



Top Ten lessons learned about rapid-learning health-systems across Canada

December 10, noon - 1pm ET



Top Ten Webinar Series

- McMaster Health Forum's 'Top Ten' webinar series features top ten insights into health- and social-systems, evidence-informed policymaking, and a range of key issues, from Forum experts and influential policymakers, stakeholders and researchers from around the world
 - Visit our 'Top Ten' webinar page
<https://www.mcmasterforum.org/learn-how/top-ten-webinars>
 - Follow #MHFtop10 on Twitter



McMaster Health Forum

- The McMaster Health Forum's goal is to generate action on the pressing health-system issues of our time.
- We aim to strengthen health systems – locally, nationally, and internationally – and get the right programs, services and drugs to the people who need them.
- Through Forum+, we are expanding our work to include social systems.

Agenda

- Top Ten lessons learned about rapid-learning health-systems across Canada (John Lavis)
- Thoughts and insights from Robyn Tamblyn
- Q & A



Top Ten Lessons Learned About Rapid-Learning Health Systems in Canada

Top Ten Webinar McMaster Health Forum

John N. Lavis, MD, PhD | [@ForumHSS](#)

Director, McMaster Health Forum and Forum+

Canada Research Chair in Evidence-Informed Health Systems

Director, WHO Collaborating Centre for Evidence-Informed Policy

Professor, Health Evidence and Impact, McMaster University

Francois-Pierre Gauvin, PhD | [@ForumCDNhealth](#)

Senior Scientific Lead, Citizen Engagement & Evidence Curation, McMaster Health Forum

Acknowledgments (& Methods)

- Authors of and contributors to the Ontario-focused rapid synthesis, which this rapid synthesis built on (available on the Forum website)
- CIHR Institute for Health Services & Policy Research (IHSPR) and Canadian Health Services & Policy Research Alliance (CHSPRA), which funded this rapid synthesis
- **CHSPRA Working Group** (and a smaller Steering Committee drawn from the Working Group, co-chaired by Tom Noseworthy & Denis Roy, and benefiting from the significant input of CHSPRA's executive director, Diane Finegood), which guided this rapid synthesis
- 50 key informants, many 'table checkers,' & three merit reviewers who contributed to this rapid synthesis
- Other Forum staff who helped conduct the **jurisdiction-specific website/document reviews and key-informant interviews** (Cristina Mattison, Kaelan Moat, Kerry Waddell & Mike Wilson) and a collaborator with highly relevant Canadian and U.S. experience (Rob Reid)



Top 10 Lessons

1. Definition needs to start with patients & cover all levels/parts of system
2. Research literature provides no 'recipe' but single studies point to key factors or strategies
3. Documenting assets (& gaps) isn't rocket science but needs specificity & regular updating
4. List of assets is remarkably rich, even in small jurisdictions, but there are common gaps
5. **What really matters is how well assets are connected to enable rapid learning & improvement**
6. Some areas have been or will be the focus of sustained efforts
7. Need to capitalize on windows of opportunity when they 'open'
8. Interdependencies & issue-based commonalities can serve as focal points for pan-Canadian collaboration
9. A rapid-learning systems framework offers the potential to get us farther, faster together
10. What you call 'it' and who you engage will vary by context



1. Definition Needs to Start with Patients and Cover All 'Levels' In & Parts of the System

- The combination of a health system and a research system that at all levels in the system – self-management/care, professional encounter, program, organization, district/region and government – and in all parts of the system – regions, sectors, conditions, treatments and populations – is
 - Anchored on patient needs, perspectives and aspirations (1)
 - Driven by timely data (2) and evidence (3)
 - Supported by appropriate decision supports (4) and aligned governance, financial and delivery arrangements (5)
 - Enabled with a culture of (6) and competencies for (7) rapid learning and improvement
- By patients we mean actual and potential patients, families & caregivers, and citizens
- One notable finding from our key-informant interviews is how diverse individuals
 - 'See themselves' in the seven characteristics of rapid-learning health systems
 - See significant value in better connecting and filling gaps in these assets to accelerate the creation of rapid-learning health systems across Canada



1. Definition Needs to Start with Patients and Cover All ‘Levels’ In & Parts of the System (2)

Patients	Clinical encounter, program & organization (IOM’s six phases)	Government (or health authority)
Understanding their risk factors and conditions	Identifying problems through an internal and external scan	Clarifying problems and their causes
Making choices about treatment and about living well with their conditions	Designing care and evaluation based on data & evidence generated locally & elsewhere	Selecting options
Overcoming obstacles to behaviour change & adhering to chosen courses of action	Implementing the plan in pilot & control settings	Identifying implementation considerations
Monitoring their condition	Evaluating to identify what does & does not work	Monitoring implementation and evaluating impact
	Adjusting, with continuous improvement based on what was learned from the evaluation	
	Disseminating the results to improve care across the system	



