QUALITY IMPROVEMENT PRIMERS

Spread Primer

MARCH 2024

Ontario Health

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Acknowledgements

This workbook is the result of the efforts of Ontario Health (OH). For information about other resources, use our Contact Us form or email us at Quorum@OntarioHealth.ca.

Ontario Health is funded by the Ontario Ministry of Health (MOH).

The Concept of Spread

Spread may be defined as the active dissemination of best practices and knowledge about interventions, and the implementation of interventions in every applicable care setting.[1] Essentially, spread is: "improvement knowledge that is generated anywhere in the system becoming common knowledge across the system, leading to improvement action."[2]

It is estimated that fewer than 40 percent of health care improvement initiatives successfully transition from adoption to sustained implementation that spreads to more than one area of an organization.[3] Lack of spread has been referred to as "islands of improvement effect."[4] This phenomenon leads to significant variation in processes and outcomes. Thus, no matter what level of experience you have with a service improvement, it is never too early to plan for spread.

Spread in the Quality Improvement Process

After Quality Improvement (QI) teams have made it through the first two steps of Ontario Health's QI Process, they are ready to "spread" the improvements that they have made.

During the "Spreading Improvement" phase of the QI Process, successful ideas are expanded and implemented on a broader scale. The successful spread of an improvement idea is based upon the successful completion of the "Implementing Change" phase and the knowledge that was gained.

While actual spread occurs at the end of a successful improvement initiative, organizational leadership and the improvement team should develop strategies for spreading improvements from the beginning of the improvement project. For example: ensuring that the team member responsible for spread is included in the entire improvement journey, from the beginning all the way through to the implementing change phase.

Developing a plan and laying the groundwork for spread will make it easier to ensure that others feel the effect of your improvement efforts. Effective spread planning helps to ensure that all

improvements – along with the renewed energy and satisfaction they generate – are spread to every relevant part of your organization.[5] However, how change is spread and where the change spreads to are both influenced by the nature of the changes being made as well as the nature and readiness of the organization as a whole.

The Science of Spread

Everett Rogers' Diffusion of Innovation (DoI) model defines the process by which an innovation or new knowledge is accepted or rejected by a particular group or organization. Rogers' theory suggests that an individual first becomes aware of an innovation and forms an attitude toward it based on their perception of the innovation. An individual's decision to adopt or reject an innovation is communicated over time through certain channels among members of a social system (either through mass media or through interpersonal relationships). The rate of adoption is affected by the following characteristics: relative advantage, compatibility, complexity, trialability and observability.[6]

Relative advantage: the degree to which an innovation is perceived as better than the current practice or ideas

Compatibility: the degree to which an innovation is perceived as consistent with the individual's existing values/ beliefs, past experiences and needs

Complexity: the degree to which an innovation is perceived as difficult to use

Trialability: the degree to which users can alter or implement an innovation on a small scale

Observability: the degree to which the results of an innovation are visible to others

Rogers theorized that, providing conditions are favourable, positive and effective ideas will spread due to their own good nature. Adoption often requires changes in the organization of care delivery, policies, resources, and other factors that will influence the large-scale spread of the superior model.[7]

To successfully spread an improvement, the initial improvement effort must be sustainable (see Ontario Health's *Implementing & Sustaining Changes Primer* for more information). The *Sustainability Guide*, a tool created by the NHS, is effective for gauging the sustainability of a change and can assist QI teams identify the: "strengths and weaknesses in [their] implementation plan and predict the likelihood of sustainability for [their] improvement initiative."[8]

Seven “Spreadly” Sins

The seven most “deadly” spread sins were identified by the Institute for Healthcare Improvement (IHI). These “spreadly” sins are:

