Rapid Synthesis

Creating Rapid-learning Health Systems in Canada

Appendix B5: Manitoba

10 December 2018

McMaster University | McMaster HEALTH FORUM

EVIDENCE >> INSIGHT >> ACTION

Rapid Synthesis:
Creating Rapid-learning Health Systems in Canada
Appendix B5: Manitoba
90-day response

Lavis JN, Gauvin F-P, Mattison CA, Moat KA, Waddell K, Wilson MG, Reid R. Appendix B5: Manitoba. In Rapid synthesis: Creating rapid-learning health systems in Canada. Hamilton, Canada: McMaster Health Forum, 10 December 2018.

Table 1: Assets and gaps at the level of Manitoba's health system

Characteristic	Examples	Health-system receptors and supports	Research-system supports
Engaged patients: Systems are anchored on patient needs, perspectives and aspirations (at all levels) and focused on improving their care experiences and health at manageable per capita costs and with positive provider experiences	1) Set and regularly adjust patient-relevant targets for rapid learning and improvement (e.g., improvements to a particular type of patient experience or in a particular health outcome) 2) Engage patients, families and citizens in: a) their own health (e.g., goal setting; self-management and living well with conditions; access to personal health information, including test results) b) their own care (e.g., shared decision-making; use of patient decision aids) c) the organizations that deliver care (e.g., patient-experience surveys; co-design of programs and services; membership of quality-improvement committees and advisory councils) d) the organizations that oversee the professionals and other organizations in the system (e.g., professional regulatory bodies; quality-improvement bodies; ombudsman; and complaint processes) e) policymaking (e.g., committees making decisions about which services and drugs are covered; government advisory councils that set direction for (parts of) the system; patient storytelling to kick off key meetings; citizen panels to elicit citizen values) f) research (e.g., engaging patients as research partners; eliciting patients' input on research priorities) 3) Build patient/citizen capacity to engage in all of the above	• Shared Health, a provincial health organization, has been created as part of health system transformation to centralize clinical and business services for the regional health authorities o As part of standards, patients are involved in planning and service delivery, which includes the Internation Association for Public Participation's core values of public participation and tools to support developing patient advisory groups (e.g., Public and Patient Engagement Evaluation Tool) • In partnership with Provincial Health Services Authority (B.C.), a cultural safety training program has been developed for health professionals working with Indigenous peoples (San'yas Indigenous Cultural Safety Training Program) • Some patients have opportunities to be engaged in self-management and focused on living well with their conditions (e.g., TeleCARE-TéléSOINS Manitoba, Dial-a-Dietician, Self and Family Managed Home Care Attendant Program and Pain Self-Management Group Education Classes), and have access to personal health information (e.g., electronic access to laboratory results) • Some patients have opportunities to be engaged in managing their own care (e.g., Manitoba Institute for Patient Safety's "It's Safe to Ask" initiative and the Declaration of Patient and Family Engagement in Patient Safety) and to be volunteers to host information booths and present on the S.A.F.E. Toolkit • Some patients have opportunities to be engaged with organizations that deliver care through patient-experience surveys (e.g., Government of Manitoba's Canadian Patient Experiences Survey – Inpatient Care) • Patient and Family Advisory Councils and Patient and Family Advisory Networks help to set direction for the system (or organizations) at Manitoba Health, Seniors and Active Living, in Regional Health Authorities (e.g., Local Health Involvement Groups) and for select sectors (specialty hospital care; long-term care), conditions (e.g., cancer; mental health and addictions), treatments (e.g., prescription drugs) and populations (e.g., Patient Advocate Units) • The Manitoba Ombudsman provides the opportunity to register a complaint if they feel they have been treated unfairly by a provincial government department and agency or regional health authority and the Critical Incident Reporting Line is a no blame critical reporting across the health system • Some regional health authorities have a Patient Experience Coordinator available to receive complaints	• The Manitoba Centre for Health Policy conducts population-based research on health services, population and public health, and the social determinants of health • The George & Fay Yee Centre for Healthcare Innovation is a partnership between the University of Manitoba and Winnipeg Regional Health Authority and part of the national network SUPPORT units (Manitoba SPOR SUPPORT unit) o The Centre for Healthcare Innovation engages citizens in governing committees and groups (e.g., the Executive Council, the Scientific Advisory Council, the Patient Engagement Award Review Committee, and the Patient and Public Engagement Lunchtime Learning Planning Committee), and the Patient/Public Advisory Group engages patients in co-developing engagement strategies, policies, resources, tools, services and programs • Chronic disease (e.g., Can -SOLVE CKD and IMAGINE) SPOR Networks are very active in the province • Ongomiizwin– Indigenous Institute of Health and Healing at the University of Manitoba is the largest Indigenous education and health-research unit in Canada, and the work is guided by knowledge keepers and elders