2. Research Literature Provides No ‘Recipe’ But Single Studies Point to Key Factors or Strategies

- There is no ‘recipe’ that can be used to create rapid-learning health systems, but many single studies point to factors or strategies that supported the creation of a rapid-learning health system in particular contexts, such as the **engagement of front-line clinicians** (e.g., strategic clinical networks in Alberta)
- Two other observations
 - There is much less attention given to some characteristics (e.g., engaged patients and aligned governance, financial and delivery arrangements) than others (e.g., digital capture, linkage and timely sharing of relevant data and timely production of research evidence), but a fair degree of attention to **how assets are connected in particular contexts**
 - There are many **ethical issues** that need to be addressed in rapid-learning health systems (e.g., confusion about which learning and improvement efforts require what types of ethical oversight)



3. Documenting Assets (& Gaps) Isn't Rocket Science But Needs Specificity & Regular Updating

- 14 jurisdictions
 - Federal (Indigenous peoples, military/veterans & prisoners), national and pan-Canadian
 - 10 provincial and 3 territorial health systems
- Three tables per jurisdiction - **available as 14 appendices**
 - Health system as a whole – **available as an appendix**
 - Primary-care sector (as one of 6 sectors) – **available as an appendix**
 - Elderly (as one of many 'populations') – **available as an appendix**
- Health & research systems as the columns in each table
- Seven characteristics, with many **prompts**, as the rows in each table
- Missing other sectors and populations, as well as regions, categories of conditions, and categories of treatments (& health determinants)
→ **many rapid-learning systems, not one**
- Prompts and assets need regular updating



4. List of Assets is Remarkably Rich, Even in Small Jurisdictions, But There Are Some Common Gaps

- **Patients** are often not being meaningfully engaged in prioritizing what ‘dials to move’ (in terms of the care experiences and outcomes that are priorities for rapid learning & improvement), and don’t have many mechanisms beyond complaints and voting to register their frustration when ‘dials don’t move’
- **Data** about patient experiences (with services, transitions and longitudinally) are often not being linked and shared in a timely way (with many jurisdictions still focused on developing a jurisdiction-wide electronic health record that will in the near term often not include key sectors like primary care, and on producing one-off or annual data reports rather than many, small, immediately actionable reports)
- **Culture** of rapid learning and improvement is not yet widespread across levels and across areas of focus (particularly the ‘rapid’ part)
- **Competencies** in data analytics and implementation science are often not sufficiently well distributed to support rapid learning and improvement across levels and across areas of focus



5. What Really Matters Is How Well Assets Are Connected to Enable Rapid Learning & Improvement

- Examples (which may not have been explicitly framed in ‘rapid learning & improvement’ terms originally)
 - Primary-care sector in Newfoundland and Labrador
 - Elderly population in Alberta
 - Figure 2: Connections among assets in Alberta’s health system to support rapid learning and improvement for the elderly
 - How two key groups took action to connect assets, with
 - Assets organized by the 7 RLHS characteristics (rows)
 - ‘Earlier’ or more ‘upstream’ actions preceding ‘later’ or more ‘downstream’ actions (columns)
 - What the figure doesn’t convey is the iterative nature of the problem identification, design of potential solutions, etc.
- Opioid crisis in Quebec
- Mississauga Halton region in Ontario
- (Prescription drugs at the pan-Canadian level)



Aligned governance,
financial and delivery
arrangements

Alberta Health Services' (AHS) provincial 'seniors health' program (PSHP) shares a leader with the strategic clinical network (SCN) on seniors health and has direct connections to Alberta Health and the five zones to enable rapid learning and improvement

Culture of rapid
learning and
improvement

Competencies for rapid
learning and
improvement

SCN on seniors health has competencies in scaling up effective practices in clinical care



Engaged patients

PSHP (and SCN) work with a provincial advisory committee (and 'core committee) that include patients and family members who guide their rapid learning and improvement efforts, and they engaged patients and family members to set research priorities for seniors health using a James Lind Alliance approach

Digital capture, linkage and timely sharing of relevant data

SCN (and PSHP) analyze local, provincial and national data to identify clinical problems and monitor the implementation of improvement efforts

