McMaster University | HEALTH FORUM

Panel Summary

Creating an integrated innovation system to enable the adaptation and uptake of health-system innovations in Canada

9 February 2024

Background

We convened a series of four citizen panels in February 2024 (with two panels on 2 February, one on 8 February, and one on 9 February 2024) with a total of 48 citizens from across the country. The participants were diverse in terms of age, gender, geographical location, ethnocultural background, and socio-economic status, and brought their unique perspectives about creating an integrated innovation system to enable the adaptation and uptake of health-system innovations in Canada. The participants were diverse in their perceptions of technology (e.g., from those who are 'early adopters' to those who typically wait much longer to adopt new technologies in their lives).

The main objectives of these virtual panels were threefold: 1) to gather insights on the challenges related to creating an integrated innovation system in Canada; 2) to explore elements of a potentially comprehensive approach for addressing these challenges; and 3) to identify barriers and facilitators that can aid in implementing these elements. The information obtained from these panels were used to inform a national stakeholder dialogue involving system leaders, policymakers, managers, professionals, researchers, caregiver representatives, and other stakeholders. This document summarizes the key insights that emerged during the virtual panel.

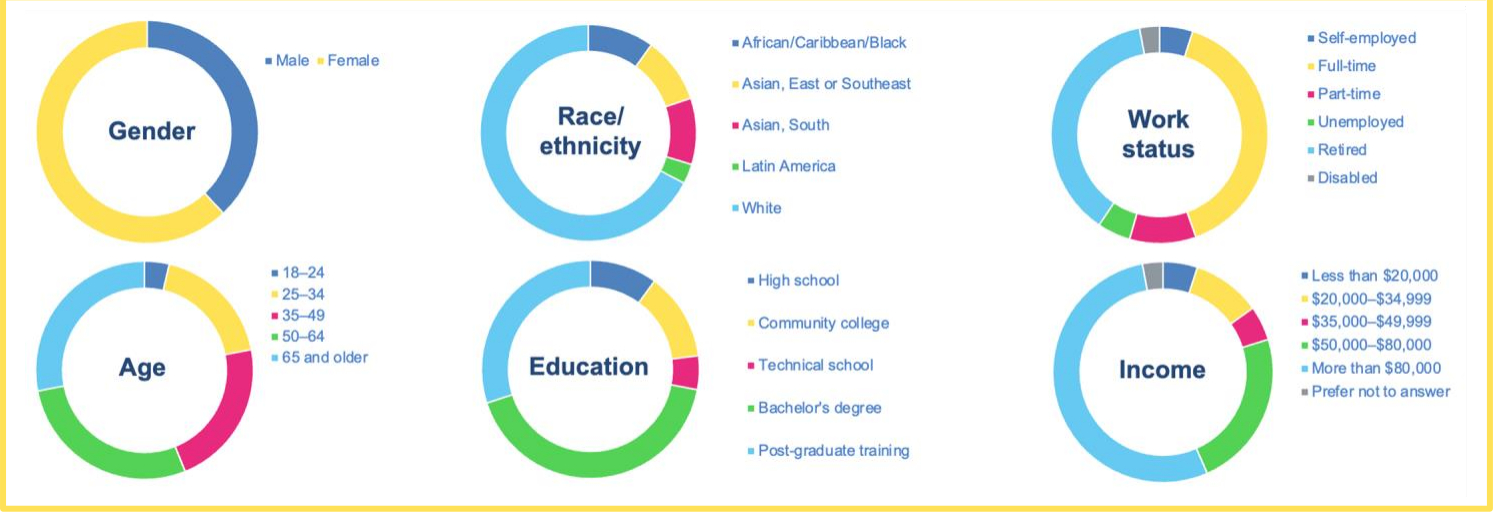
Box 1: About this panel

This virtual panel had the following 11 features:

- it addressed a high-priority issue in Canada
- it provided an opportunity to discuss different features of the problem
- it provided an opportunity to discuss solutions for addressing the problem
- it provided an opportunity to discuss key barriers and facilitators to move forward
- it provided an opportunity to talk about who might do what differently
- it was informed by a pre-circulated, plain-language brief
- it involved a facilitator to assist with the discussions
- it brought together participants affected by the problem or by future decisions related to the problem
- it aimed for fair representation among the diversity of participants involved in or affected by the problem
- it aimed for open and frank discussions that preserved the anonymity of participants
- it aimed to find both common ground and differences of opinions.