Characteristic	Examples	Health-system receptors and supports	Research-system supports
		• Professional regulatory bodies (21) all have formal complaints systems	○ Framework for Research Engagement with First Nation, Métis, and Inuit Peoples
Digital capture, linkage and timely sharing of relevant data: Systems capture, link and share (with individuals at all levels) data (from real-life, not ideal conditions) about patient experiences (with services, transitions and longitudinally) and provider engagement alongside data about other process indicators (e.g., clinical encounters and costs) and outcome indicators (e.g., health status)	1) Data infrastructure (e.g., interoperable electronic health records; immunization or condition-specific registries; privacy policies that enable data sharing) 2) Capacity to capture patient-reported experiences (for both services and transitions), clinical encounters, outcomes and costs 3) Capacity to capture longitudinal data across time and settings 4) Capacity to link data about health, healthcare, social care, and the social determinants of health 5) Capacity to analyze data (e.g., staff and resources) 6) Capacity to share 'local' data (alone and against relevant comparators) – in both patient- and provider-friendly formats and in a timely way – at the point of care, for providers and practices (e.g., audit and feedback), and through a centralized platform (to support patient decision-making and provider, organization and system-wide rapid learning and improvement)	• As part of Manitoba's health-system transformation program, a single provincial information and communications technology service will be created with the aim of supporting quality improvement, administration of provincial data quality standards, and integration of systems, processes and data to be used by clinicians, researchers and decision-makers • Manitoba eHealth along with other information and communications technology programs will become Digital Health (under Shared Health) ○ Manitoba eHealth has implemented the following clinical systems: ▪ eChart Manitoba (primary care and hospitals); ▪ electronic patient records (hospitals); ▪ electronic medical records and MBTelehealth (primary and specialty care); and ▪ Radiology Information System and Picture Archiving and Communication System (diagnostics) • Home Clinic (for health professionals in primary care and provides patient enrolment data, demographics and links to data from other sources including medical claims and quality indicators) • Gaps may include limitations to the timely sharing of relevant data	• Manitoba Centre for Health Policy conducts population-based research on health services, population and public health, and the social determinants of health (e.g., data linkages to Departments of Families, Education and Training, and Justice) • Manitoba Collaborative Data Portal provides neighbourhood and local level data • Information Management & Analytics Branch of Manitoba Health, Seniors and Active Living has formal data-sharing agreements and corporate relationships with external provincial and national stakeholder groups (CancerCare Manitoba, Canadian Institute for Health Information, First Nations Health and Social Secretariat of Manitoba, Manitoba Centre for Health Policy, Research Manitoba and Statistics Canada)
Timely production of research evidence: Systems produce, synthesize, curate and share (with individuals at all levels) research about problems, improvement options and implementation considerations	1) Distributed capacity to produce and share research (including evaluations) in a timely way 2) Distributed research ethics infrastructure that can support rapid-cycle evaluations 3) Capacity to synthesize research evidence in a timely way 4) One-stop shops for local evaluations and pre-appraised syntheses 5) Capacity to access, adapt and apply research evidence 6) Incentives and requirements for research groups to collaborate with one another, with patients, and with decision-makers	• As part of Manitoba's health-system transformation, the ministry's (Manitoba Health, Seniors and Active Living) role will focus on policy, funding and oversight, and the production of research evidence will be carried out by the Centre for Healthcare Innovation and the Manitoba Centre for Health Policy • Shared Health has developed standard operating procedures to ensure a consistent approach to research and created a centralized system so that any facility can accommodate a medical research study with a single approval • Health Information Privacy Committee is currently responsible for approving health-research projects for government departments or agencies that use personal health information (see RITHiM) • Gaps may include limitations to the systematic collection of data within home and community care and rehabilitation, and most likely is a reflection of fragmentation within these systems	• Research Improvement Through Harmonization in Manitoba (RITHiM) is an initiative of Research Manitoba to harmonize ethics, privacy, and impact review related to human clinical research and data-intensive health research to establish a single amalgamated health-research review committee • Centre for Healthcare Innovation's knowledge synthesis platform provides rapid reviews for government and decision-makers • Manitoba Centre for Health Policy is under contract to Manitoba Health, Seniors and Active Living