Timely production of research evidence

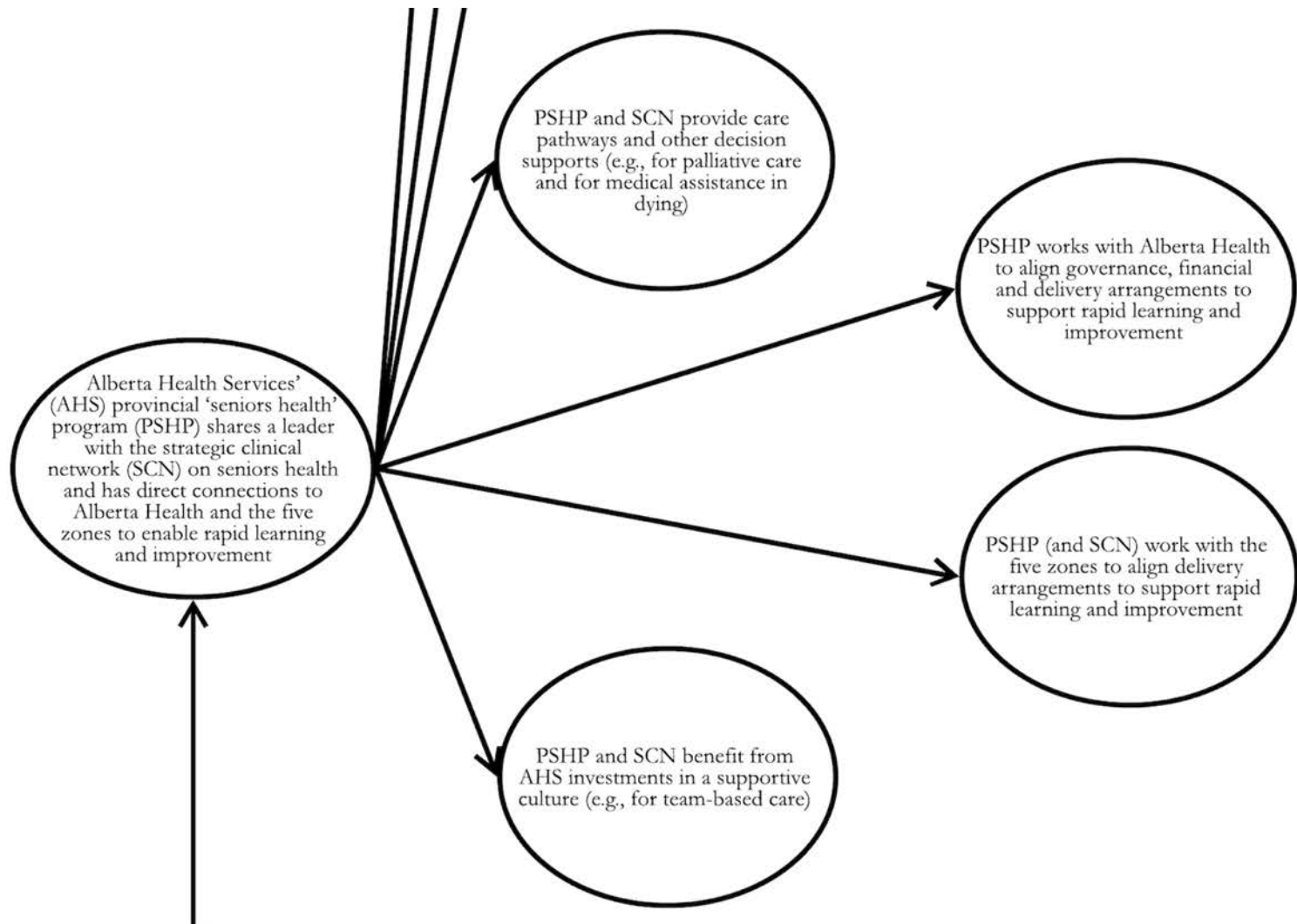
PSHP and SCN work with AHS knowledge-management staff to synthesize data and evidence about clinical problems and options for improvement