1) **Starting with large pilot programs:** Successful spread involves testing approaches on a small scale and learning to neutralize or remove barriers before implementing a large spread plan. The experiences and opinions of the front line are crucial to developing good processes that will foster adoption and spread.
2) **Finding one person willing to do it all:** Any process or plan that relies on one individual is not sustainable.
3) **Relying on vigilance and hard work:** A process that relies on hard work and vigilance is difficult to teach and leaves itself open to interpretation and customization. However, sometimes a change will require people to work a little harder. In these instances, it is important to be receptive to new information and new tests of change. Use a variety of approaches to make it easy for staff to be receptive and to adopt change.
4) **Spreading the pilot without change if the pilot project worked:** No department or team is identical, so without some customization, successful spread is not likely. Therefore, customization should be permitted, but monitored and controlled. It is important to study small samples and customize the change based on lessons learned.
5) **Requiring the person or team who drove the pilot to be responsible for system-wide spread:** Sharing accountability for spread and empowering others to lead spread will build commitment to common goals as well as the infrastructure to sustain change.
6) **Looking at process and outcome measures on a quarterly basis:** Review data about defects and performance on a regular basis. Look at defects as they occur, with the aim of understanding and removing them. Audit small samples of data on a weekly basis (e.g., 10 charts per week).
7) **Expecting marked improvements in outcomes at an early stage:** Outcomes cannot be expected to change unless processes fundamentally change. Once processes are reliable (repeatable and predictable), outcomes will follow.

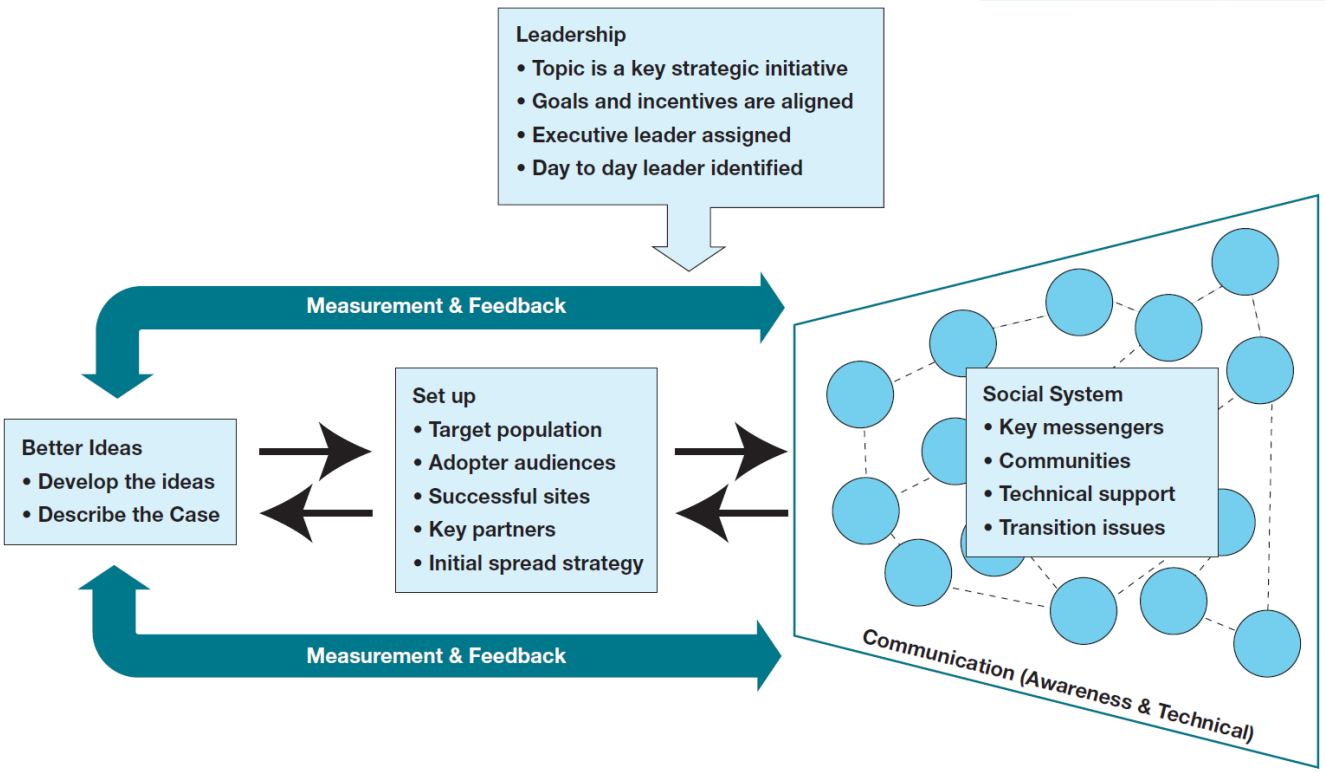
Therefore, the widespread adoption of change requires:

1) Creating a sense of urgency and an understanding of unmet needs
2) Building awareness of change concepts and ideas
3) Evaluating the applicability of potential changes to new environments
4) Instilling a belief that change ideas will result in improvement
5) Taking action to adopt the change

Building awareness of change concepts and ideas involves creating and sharing problem/opportunity statements, data, the science and story behind the change, and emphasizing why it's important to the staff. Independent evaluation of the applicability of potential changes can involve both the examination of whether a change is required in a particular environment and whether the changed concept or standard is amenable to local variation.