Characteristic	Examples	Health-system receptors and supports	Research-system supports
			and the Healthy Child Committee of Cabinet to provide analyses, policy development and services planning o The studies take two to three years to complete and four-to-five deliverables (reports) are published annually • Manitoba's SPOR Network in Primary and Integrated Health Care Innovations (PIHCI) supports patient-oriented research
Appropriate decision supports: Systems support informed decision-making at all levels with appropriate data, evidence, and decision-making frameworks	1) Decision supports at all levels – self-management, clinical encounter, program, organization, regional health authority and government – such as a) patient-targeted evidence-based resources b) patient decision aids c) patient goal-setting supports d) clinical practice guidelines e) clinical decision support systems (including those embedded in electronic health records) f) quality standards g) care pathways h) health technology assessments i) descriptions of how the health system works	• KPMG was retained in 2016 to review the sustainability for the health system, and the report identified inconsistent approaches to clinical standards, quality improvement, practices and levels of care across the system o The report has informed the health-system transformation and initiatives are underway to standardize these approaches • MB Healthcare Providers Network provides supports for health professionals wanting to practise in Manitoba • Some regional health authorities provide patient-targeted evidence-based resources (e.g., Consumer Health Resource Centre) • Many groups provide recommendations to providers about optimal care: o professional colleges including the College of Physicians and Surgeons of Manitoba and the College of Registered Nurses of Manitoba produce and maintain clinical practice guidelines and clinical standards o CancerCare Manitoba's cancer management guidelines • eHealth Manitoba provides supports to health professionals for electronic health records that incorporate decision supports • Gaps may include less attention to patient decision aids and patient goal-setting supports	• None identified
Aligned governance, financial and delivery arrangements: Systems adjust who can make what decisions (e.g., about joint learning priorities), how money flows and how the systems are organized and aligned to support rapid learning and improvement at all levels	1) Centralized coordination of efforts to adapt a rapid-learning health system approach, incrementally join up assets and fill gaps, and periodically update the status of assets and gaps 2) Mandates for preparing, sharing and reporting on quality-improvement plans 3) Mandates for accreditation 4) Funding and remuneration models that have the potential to incentivize rapid learning and improvement (e.g., focused on patient-	• As part of Manitoba's health-system transformation program, Shared Health will provide centralized clinical (e.g., strategic planning and the development of clinical standards) and business services for regional health authorities o Initiatives include: development of a provincial quality framework and performance dashboards, as well as revaluating accreditation • A new Regulated Health Professions Act will expand the role of some health professions (e.g., pharmacists' ability to prescribe and order tests)	• Research Manitoba is a provincial funding agency and includes funding for health and social sciences research and plays in role in the integration and alignment between government and universities

