

## Structures and processes to support spread and scale of health system innovations

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### Context

- Health-system decision makers are increasingly grappling with a wide range of innovations to strengthen their health systems to get programs, services, and products to those who need them.
- In addition to identifying and prioritizing the innovations that are ready for wide-spread implementation, there is a need for complementary structures and processes to support their spread and scale.

### Question

- What structures and processes have been used to support the spread and scale of health-system innovations?

### High-level summary of key findings

- We identified nine evidence syntheses, 11 primary studies and one policy brief that provide insights about structures, processes and tools to support the spread and scale up of health-system innovations.
- We undertook a jurisdictional scan of three comparator countries (Israel, U.K. and U.S.) as well as Canada and identified 15 organizations that provide supports for the spread and scale of innovations.
- Identified organizations that support the spread and scale of innovations were found to operate at different levels and varied in whether they operated within government or externally as either not-for-profit or private for-profit entities.
- As compared to the comparator jurisdictions, Canada appears to differ in its lack of infrastructure embedded within government to support the ongoing identification, spread and scale of innovations across provinces and territories.
- We did identify some examples of organizations that support the spread and scale of health-system innovations in Canada, however these are largely focused on spread and scale in particular areas rather than advancing large-scale innovations, including:
  - CAN Health Network, a national network with a focus on health technologies at a system level
  - Canada Health Infoway, a pan-Canadian health organization with a focus on scaling and spreading digital solutions
  - Healthcare Excellence Canada, a pan-Canadian health organization with a focus on scaling and spreading quality and safety innovations
  - Centre for Collaboration, Motivation and Innovation, an organization that currently supports provincial efforts but has previous experience with supporting innovations in the U.S.
  - Health Commons Solutions Lab, a provincial organization in Ontario that focuses on the health sector with an equity and diversity lens
  - Provincial System Support Program, a provincial program in Ontario that focuses on mental health and addictions innovations.

- The frameworks, structures, processes and tools we identified from the evidence provide guidance for how federal, provincial and territorial governments could invest to support the spread and scale of innovations that are already being implemented and evaluated.
- Canadian federal, provincial and territorial governments can also look to the examples from other jurisdictions to inform their approaches such as the many embedded supports within health maintenance organizations in Israel, the NHS, and within the Centers for Medicare and Medicaid Services in the U.S.

## Framework to organize what we looked for

- Health-system innovations
  - Object of innovation
    - Structural innovation
    - Process innovation
  - Relation to existing standard solution
    - Brand new
    - Competing with an existing solution
  - Extent of change
    - Radical innovation
    - Incremental innovation
- Type of diffusion
  - Spread
  - Scale-up
- Structures to support spread and/or scale-up
  - Governance structures
  - Financial structures
  - Delivery (and implementation) structures
- Processes to support spread and/or scale-up
  - Synthesis and translation of existing research related to the innovation and the local context
  - Support processes
    - Providing training and technical assistance
  - Tools to support spread and/or scale-up

### Box 1: Approach and supporting materials

We identified evidence addressing the question by searching: Health Systems Evidence, Social Systems and PubMed. All searches were conducted between 23-24 March 2023. The search strategies used are included in Appendix 1. We identified jurisdictional experiences by hand searching government and stakeholder websites for information relevant to the question. In contrast to synthesis methods, which provide in-depth understanding of the evidence, this profile focuses on providing an overview and insights from relevant documents.

We searched for evidence syntheses, protocols for evidence syntheses, and primary studies.

We appraised the methodological quality of evidence syntheses that were deemed to be highly relevant using AMSTAR. Note that quality appraisal scores for rapid syntheses/reviews are often lower because of the methodological shortcuts that need to be taken to accommodate compressed timeframes. AMSTAR rates overall quality on a scale of 0 to 11, where 11/11 represents an evidence synthesis of the highest quality. It is important to note that the AMSTAR tool was developed to assess evidence syntheses focused on clinical interventions, so not all criteria apply to evidence syntheses pertaining to delivery, financial or governance arrangements within health systems or to broader social systems.

This rapid evidence profile was prepared in the equivalent of three days of a ‘full-court press’ by all involved staff.

A separate appendix document includes:

- 1) methodological details (Appendix 1)
- 2) a summary table of frameworks related to spread and scale-up of innovations (Appendix 2)
- 3) a summary table of select organizations, approaches and processes used to spread and scale health-system innovations in Canada, U.K. and U.S. (Appendix 3)
- 4) findings from each evidence document, organized by document type, and sorted by relevance to the question of scale-up and spread of health-system innovations (Appendix 4)
- 5) documents excluded at the final stages of reviewing (Appendix 5)

## What we found

We identified 21 highly relevant evidence documents, including:

- nine evidence syntheses (including two evidence briefs that were developed as an input to stakeholder dialogues)
- eleven single studies that provide additional insights
- one policy brief.