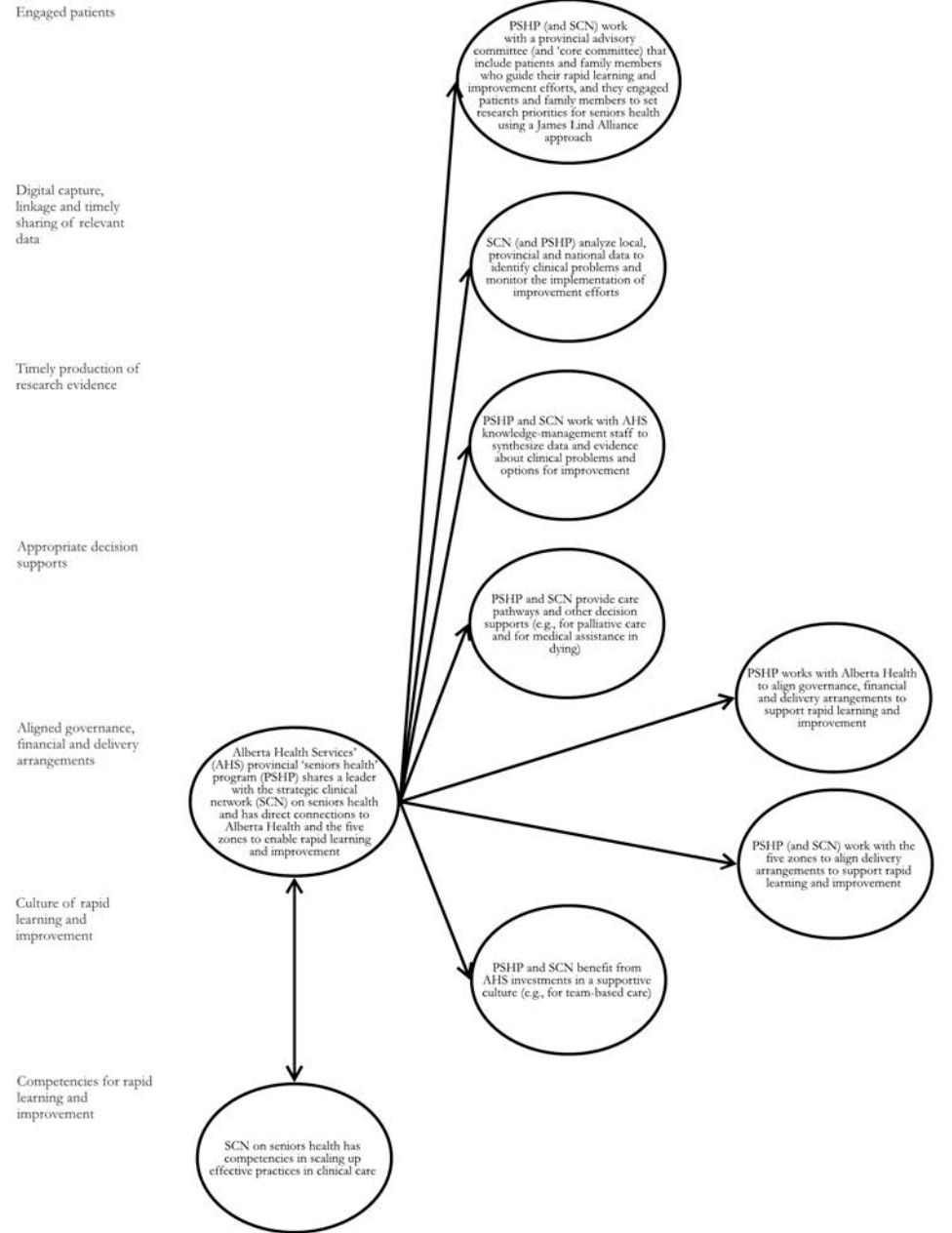


Appropriate decision supports

Aligned governance, financial and delivery arrangements

Culture of rapid learning and improvement







6. Some Areas Have Been or Will Be the Focus of Sustained Efforts to Create Rapid-Learning Systems

- Some other sectors – e.g., home and community care
- Some other populations – e.g., Indigenous peoples
- Many categories of conditions – e.g., mental health & addictions
- Some categories of treatment – e.g., surgery



7. Need to Capitalize on Windows of Opportunity When They ‘Open’

- Growing use of the framework and concepts in health systems (e.g., B.C., Ontario and New Brunswick), including among supporting bodies (e.g., Canadian Health Services and Policy Research Alliance)
- Re-configuring of pan-Canadian health organizations
- New CIHR president and strategic-planning process (including the possibility of SPOR renewal)
- Growing roles of patient and family advisors
- Growing capacity for responsive and timely health-systems research
- Amalgamation of regional health authorities (e.g., Saskatchewan and Northwest Territories)
- New governing parties that may support the type of decentralized decision-making needed for rapid learning and improvement (e.g., Quebec)... but elections can also disrupt movement towards a RLHS
- Proposal being developed for the implementation of national pharmacare