Characteristic	Examples	Health-system receptors and supports	Research-system supports
	reported outcome measures, some bundled-care funding models) 5) Value-based innovation-procurement model 6) Funding and active support to spread effective practices across sites 7) Standards for provincial expert groups to involve patients, a methodologist, use existing data and evidence to inform and justify their recommendations 8) Mechanisms to jointly set rapid-learning and improvement priorities 9) Mechanisms to identify and share the 'reproducible building blocks' of a rapid-learning health system	• Adopted the LEADS in a Caring Environment leadership framework to connect health leadership programming across Manitoba Health, Seniors and Active Living, regional health authorities, CancerCare Manitoba, Shared Health and the University of Manitoba's Rady Faculty of Health Sciences • The College of Physicians and Surgeons of Manitoba's Quality Improvement Program reviews physician practices • New financial arrangements are beginning to or have the potential to incentivize rapid learning and improvement (e.g., Quality Based Incentive Funding to engage physicians in Physician Integrated Networks) and to focus attention on care quality indicators • Gaps may include limitations in financial arrangements to appropriately reflect changes to scope of practice for some professions with the new Regulated Health Professions Act	
Culture of rapid learning and improvement: Systems are stewarded at all levels by leaders committed to a culture of teamwork, collaboration and adaptability	1) Explicit mechanisms to develop a culture of teamwork, collaboration and adaptability in all operations, to develop and maintain trusted relationships with the full range of partners needed to support rapid learning and improvement, and to acknowledge, learn from and move on from 'failure'	• Embedded within Manitoba's health-system transformation program is a focus on change management with project leads meeting every two weeks (interdependencies are tracked to foster learning between projects) and key stakeholders are engaged to support the projects	• None identified
Competencies for rapid learning and improvement: Systems are rapidly improved by teams at all levels who have the competencies needed to identify and characterize problems, design data- and evidence-informed approaches (and learn from other comparable programs, organizations, regions, and sub-regional communities about proven approaches), implement these approaches, monitor their implementation, evaluate their impact, make further adjustments as needed, sustain proven approaches locally, and support their spread widely	1) Public reporting on rapid learning and improvement 2) Distributed competencies for rapid learning and improvement (e.g., data and research literacy, co-design, scaling up, leadership) 3) In-house capacity for supporting rapid learning and improvement 4) Centralized specialized expertise in supporting rapid learning and improvement 5) Rapid-learning infrastructure (e.g., learning collaboratives)	• Manitoba, Health, Seniors and Active Living's Health Services monitors and publicly reports on: o wait times for diagnostic, surgical and cancer services; o weekly statistics for emergency/urgent care statistics by site and personal home-care clients; and o population-based annual statistics (population, mortality, disease and injury, prevalence of mental illness, physician and hospital services, use of home care and personal care homes, preventative services and prescription drug use)	• Community Health Assessments (Winnipeg Regional Health Authority) identify health assets and issues and monitor progress towards meeting the objectives o Centre for Healthcare Innovation's Research and Evaluation Unit leads this work

Table 2: Assets and gaps in the primary-care sector in Manitoba

Characteristic	Examples	Health-system receptors and supports	Research-system supports
Engaged patients: Systems are anchored on patient needs, perspectives and aspirations (at all levels) and focused on improving their care experiences and health at manageable per capita costs and with positive provider experiences	1) Set and regularly adjust patient-relevant targets for rapid learning and improvement (e.g., improvements to a particular type of patient experience or in a particular health outcome) 2) Engage patients, families and citizens in: a) their own health (e.g., goal setting; self-management and living well with conditions; access to personal health information, including test results) b) their own care (e.g., shared decision-making; use of patient decision aids) c) the organizations that deliver care (e.g., patient-experience surveys; co-design of programs and services; membership of quality-improvement committees and advisory councils) d) the organizations that oversee the professionals and other organizations in the system (e.g., professional regulatory bodies; quality-improvement bodies; ombudsman; and complaint processes) e) policymaking (e.g., committees making decisions about which services and drugs are covered; government advisory councils that set direction for (parts of) the system; patient storytelling to kick off key meetings; citizen panels to elicit citizen values) f) research (e.g., engaging patients as research partners; eliciting patients' input on research priorities) 3) Build patient/citizen capacity to engage in all of the above	• My Health Teams offer interprofessional primary-care services using evidence-informed strategies to provide: after-hours care; QuickCare; mobile and outreach services; health promotion and wellness; chronic-disease management; group sessions; and mental health, public health and home-care services o Health professionals work together to deliver services to a geographic area (e.g., northern Manitobans), specific community (e.g., newcomers) or population (e.g., marginally housed) o My Health Teams also coordinate care transitions across regions and levels of care • Patients have the opportunity to be engaged in self-management in primary care through: o TeleCARE-TéléSOINS Manitoba for heart failure or Type 2 diabetes; and o Dial-a-Dietician a direct line with a registered dietitian • Home Clinic (for patients to coordinate primary care and manage their health records) • Co-design is used within primary-care networks	• Manitoba's SPOR Network in Primary and Integrated Health Care Innovations (PIHCI) supports patient-oriented research in primary care
Digital capture, linkage and timely sharing of relevant data: Systems capture, link and share (with individuals at all levels) data (from real-life, not ideal conditions) about patient experiences (with services, transitions and longitudinally) and provider engagement alongside data about other process indicators (e.g., clinical encounters and costs) and outcome indicators (e.g., health status)	1) Data infrastructure (e.g., interoperable electronic health records; immunization or condition-specific registries; privacy policies that enable data sharing) 2) Capacity to capture patient-reported experiences (for both services and transitions), clinical encounters, outcomes and costs 3) Capacity to capture longitudinal data across time and settings 4) Capacity to link data about health, healthcare, social care, and the social determinants of health 5) Capacity to analyze data (e.g., staff and resources)	• The Primary Care/Community Information Systems Office supports the adoption of electronic medical records including: o eChart Manitoba's secure access to healthcare information for health professionals (e.g., prescriptions, lab results, immunizations and X-ray reports) • Two types of monthly reports are available to registered Home Clinics: o operational (e.g., provider and client enrolment and enrolled details)	• None identified