We also identified eight frameworks that have been used to guide the spread and scale-up of health-system innovations.

We outline in narrative form below our key findings related to the question from highly relevant evidence documents and based on experiences from the selected countries and Canadian provinces and territories. This is accompanied by a separate appendix document with details about our methods (Appendix 1), details of frameworks related to spread and scale-up of innovations (Appendix 2), details about experiences from the selected countries and in Canadian provinces and territories (Appendix 3), findings from each evidence document (Appendix 4) and hyperlinks for documents excluded at the final stage of reviewing (Appendix 5).

## Key findings from highly relevant evidence sources

### Defining spread and scale

[One evidence synthesis provided clear definitions of spread and scale](#), as well as sustainability:

- spread refers to the process through which new working methods developed in one setting are adopted, perhaps with appropriate modifications, in other context
- scale refers to the process of expanding the coverage of an intervention but can also refer to increasing the financial, human and capital resources required to expand coverage
- sustainability refers to the process through which new working methods, performance enhancements and continuous improvements are maintained for a period appropriate given the context.

The [evidence synthesis pointed out that critical to enabling each of these processes is a careful balance of maintaining fidelity to the innovation with the contextual adjustments and adaptability](#) required to either spread or scale the innovation.

### Types of innovations covered

The literature covered both structures and processes to enable spread and scale generally and the spread and scale of specific types of innovations. Specific innovations highlighted in the literature include:

- adjustments to how the system is organized, including the consolidation of regional authorities and healthcare organizations ([1](#), [2](#), [3](#))
- adjustments to how specific products and services are delivered across the system, including changes to a [national medicines program](#) and implementing new evidence-based practices such as [hospital-based walking for older adults and group physical therapy](#)
- digital technologies including [telemonitoring](#), [eConsult services](#), [online mental health supports](#), artificial-intelligence supported tools for patients and providers ([1](#), [2](#)), and [digital therapeutics](#).

## Frameworks that support the spread and scale-up of health-system innovations

We identified eight frameworks relating to the spread and/or scale-up of health-system innovations and one framework focused on the role of technical supports in the implementation of innovations (1, 2, 3, 4, 5, 6, 7, 8). These are summarized in a table in Appendix 2.

The frameworks varied as to whether they were developed to act as checklists in the process of implementing innovations (such as Consolidated Framework for Implementation Research) or whether they were developed to guide conceptual discussions (such as the non-adoption, abandonment, scale-up, spread and sustainability framework). The identified frameworks typically included some variation on the following five components:

- the innovation – highlighting the importance of it being evidence-based, derived from a credible source, superior to existing approaches, simple to understand, easy to modify or tailor, and aligned to existing culture (1, 2, 3, 4, 5, 6)
- the spread or scale-up process – many of which took an approach of moving from a single pilot, to small scale trials in different contexts, to systematic efforts to replicate in other setting by using rapid-cycle tests of change (1, 2, 3, 4)
- the resources team supporting the implementation – highlighting the importance of identifying credible and committed change agents, providing sufficient resources to support the innovation including those to build both general and innovation-specific capacity, and ensuring clearly assigned and accepted responsibilities for implementing change (1, 2, 3, 4, 5, 6)
- the innovation user (or organization) – highlighting the importance of leadership support at each level of implementation, considering the existing infrastructure that could support implementation, identifying any incentive systems that could support adoption or implementation, and ensuring that implementing and delivering the innovation is important compared to other priorities (1, 2, 3)
- broader environmental factors – highlighting the importance of considering sociocultural values and beliefs, local conditions, and priorities, financing available to implement the innovation, and external pressures that can either drive innovation or hinder its implementation.(1, 2, 3, 4)

## Structures found to support the spread and scale-up of health-system innovations

The literature identified the structures below as being supportive of the spread and scale of health-system innovations, however given the diversity of innovations and contexts their relative importance was found to vary. Identified structures include:

- pilot site (or sites) where the innovation has first been tested and can generate evidence on its effects (1)
- legislation and regulations where necessary to advance the spread and scale of the innovation (e.g., providing the legal framework to establish or consolidate organizations or amending regulatory frameworks to include new digital supports) (1, 2, 3, 4, 5)
- distributed leadership models and advisory groups made up of individuals with significant public trust/good will (1, 2, 3)
- clear governance arrangements that define roles and responsibilities for team members or groups (1, 2)
- specific forums to support dialogue and problem solving between delivery stakeholders and policy stakeholders (1)
- dedicated funds to cover the costs of the innovation (e.g., cover the cost of acquiring the hardware and software to support telemonitoring and eConsult) as well as for training, evaluative and administrative supports required to ensure fidelity when implementing (1, 2, 3, 4)
- dedicated intermediary with a mandate to spread or scale an innovation and whose role it is to build capacity within the system and to moderate between stakeholders (1)
- clear assessment and certification pathways when implementing new products such as digital technologies or digital therapeutics.(1)