Box 1 provides additional background to the panel, and Box 2 provides a profile of participants.

Box 2: Profile of participants



Summary of the deliberation about the problem

During the deliberation about the problem, participants emphasized four main issues when considering some of the major challenges they face, which are included in the figure below. These issues broadly related to those presented in the citizen brief, which included: 1) governments are lacking structures to support ongoing identification, adaptation, and uptake of innovations; 2) some organizations are not welcoming to innovation from the 'outside'; 3) we are lacking an infrastructure that can help to bridge the demand and supply for innovation; and 4) citizens, patients, and caregivers play a limited role in health-system innovations.

There is a lack of dialogue and coordination across governments, as well as a lack of human and fiscal resources invested into innovation

Regarding the first issue, participants noted that there is a lack of dialogue and coordination across governments, sectors and stakeholders (e.g., citizens, patients, providers), and that there is a need for some overarching leadership to promote coordination and share lessons learned. Participants noted that during the pandemic, a large amount of innovation occurred in a coordinated way under significant time constraints, in large part due to a shared and urgent goal that is generally lacking during non-emergency times. Participants noted that this may result in complacency in non-emergency times that poses a barrier to a coordinated approach to innovation going forward. At the individual

level, the lack of continuity of care experienced by some participants across providers was thought to present a challenge for harnessing innovations in a way that is people centred, as it creates inconsistent and fragmented approaches to adopting innovation. Participants suggested that the media could play an important role in highlighting ongoing challenges in health systems, encouraging input from citizens, and providing transparency about what is being discussed and how it is currently being acted upon.

Additionally, human and financial resource constraints present a key barrier to innovation. Citizens stressed that innovation cannot be a substitute for proper funding for people, equipment, and supplies, and the availability of services must be scaled to accommodate population growth and the increasing complexity of health problems. Participants also stressed the need to build trust among decision-makers, managers, and providers to increase willingness to take on risk associated with developing and implementing innovations (e.g., to assuage concerns about accountability and liability). Similarly, building trust with the public was identified as important for communicating the potential value of and addressing concerns about innovations such as artificial intelligence (AI) solutions or new roles for providers such as nurse practitioners, pharmacists, and remote monitoring.

Some organizations face challenges related to a lack of financial incentives and regulatory challenges that results in resistance towards innovation

Regarding the second issue, participants explained that currently there is a lack of financial incentives to encourage the development, uptake, testing, and scale-up of new innovations, and that these incentives are crucial to help break 'old habits' and help organizations and individuals become more innovative. Regulatory and other challenges, such as concern over additional administrative responsibilities for family physicians to adapt their practice, cyber security, systems compatibility, and extra maintenance can inhibit new innovation.

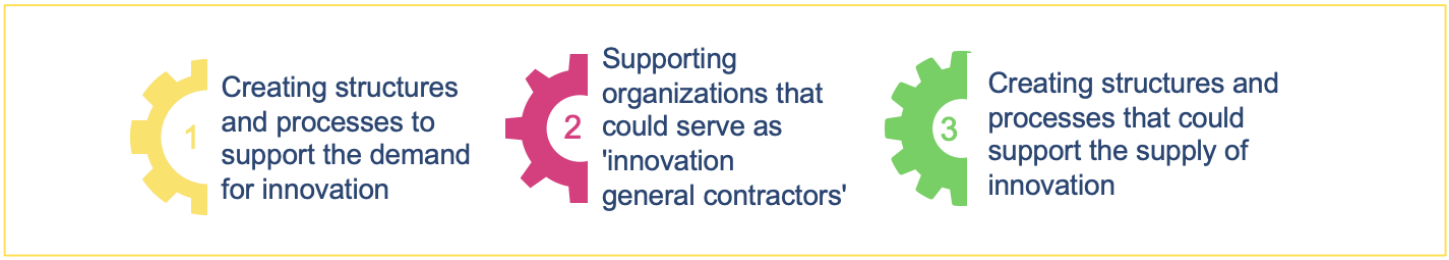
We rely too much innovation suppliers rather than demand-side decision-makers and users to set innovation agendas

Regarding the third issue, participants highlighted that currently the system relies on 'push' (from suppliers) rather than 'pull' (demand from decision-makers and users) to drive the innovation agenda. This was highlighted as a key part of the problem, with participants noting that innovations are not always attuned to the specific challenges being faced by those involved in or affected by decisions about provincial and territorial health systems. Participants also noted that the uptake in innovation is more challenging for some than others because of inequitable distribution of hospital infrastructure (e.g., better resourced hospitals in urban centres as compared to rural hospitals that lack the same technological infrastructure to take up new innovations) or user characteristics (e.g., providers uninterested in changing how they practice).