Characteristic	Examples	Health-system receptors and supports	Research-system supports
	6) Capacity to share 'local' data (alone and against relevant comparators) – in both patient- and provider-friendly formats and in a timely way – at the point of care, for providers and practices (e.g., audit and feedback), and through a centralized platform (to support patient decision-making and provider, organization and system-wide rapid learning and improvement)	o analytic, which combines enrolment data with other sources (e.g., medical claims and primary-care quality indicators)	
Timely production of research evidence: Systems produce, synthesize, curate and share (with individuals at all levels) research about problems, improvement options and implementation considerations	1) Distributed capacity to produce and share research (including evaluations) in a timely way 2) Distributed research ethics infrastructure that can support rapid-cycle evaluations 3) Capacity to synthesize research evidence in a timely way 4) One-stop shops for local evaluations and pre-appraised syntheses 5) Capacity to access, adapt and apply research evidence 6) Incentives and requirements for research groups to collaborate with one another, with patients, and with decision-makers	• None identified	• Seven Oaks General Hospital's Chronic Disease Innovation Centre is building clinical datasets to allow real-time access to retrospective data
Appropriate decision supports: Systems support informed decision-making at all levels with appropriate data, evidence, and decision-making frameworks	1) Decision supports at all levels – self-management, clinical encounter, program, organization, regional health authority and government – such as a) patient-targeted evidence-based resources b) patient decision aids c) patient goal-setting supports d) clinical practice guidelines e) clinical decision support systems (including those embedded in electronic health records) f) quality standards g) care pathways h) health technology assessments i) descriptions of how the health system works	• None identified	• None identified
Aligned governance, financial and delivery arrangements: Systems adjust who can make what decisions (e.g., about joint learning priorities), how money flows and how the systems are organized and aligned to support rapid learning and improvement at all levels	1) Centralized coordination of efforts to adapt a rapid-learning health system approach, incrementally join up assets and fill gaps, and periodically update the status of assets and gaps 2) Mandates for preparing, sharing and reporting on quality-improvement plans 3) Mandates for accreditation 4) Funding and remuneration models that have the potential to incentivize rapid learning and improvement (e.g., focused on patient-reported	• None identified	• None identified