Framework for Spread

The following diagram, developed by the IHI, helps visualize the components that are important to ensuring the successful spread of improvements: leadership, the improvement, communication, social system or organizational culture, measurement and feedback, and knowledge management.



Successful Spread

To successfully spread any improvement, teams need to develop and carry out a purposeful plan with stakeholders throughout the organization. Teams also require an understanding of organizational culture and knowledge of different departments, areas and staff groups. Optimally, the plan for spread is strategically aligned with the vision and values of the organization. There are six key questions to ask when planning for spread:

1. What do you want to spread?

Determine what the organization wants to spread. Effective spread involves sharing lessons learned, change concepts, data and any relevant information to support the change, as well as the change itself.

2. Has an aim statement and a set of measurements been created for spread?

An aim statement acts as a compass, guiding the team to their destination, and identifies desired outcomes. Create an aim statement that addresses the *who*, *what* and *when* of the initiative. For example: "the changes, which led to a 20% reduction in medication errors, will be fully adopted in the following areas by January 1, 2025."

Developing clear key measures will help improvement teams continually assess the performance and reliability of the improved processes. Regularly assessing key measures will also allow teams to quickly determine whether or not processes have begun to break down and enable immediate action. Essentially, rigorous measures are the foundation for continuous quality improvement.

3. How will the change(s) be most effectively spread in your work environment?

Determine whether to spread the change as a bundle of ideas (e.g., Central Line Associated Bloodstream Infection [CLI] bundles) or one change at a time (e.g., ensuring the head of the bed is at 30°). Assess which changes are ready for spread and decide upon which one(s) to spread first. Determine the sequence in which you spread the changes to other areas of the organization as well as the pace at which they will be spread. For example, a small number of units and progress quickly or many units at a slow rate.

4. Have you identified individuals who will lead the efforts to spread change?

It is essential to secure executive sponsorship. The executive sponsor is responsible for creating expectations and accountability for all of those involved in the improvement project. It is also essential to identify those individuals that will lead and manage day-to-day spread activities. These individuals 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.

5. Have the necessary resources and infrastructure been allotted?

Ensure that there is sufficient equipment, staff and other necessary resources to support the spread of the improvement. Develop a detailed spread plan that includes: the target group, the timing of the project's activities, and the resources required to spread the change.

6. Has a communication plan been developed prior to spreading the change?

Communication is critical to the spread of any improvement effort. It is important to consider both the method of communication and the message being delivered. In your communications, it is important to:

- Clearly identify changes and demonstrate evidence of their benefits (update regularly).
- Highlight the advantages of the changes 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 and include the key strategic goals of the organization in the communication plan.
- Create a process for two-way communication (feedback and suggestions) between the pilot and spread areas to support and encourage continuous improvement. How will you establish two-way communication between those leading spread and the units that the change spreads to?
- Review the list of your stakeholders and consider utilizing a variety of communication strategies.

Plan for Setbacks from the Outset

The table below lists some of the common issues, and their causes, that teams face when they try to spread change. It is important to consider these issues early in your change initiative, to ensure they do not have an effect on the spread of your improvements.

Issue	Potential Causes
Failure to launch	• Stuck in diagnostics – leaders unable to agree on where to start, what to do • Employees resistant to change • Rationale for "why change" not communicated across organization, nor are benefits of change credible to the organization
Failure to sustain	• New changes are not supported by change in day-to-day behaviours • Change agents – not line leaders – lead the change • Staff are not given new skills and capabilities to make the change • Managers are not held accountable for performance • Senior leaders do not role model the desired new way of working
Failure to scale and continuously improve	• No overarching blueprint for change across the organization with crystal clear objectives and priorities • Competing priorities • Limited leadership capacity to manage the process • Waning focus from senior team

Resource

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ISBN 978-1-4868-7942-7 (PDF)