Citizens, patients, and caregivers play a limited role in health-system innovation, and there is a lack of public dialogue about innovation

Regarding the fourth issue, citizens highlighted that equity issues present a key barrier to the uptake of innovations, reflecting a need to better incorporate diverse perspectives of citizens, patients, and caregivers that can benefit from innovation across its development. While some participants noted that new innovations cannot be rolled out as a one-size-fits-all approach and that considerations for how to support all communities is important, some also noted that in some cases innovation will always have to start somewhere before it can spread. Participants also stressed the need to build trust with the public for how and why new innovations are important and can be used to strengthen health systems (e.g., about accommodating AI solutions or new roles for providers such as nurse practitioners, pharmacist prescribing, and remote monitoring), which may help with acceptance of more risk taking. Participants noted that the media needs to play a bigger role in highlighting ongoing challenges in health systems, encouraging input from citizens, and providing transparency about what is being said and how it is being acted on.

Summary of the deliberation about solutions



Participants raised several issues when discussing each solution as they were framed in the brief (see the figure above), which are summarized below.

1 Creating structures and processes to support the demand for innovation

During the deliberation about solution 1, citizens called for innovation development to 'start with those using it' by gaining insights from users and front-line providers. This was noted as requiring more outreach and feedback processes with citizens to shape innovations based on priorities, preferences, and concerns. The role that patients, families, and caregivers play across solutions should be clearly defined, and their insights could be gathered through guided panels as well as online/app-based communication channels. Participants also identified the need to create opportunities for shared learning and best-practice dissemination across the country to help focus efforts and share insights. Suggestions included creating a 'bulletin board' of priority challenges to help focus innovator's efforts and looking at other countries (e.g., Germany, France) to see what business cases or other information are available about innovations that have been rolled out to help guide planning.

Within the health sector, innovation should be embedded into medical education to help a new generation advance innovation efforts, and managers and other health workers should be encouraged, empowered, and expected to innovate (i.e., innovation need not always be a top-down process). Finally, participants explained that there was a need to promote an acceptance of risk and define who is accountable for risk taking and course correcting innovations so that decision-makers are not hesitant to take risks, emphasizing the need to 'just get on with it' and 'try something.'