Characteristic	Examples	Health-system receptors and supports	Research-system supports
	outcome measures, some bundled-care funding models) 5) Value-based innovation-procurement model 6) Funding and active support to spread effective practices across sites 7) Standards for provincial expert groups to involve patients, a methodologist, use existing data and evidence to inform and justify their recommendations 8) Mechanisms to jointly set rapid-learning and improvement priorities 9) Mechanisms to identify and share the 'reproducible building blocks' of a rapid-learning health system		
Culture of rapid learning and improvement: Systems are stewarded at all levels by leaders committed to a culture of teamwork, collaboration and adaptability	1) Explicit mechanisms to develop a culture of teamwork, collaboration and adaptability in all operations, to develop and maintain trusted relationships with the full range of partners needed to support rapid learning and improvement, and to acknowledge, learn from and move on from 'failure'	• Practice improvement initiative of the College of Family Physicians of Canada to improve front-line care by using quality improvement, data and research	• Manitoba Primary Care Research Network is focused on primary-care providers to improve practice through collaborative practice-based research
Competencies for rapid learning and improvement: Systems are rapidly improved by teams at all levels who have the competencies needed to identify and characterize problems, design data- and evidence-informed approaches (and learn from other comparable programs, organizations, regions, and sub-regional communities about proven approaches), implement these approaches, monitor their implementation, evaluate their impact, make further adjustments as needed, sustain proven approaches locally, and support their spread widely	1) Public reporting on rapid learning and improvement 2) Distributed competencies for rapid learning and improvement (e.g., data and research literacy, co-design, scaling up, leadership) 3) In-house capacity for supporting rapid learning and improvement 4) Centralized specialized expertise in supporting rapid learning and improvement 5) Rapid-learning infrastructure (e.g., learning collaboratives)	• None identified	• None identified

Table 3: Assets and gaps in the area of aging (or for the elderly population or a relevant 'problem focus,' such as frailty) in Manitoba

Characteristic	Examples	Health-system receptors and supports	Research-system supports
Engaged patients: Systems are anchored on patient needs, perspectives and aspirations (at all levels) and focused on improving their care experiences and health at manageable per capita costs and with positive provider experiences	1) Set and regularly adjust patient-relevant targets for rapid learning and improvement (e.g., improvements to a particular type of patient experience or in a particular health outcome) 2) Engage patients, families and citizens in: a) their own health (e.g., goal setting; self-management and living well with conditions; access to personal health information, including test results) b) their own care (e.g., shared decision-making; use of patient decision aids) c) the organizations that deliver care (e.g., patient-experience surveys; co-design of programs and services; membership of quality-improvement committees and advisory councils) d) the organizations that oversee the professionals and other organizations in the system (e.g., professional regulatory bodies; quality-improvement bodies; ombudsman; and complaint processes) e) policymaking (e.g., committees making decisions about which services and drugs are covered; government advisory councils that set direction for (parts of) the system; patient storytelling to kick off key meetings; citizen panels to elicit citizen values) f) research (e.g., engaging patients as research partners; eliciting patients' input on research priorities) 3) Build patient/citizen capacity to engage in all of the above	• VPriority Home is an initiative that provides home-care supports for high-needs older adults to prevent institutionalization • Seniors Community Resource Councils provide programs for older adults in the community • The Active Living Coalition of Older Adults for Manitoba supports well-bring for older adults	• The Centre on Aging at the University of Manitoba conducts research on aging o Annual Research Symposium promotes dialogue between researchers and citizens • Manitoba Follow-up Study is the largest and longest (71 years) Canadian research on cardiovascular disease • Research from the University of Manitoba on developing a conceptual framework for community-based restorative care
Digital capture, linkage and timely sharing of relevant data: Systems capture, link and share (with individuals at all levels) data (from real-life, not ideal conditions) about patient experiences (with services, transitions and longitudinally) and provider engagement alongside data about other process indicators (e.g., clinical encounters and costs) and outcome indicators (e.g., health status)	1) Data infrastructure (e.g., interoperable electronic health records; immunization or condition-specific registries; privacy policies that enable data sharing) 2) Capacity to capture patient-reported experiences (for both services and transitions), clinical encounters, outcomes and costs 3) Capacity to capture longitudinal data across time and settings 4) Capacity to link data about health, healthcare, social care, and the social determinants of health 5) Capacity to analyze data (e.g., staff and resources)	• None identified	• The Aging in Manitoba (AIM) Longitudinal Study is the longest continuous study of aging in Canada, with data located at the Centre on Aging at the University of Manitoba

