RISE
Rapid-Improvement Support and Exchange

RISE brief 12: Rapid learning and improvement (Last updated 7 August 2019)

Overview

Ontario Health Teams (OHTs) will need to learn rapidly from their contributing partners' experiences, from other OHTs, and from those who've succeeded (and failed) in similar work outside Ontario. They will also need to improve rapidly and share their successes (and failures) with others. A 'rapid learning and improvement' lens will be key to OHTs continually 'upping their game' in achieving the quadruple aim of improving care experiences and health outcomes at manageable per capita costs, and with positive provider experiences. Over time, each OHT will become a microcosm of a rapid-learning health system as well as contribute to Ontario's health system becoming a rapid-learning health system.

Box 1: Coverage of OHT building blocks & relevance to sections in the OHT full application form

This RISE brief addresses **building block #8**:

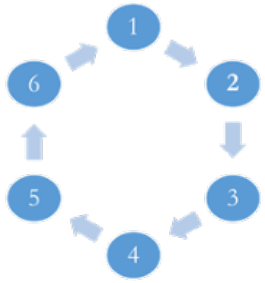
1) defined patient population
2) in-scope services
3) patient partnership and community engagement
4) patient care and experience
5) digital health
6) leadership, accountability and governance
7) funding and incentive structure
8) **performance measurement, quality improvement, and continuous learning**
   - **rapid learning and improvement - local area-focused, problem-focused and competencies (domains 55, 56 and 58)**

It is relevant primarily to **section 5** (question 5.2.1) and secondarily as background to **section 3** (how will you transform care?) as well as to **other sections** in the OHT full application form.

Rapid learning and improvement

Rapid learning and improvement involves six steps:

1) identifying a problem (or goal) through an internal and external review;
2) designing a solution based on data and evidence generated locally and elsewhere;
3) implementing the plan (possibly in pilot and control settings);
4) evaluating to identify what does and does not work;
5) adjusting, with continuous improvement based on what was learned from the evaluation (and from other OHTs' evaluations); and
6) disseminating the results to improve the coverage of effective solutions across the health system.



Rapid learning and improvement can take place at all levels of a health system – self-management, clinical encounter, program, organization, local and provincial health authority (e.g., OHTs and Ontario Health), and government – although the wording of the six steps is more appropriate to levels from program upwards.

Rapid learning and improvement can focus on:

1) a local area (e.g., the population served by an OHT); or
2) a local problem, which can be defined with respect to:
   a) a sector (e.g., a lack of capacity in long-term care),
   b) a condition or category of conditions (e.g., cancer),
   c) a treatment or category of treatments (e.g., prescription drugs), or
   d) a population (e.g., elderly); or
3) both (as is likely to be optimal).

While local areas will be the focus of OHTs, problem-focused initiatives will certainly continue as part of initiatives across the province and may continue under the leadership of Ontario Health (e.g., initiatives focused on cancer

care given Ontario Health's integration of Cancer Care Ontario). These problem-focused initiatives will need to be supported by OHTs as well.

Rapid-learning health systems

Rapid learning and improvement to address a problem or achieve a goal involves harnessing assets from each of the seven characteristics of a rapid-learning health system (see the first column of Table 1). These characteristics can be mapped to the OHT building blocks (see the text preceded by an arrow at the bottom of each cell in the first column of Table 1). For each characteristic, a set of prompts can be used to spur reflection about how fully the characteristic is embodied in a given local health system (e.g., an OHT) or in the Ontario health system as a whole (see the second column of Table 1).

While many assets exist in the Ontario health system, gaps remain for each of the seven characteristics:

1) patients are not meaningfully engaged in prioritizing what 'needles to move' (in terms of the care experiences and outcomes that are priorities for rapid learning and improvement) or in co-designing approaches to 'move the needles,' and they have few mechanisms beyond complaints and voting to register their frustration when 'needles don't move;'
2) data about patient experiences (with services, transitions and longitudinally) are often not being linked and shared in a timely and understandable way to support rapid learning and improvement at the local-area level;
3) research evidence about priority problems and improvement options is often not produced, synthesized, curated and shared in a timely and locally contextualized way to support rapid learning and improvement;
4) decision supports are often not sufficiently oriented to meeting local needs;
5) alignments in governance, financial and delivery arrangements to support rapid learning and improvement are often inadequate or not yet fully in place (e.g., with primary care and public health);
6) a culture of rapid learning and improvement is not yet widespread across levels and across areas of focus (particularly the 'rapid' part); and
7) competencies are often not sufficiently well distributed to support rapid learning and improvement across levels and across local areas or problems (e.g., in smaller communities or outside hospitals).

OHTs will need to both harness assets available locally, provincially (like RISE) and nationally (like the pan-Canadian health organizations) and fill gaps in timely and responsive ways.

Table 1: Characteristics of a rapid-learning health system

Characteristics	Prompts
1) 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 → Aligns with OHT building block #3 (patient partnership and community engagement) and with the co-design opportunities with building block #4 (patient care and experience)	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

Characteristics	Prompts
	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
2) 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) → Aligns with OHT building block #5 (digital health) and with the data elements of building blocks #4 (patient care and experience) and #8 (performance measurement, quality improvement, and continuous learning)	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)
3) Timely production of research evidence Systems produce, synthesize, curate and share (with individuals at all levels) research about problems, improvement options and implementation considerations → Aligns with the measurement and learning parts of OHT building block #8 (performance measurement, quality improvement, and continuous learning)	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 *Note that for Indigenous peoples, this row would ideally be re-conceptualized to include traditional knowledge, however, more broadly the entire framework would need to be assessed by Indigenous leaders to determine if it adds value to Indigenous peoples-led approaches*
4) Appropriate decision supports Systems support informed decision-making at all levels with appropriate data, evidence and decision-making frameworks → Aligns with the digital tools part of OHT building block #5 (digital health)	1) Decision supports at all levels – self-management, clinical encounter, program, organization, local 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
5) 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 systems 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 outcome measures, some bundled-care funding models)

Characteristics	Prompts
→ Aligns with OHT building blocks #6 (leadership, accountability and governance) and #7 (funding and incentive structure)	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, and 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
6) Culture of rapid learning and improvement Systems are stewarded at all levels by leaders committed to a culture of teamwork, collaboration and adaptability → Aligns with the culture part of OHT building block #6 (leadership, accountability and governance)	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'
7) 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, local areas 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 → Aligns with the competencies part of OHT building blocks #6 (leadership, accountability and governance) and #8 (performance measurement, quality improvement, and continuous learning)	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)

Key resources

Waddell K, Gauvin FP, Lavis JN. Evidence brief: Supporting rapid learning and improvement across Ontario's health system. Hamilton, Canada: McMaster Health Forum; 28 March 2019.

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

Gauvin FP, Lavis JN. RISE brief 12: Rapid learning and improvement. Hamilton, Canada: McMaster Health Forum; 2019.

RISE prepares both its own resources (like this RISE brief) that can support rapid learning and improvement, as well as provides a structured 'way in' to resources prepared by other partners and by the ministry. RISE is supported by a grant from the Ontario Ministry of Health to the McMaster Health Forum. The opinions, results, and conclusions are those of RISE and are independent of the ministry. No endorsement by the ministry is intended or should be inferred.

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