2 Supporting organizations that could serve as 'innovation general contractors'

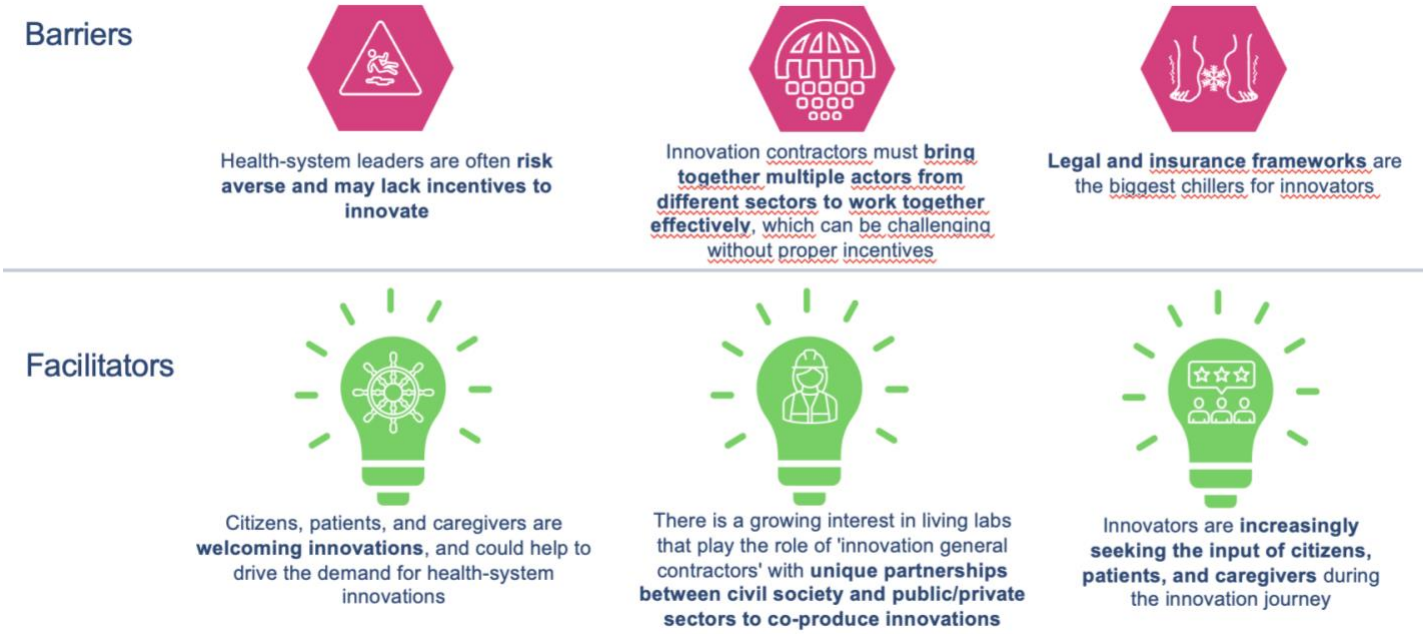
During discussions about solution 2, participants supported the idea of a 'general contractor' connecting innovation demand and supply, but stressed the importance of ensuring they are free from any conflict of interests. Additionally, the process of involving a general contractor should be equity sensitive, avoiding one-size-fits-all approaches. Some participants noted concerns about adding yet another layer of bureaucracy to an already inefficient and fragmented system, while others noted the need to understand if we need a 'contractor' to renovate a house, or a systems architect to build a new one, and how this might change the nature of the general contractor/intermediary's work. To make a general contractor model more efficient, a roster or list of individuals/organizations that can be contracted to advance certain innovations based on fit and prior performance could help reduce costs by creating competition and avoiding conflicts of interest. Finally, participants noted that townhalls, panels, and even social media/apps could be leveraged to allow citizens to be updated about these processes and provide feedback.

3 Creating structures and processes that could support the supply of innovation

The third solution focused on the need to accept 'failure' and uncertainty inherent to innovation. In particular, many participants noted that even if innovations 'fail' the work is not necessarily a waste, as others might be able to adapt and reuse certain elements of the innovation. Given this, participants emphasized the need to be receptive to the possibility of failing and be able to build on failure through a commitment to an iterative process (e.g., through rapid-learning and improvement cycles). Participants emphasized the need for innovators to more consistently prioritize

input from front-line workers, families, patients, and caregivers throughout all stages of the innovation process. Inputs from healthcare staff could be facilitated via evaluations and 'incubators'/suggestion boxes. Finally, it is important to leverage other health workers in developing and refining innovations such as nurse practitioners and pharmacists to address simple issues that do not require a physician.

Summary of the deliberation about barriers and facilitators to moving forward



After discussing the three solutions, participants examined potential barriers to and facilitators for creating an integrated innovation system in Canada. The discussion generally focused on six key barriers:

- legal/insurance frameworks that focus on worst case scenarios can make us risk adverse and inhibit innovation
- lack of funding that can potentially be compounded by certain 'general contractor' models like living labs, which can be resource intensive
- difficulty changing perceptions to better accommodate innovation (e.g., to become more accepting of risk in decision-making about health systems)
- conflicts of interest
- health human resource limitations
- lack of digital literacy and acceptance of new technologies.

When discussing facilitators, participants identified four, including:

- involving citizens, families, caregivers, and front-line workers with all three elements and stages of innovation
- living labs that are positioned to facilitate learning and improvement cycles for innovations
- transitioning out the 'old-guard' of health-system decision-makers (in terms of perceptions, not age) to help facilitate new ways of thinking and doing things
- establishing a body to help coordinate innovation efforts across the country.

DeMaio P, Moat KA, Bhuiya A, Cura J, Wilson MG. Panel summary: Creating an integrated innovation system to enable the adaptation and uptake of health-system innovations in Canada. Hamilton: McMaster Health Forum, 9 February 2024.

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