8. Interdependencies & Issue-Based Commonalities Can Serve as Focal Points for Pan-Canadian Collaboration

- Inter-dependencies
 - E.g., Planned SPOR national data platform that would permit benchmarking, the evaluation of natural experiments, etc.
 - E.g., Shared specialty-care arrangements across jurisdictions (e.g., for highly specialized care or for those living in small jurisdictions or near borders)
- Issue-based commonalities
 - E.g., Care for mental health and addictions, including the opioid crisis
 - E.g., Care in rural and remote communities
 - E.g., Need to develop accreditation standards and other supports for rapid-learning organizations and systems



9. A Rapid-Learning Systems Framework Offers the Potential to Get Us Farther, Faster Together

- Can enable **data- and evidence-informed transformations** at all levels and in all parts of a health system, in ways that are more rapid, better sustained locally and more widely spread across teams, programs, organizations, and districts/regions (and thereby join up the different parts of the system so they work well together)
- Can motivate **greater collaboration** among, and enable greater impacts of (and returns on investments in), all elements of the research system
- Can **better leverage** any quality-improvement & other infrastructure operating at the interface between the health system and the research system

9. A Rapid-Learning Systems Framework Offers the Potential to Get Us Farther, Faster Together (2)

Groups / organizations	Focus	
	Phase(s) of the policymaking process	Programs, services & products or health-system arrangements
Data analytics	Clarifying problems & monitoring implementation	Programs, services and products
Guidelines*	Selecting options (practice)	Programs, services and products
Technology assessments*	Selecting options (system)	Programs, services and products
Modelling	Selecting options (reach, needs)	All
Implementation research (behavioural insights)	Identifying implementation considerations (or developing implementation plans)	Programs, services and products
Evidence-informed policymaking supports	Clarifying problems, selecting options, and identifying implementation considerations	Health-system arrangements
Evaluation	Monitoring implementation & evaluating impact	Programs, services and products

*Similarly rely on existing data and evidence (versus building data and evidence de novo)



10. What You Call 'It' and Who You Engage Will Vary by Context (And This Isn't In the Report)

- For example, in Ontario right now, you may want to say
 - Driving point-of-care improvements that matter to patients and that are based on the best available data and evidence
- For example, in an Ontario hospital, you may engage staff in the following areas
 - Business intelligence
 - Clinical informatics
 - Decision support
 - Quality improvement
 - Government relations
 - Communications
- A key challenge is the traditional lack of such staff in many parts of the health system, such as in the primary-care sector



Top 10 Lessons

1. Definition needs to start with patients & cover all levels/parts of system
2. Research literature provides no 'recipe' but single studies point to key factors or strategies
3. Documenting assets (& gaps) isn't rocket science but needs specificity & regular updating
4. List of assets is remarkably rich, even in small jurisdictions, but there are common gaps
5. **What really matters is how well assets are connected to enable rapid learning & improvement**
6. Some areas have been or will be the focus of sustained efforts
7. Need to capitalize on windows of opportunity when they 'open'
8. Interdependencies & issue-based commonalities can serve as focal points for pan-Canadian collaboration
9. A rapid-learning systems framework offers the potential to get us farther, faster together
10. What you call 'it' and who you engage will vary by context

Some Next Steps

- At the Forum
 - Posting this webinar
 - Posting the report, 14 jurisdiction-specific appendices, 1 'health system as a whole' appendix, 1 primary-care appendix, and one 'elderly population' appendix
 - Sharing the findings at an upcoming CAHSPR event (January 14-15) and at other events in B.C. Alberta, and other jurisdictions
 - Convening an Ontario-specific stakeholder dialogue in late March
 - Embedding the approach in a new 14-country collaborative: Partners for Evidence-driven Rapid Learning in Social Systems (PERLSS)
- At the Canadian Health Services & Policy Research Alliance
 - Working Group will also use this report as a jumping-off point for its efforts to support the creation of rapid-learning health systems across Canada
- At the CIHR Institute for Health Services & Policy Research
 - We'll hear from [Robyn Tamblyn](#) next

Questions?

Please ask your questions using the text chat box
or tweet using #MHFtop10
@McMasterForum

Which insights resonated with you the most?



Thanks for joining us

- For more information on our Top Ten webinar series, please visit www.mcmasterforum.org/learn-how/top-ten-webinars
- Follow us on social media:
 - Twitter
 - @McMasterForum
 - @forumHSS, @forumLMIC, @forumCDNhealth, @forumONhealth
 - Facebook
 - LinkedIn