Characteristic	Examples	Health-system receptors and supports	Research-system supports
	6) Capacity to share 'local' data (alone and against relevant comparators) – in both patient- and provider-friendly formats and in a timely way – at the point of care, for providers and practices (e.g., audit and feedback), and through a centralized platform (to support patient decision-making and provider, organization and system-wide rapid learning and improvement)		
Timely production of research evidence: Systems produce, synthesize, curate and share (with individuals at all levels) research about problems, improvement options and implementation considerations	1) Distributed capacity to produce and share research (including evaluations) in a timely way 2) Distributed research ethics infrastructure that can support rapid-cycle evaluations 3) Capacity to synthesize research evidence in a timely way 4) One-stop shops for local evaluations and pre-appraised syntheses 5) Capacity to access, adapt and apply research evidence 6) Incentives and requirements for research groups to collaborate with one another, with patients, and with decision-makers	• None identified	• None identified
Appropriate decision supports: Systems support informed decision-making at all levels with appropriate data, evidence, and decision-making frameworks	1) Decision supports at all levels – self-management, clinical encounter, program, organization, regional health authority and government – such as a) patient-targeted evidence-based resources b) patient decision aids c) patient goal-setting supports d) clinical practice guidelines e) clinical decision support systems (including those embedded in electronic health records) f) quality standards g) care pathways h) health technology assessments i) descriptions of how the health system works	• Preventfalls.ca by the Winnipeg Regional Health Authority to reduce the risk of falling	• None identified
Aligned governance, financial and delivery arrangements: Systems adjust who can make what decisions (e.g., about joint learning priorities), how money flows and how the systems are organized and aligned to support rapid learning and improvement at all levels	1) Centralized coordination of efforts to adapt a rapid-learning health system approach, incrementally join up assets and fill gaps, and periodically update the status of assets and gaps 2) Mandates for preparing, sharing and reporting on quality-improvement plans 3) Mandates for accreditation 4) Funding and remuneration models that have the potential to incentivize rapid learning and improvement (e.g., focused on patient-reported	• None identified	• None identified

Characteristic	Examples	Health-system receptors and supports	Research-system supports
	outcome measures, some bundled-care funding models) 5) Value-based innovation-procurement model 6) Funding and active support to spread effective practices across sites 7) Standards for provincial expert groups to involve patients, a methodologist, use existing data and evidence to inform and justify their recommendations 8) Mechanisms to jointly set rapid-learning and improvement priorities 9) Mechanisms to identify and share the 'reproducible building blocks' of a rapid-learning health system		
Culture of rapid learning and improvement: Systems are stewarded at all levels by leaders committed to a culture of teamwork, collaboration and adaptability	1) Explicit mechanisms to develop a culture of teamwork, collaboration and adaptability in all operations, to develop and maintain trusted relationships with the full range of partners needed to support rapid learning and improvement, and to acknowledge, learn from and move on from 'failure'	• None identified	• None identified
Competencies for rapid learning and improvement: Systems are rapidly improved by teams at all levels who have the competencies needed to identify and characterize problems, design data- and evidence-informed approaches (and learn from other comparable programs, organizations, regions, and sub-regional communities about proven approaches), implement these approaches, monitor their implementation, evaluate their impact, make further adjustments as needed, sustain proven approaches locally, and support their spread widely	1) Public reporting on rapid learning and improvement 2) Distributed competencies for rapid learning and improvement (e.g., data and research literacy, co-design, scaling up, leadership) 3) In-house capacity for supporting rapid learning and improvement 4) Centralized specialized expertise in supporting rapid learning and improvement 5) Rapid-learning infrastructure (e.g., learning collaboratives)	• None identified	• None identified

McMaster University

McMaster HEALTH FORUM

>> Contact us

1280 Main St. West, MML-417
Hamilton, ON, Canada L8S 4L6
+1.905.525.9140 x 22121
forum@mcmaster.ca

>> Find and follow us

mcmasterforum.org
healthsystemsevidence.org
mcmasteroptimalaging.org

mcmasterforum

FORUM+

McMaster University