## Processes found to support spread and scale-up of health-system innovations

In addition to specific structures that support the spread and scale and innovations, the literature identified a number of processes, which include:

- gathering evidence on the innovation of interest including its outcomes from being implemented elsewhere and cost-effectiveness to support communication of benefits later on ([1](#), [2](#))
- undertaking a baseline assessment to understand the problem, understand specific contexts for implementation (this may differ between regions, communities or organizations within the system), and determine whether communities and organizations are ‘ready’ for spread or scale-up ([1](#), [2](#), [3](#))
- engaging stakeholders and creating trusted relationships with organizations required to implement the innovation ([1](#), [2](#), [3](#))
- communicating a ‘why’ that frames the innovation simply and clearly advertises the benefits (e.g., improving patient care; improving responsiveness of the health system; and improving population health) ([1](#), [2](#))
- capacity building, facilitation and technical assistance, including using coaching to advance general and innovation-specific skills and communities of practice to build new information pathways and support knowledge sharing across organizations ([1](#), [2](#), [3](#), [4](#), [5](#))
- ongoing measurement, evaluation and reporting on outcomes to enable frequent adjustment of spread or scale-up processes and to provide public updates on changes that are taking place. ([1](#), [2](#))

In addition to the processes identified above, we found one primary study that provides a [comprehensive list of 73 implementation strategies](#) developed from a literature review and delphi method. While these are not specific to spreading and scaling an innovation, they may be useful to consider.

## Tools to support spread and scale-up of health-system innovations

In addition to the structures and processes to support the spread and scale-up of innovations, we also found mentions of specific tools within the literature that can help throughout the process. The first is the [scale-up readiness assessment tool](#), which was developed by the Public Health Agency of Canada to help identify successful innovations with the capacity for national scale-up. In particular, an evaluation of the tool found that [high scores on the domains of system readiness, organizational capacity, and policy influence were scaled-up successfully](#). In addition, we identified an overview of [21 tools related to the scalability of health innovations](#). These tools largely focus on the initial stages of spreading and scaling including planning checklists, assessments of transferability of an innovation, and readiness assessments. We also identified the ‘[nose to tail tool](#),’ which has been designed to track the full innovation scale-up process, identify key considerations and potential barriers, and provide proactive support for early modification and redesign where needed.

## Additional considerations

Additional considerations that were mentioned in the literature that should be considered when planning for the spread or scale of a health-system innovation include:

- [complexity of the innovation](#)
- [absorptive capacity for the innovation](#)
- [political commitment and alignment of the innovation with existing government priorities](#)
- [timing of spread or scale-up, taking into consideration timing with external influences or external events](#)
- [flexibility in the innovation to ensure it can be successfully spread to different local contexts within the health system.](#)

## Key findings from a sample of organizations that support the spread or scale-up of health-system innovations

In addition to the literature, we identified fifteen organizations that have been responsible for supporting the spread or scale-up of health-system innovations in Canada, Israel, the U.K. and the U.S. These have been included in Appendix 3, where we provide brief descriptions about the work that each of the organizations undertake as well as the approaches and processes used.

In general, organizations supported the spread and scale-up of innovations by:

- supporting the process of adapting the innovation to a new context, including through market research, evidence supports, and needs assessments ([1](#), [2](#), [3](#), [4](#), [5](#))
- providing training and capacity-building supports in core areas that support spread and scale-up (e.g., leadership, data analytics, program and project management) ([1](#), [2](#), [3](#), [4](#), [5](#), [6](#), [7](#), [8](#), [9](#))
- developing guidance and tools to support the wide-spread implementation of the innovation alongside customized implementation plans ([1](#), [2](#), [3](#), [4](#), [5](#), [6](#), [7](#), [8](#), [9](#))
- sharing knowledge and lessons learned by hosting peer-to-peer learning events, communities of practice or learning collaboratives ([1](#), [2](#), [3](#), [4](#), [5](#))
- providing funding supports, including both issuing calls for innovations that meet a wide-spread need and providing implementation funding to incentivize the spread and scale-up of an innovation across the health system ([1](#), [2](#), [3](#), [4](#))
- identifying and removing regulatory and other barriers that block the spread and scale-up of health system innovations. ([1](#), [2](#), [3](#))

It should be noted this scan is not a fulsome representation of all organizations providing supports for the spread and scale of innovations in each country as this would not be feasible in the timeline given for this profile, particularly in the U.S., where there is a significant presence of both public and private suppliers of supports for the spread and scale-up of innovations. Instead, we provide focused insights from a purposive sample of leading organizations that we identified from related work on the topic of technical assistance and health-system transformations.

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