledge\_mana</u> <u>gement/knowledge\_management\_resources/spread\_and\_sustainability.aspx</u>
- Healthcare Improvement Scotland. (2014). *The spread and sustainability of quality improvement in healthcare*. Edinburgh, UK: Author. Retrieved from <a href="http://www.qihub.scot.nhs.uk/media/596811/the%20spread%20and%20sustainability%2">http://www.qihub.scot.nhs.uk/media/596811/the%20spread%20and%20sustainability%2</a> Oofquality%20improvement%20in%20healthcare%20pdf%20.pdf

Health Quality Ontario. (2013). *Spread primer*. Toronto, ON: Author. Retrieved from <u>http://www.hqontario.ca/Portals/0/Documents/qi/qi-spread-primer-en.pdf</u>

- Ilott, I., Gerrish, K., Pownall, S., Eltringham, S., & Booth, A. (2013). Exploring scale-up, spread, and sustainability: An instrumental case study tracing an innovation to enhance dysphagia care. *Implementation Science*, *8*, 128. doi:10.1186/1748-5908-8-128
- Institute for Healthcare Improvement. (2008). *Getting started kit: Sustainability and spread*. Cambridge, MA: Author.
- Massoud, M. R., Nielsen, G. A., Nolan, K., Nolan, T., Schall, M. W., & Sevin, C. (2006). *A framework for spread: From local improvements to system-wide change*. Cambridge, MA: Institute for Healthcare Improvement. Retrieved from <u>http://www.ihi.org/resources/Pages/IHIWhitePapers/AFrameworkforSpreadWhitePaper.a</u> <u>spx</u>
- Mittman, B. (2014). Factors that influence the scale up and spread of innovations. Rockville, MD: Agency for Healthcare Research and Quality. Retrieved from <u>https://innovations.ahrq.gov/perspectives/factors-influence-scale-and-spread-innovations#ref1</u>
- NHS England. (2018). *Leading large scale change: A practical guide*. Leeds, UK: Author. Retrieved from <u>https://www.england.nhs.uk/wp-content/uploads/2017/09/practical-guide-large-scale-change-april-2018-smll.pdf</u>
- Nieva, V. F., Fair, S., Gray, L., & Bergmann, J. (2012). Scaling and spreading innovation: Strategies to improve cardiovascular health. Rockville, MD: Agency for Healthcare Research and Quality. Retrieved from <u>https://innovations.ahrq.gov/scale-up-and-spread/reports/scaling-and-spreading-innovation-strategies-improve-cardiovascular</u>
- Nykiforuk, C. I. J., Atkey, K. M., Nieuwendyk, L. M., Raine, K. D., Reed, S., & Kyle, K. (2011). *Policy readiness tool: Understanding a municipality's readiness for policy change and strategies for taking action.* Edmonton, AB: School of Public Health, University of Alberta. Retrieved from <u>https://www.nccmt.ca/knowledge-repositories/search/144</u>
- Ovretveit, J. (2011). Widespread focused improvement: Lessons from international health for spreading specific improvements to health services in high-income countries. *International Journal for Quality in Health Care*, *23*(3), 239-246. doi:10.1093/intqhc/mzr018
- Paina, L., & Peters, D. H. (2012). Understanding pathways for scaling up health services through the lens of complex adaptive systems. *Health Policy and Planning*, 27(5), 365-373. doi:10.1093/heapol/czr054
- Rogers, E. M. (2003). *Diffusion of Innovations* (5<sup>th</sup> ed.). New York, NY: Free Press.

- Shiell-Davis, K., & Wright, A. (2015). *Scaling-up innovations: Evidence review*. Edinburgh, UK: What Works Scotland Evidence Bank. Retrieved from <u>http://whatworksscotland.ac.uk/publications/scaling-up-innovations/</u>
- World Health Organization. (2010). *Nine steps for developing a scaling-up strategy*. Geneva, CH: Author. Retrieved from <u>https://www.who.int/reproductivehealth/publications/strategic\_approach/9789241500319/</u> <u>en/</u>
- World Health Organization. (2016). Scaling up projects and initiatives for better health: From concepts to practice. Copenhagen, DK: Author. Retrieved from <u>http://www.euro.who.int/en/publications/abstracts/scaling-up-projects-and-initiatives-forbetter-health-from-concepts-to-practice-2016</u>

## Appendix A: Literature search terms

Concept	Key Terms
Scale and spread	scale-up, scaling-up, spread, dissemination, reach, implementation, health plan implementation. implementation science, knowledge translation, adoption, innovation adoption, diffusion of innovation, organizational innovation, quality improvement, sustainability, technology
Best practices	best practices, facilitators, barriers, evidence-based practices, standards, guidelines, practice guidelines
Healthcare	health care, primary care, community care, secondary care, tertiary care, health care facilities, hospital, delivery of health care

## Appendix B: Resources

See below for several resources aimed at facilitating successful scale and spread. Links to the full-text document are in embedded in the titles.

#### Getting Started Kit: Sustainability and Spread Institute for Healthcare Improvement (2008)

A how-to guide for health organizations to sustain and spread improvements.

#### Nine Steps for Developing a Scaling-Up Strategy

World Health Organization (2010)

This comprehensive guide provides a step-by-step process for developing a scaling-up strategy.

#### Seven 'Spreadly' Sins

Institute for Healthcare Improvement (2015)

This document offers quick, practical tips for teams encountering challenges to successful sharing.

#### Spread Planner

Healthy Quality Ontario (n.d.)

This planner provides an outline of how to spread innovations.

#### Spreading Effective Practices: Toolkit Kaiser Permanente (2013)

This toolkit was developed to help teams spread effective practices.