RISE
Rapid-Improvement Support and Exchange

Year 1 priority population

RISE brief 15 (draft): Resources to support population-health management for people with chronic conditions (Last updated 12 February 2020)

Overview

Many OHTs selected people with chronic conditions as one of their year 1 priority populations and have established working groups focused on 'moving the needle' on quadruple-aim metrics for this population. Central to such work is developing a population-health management plan, which includes four steps:

1) segmenting the priority population into groups with shared needs;
2) co-designing care pathways and in-reach and out-reach services for each group;
3) implementing pathways and services in a way that reaches and is appropriate to each group; and
4) monitoring implementation and evaluating impact.

To support this work, RISE has:

1) updated RISE brief 6 on population-health management;[1] and
2) developed a list of questions related to developing a population-health management plan (which is available as an appendix to RISE brief 6).

When undertaking population segmentation, OHTs will likely want to be sensitive to diversity in the population of people with chronic conditions. This population includes:

1) people living with a single chronic condition (such as congestive heart failure, chronic obstructive pulmonary disease, dementia and diabetes), two or more related chronic conditions (e.g., obese individuals often also have diabetes), two or more unrelated chronic conditions (e.g., multimorbidity that includes, say, heart disease, HIV/AIDS, and a mental health or addictions issues) or any such combination; and
2) people with low risk (e.g., a single well-managed chronic condition or risk health behaviour), emerging risk (e.g., multiple poorly controlled chronic conditions), high risk (e.g., high complexity, needs and barriers to accessing care) or the full spectrum of risk.

OHTs will also likely want to be sensitive to how Ontarians living with low socio-economic status carry a disproportionate burden of chronic conditions, with higher rates of hospitalizations and deaths.[2,3]

When co-designing care pathways and in-reach and out-reach services to address this diversity in the population of people with chronic conditions, OHTs may want to choose an appropriate balance among: 1) primary, secondary

Box 1: Coverage of year 1 priority populations and OHT building blocks

This RISE brief addresses the first of four year 1 priority populations that were frequently selected by cohort 1 OHTs:

1) **people with chronic conditions, which were sometimes more specifically defined by OHTs as including congestive heart failure, chronic obstructive pulmonary disease, dementia, diabetes, and those with complex-care needs**
2) people with mental health and addictions issues
3) older adults with greater needs, which was variably defined by OHTs as including 'at risk,' co-morbidities/chronic conditions, complexity, frailty, and high service users
4) people at the end of life and/or needing palliative care.

This RISE brief primarily addresses **building block #4** and secondarily addresses **building blocks #3, #5 and #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**

and tertiary prevention; 2) managing both individual conditions and multimorbidity; and 3) helping people live as well as possible with their conditions. Moreover, they may want to consider findings like those from systematic reviews of the research literature suggesting that: 1) the right integrated care for people with chronic conditions can significantly reduce emergency admissions and hospital length-of-stay; and 2) examples of successful integrated-care practices include coordination across and between services through more patient contact, treatment and follow-up in primary care and in patients' homes or their community.[2,4] They may also want to consider that people with chronic conditions often need access both to health services and to a broad array of social services that may be provided by community-based organizations, municipal governments, and others.[6]

Lastly, when implementing pathways and services, OHTs will likely also want to proactively identify people with chronic conditions and make careful and evidence-informed decisions about when, where, by whom and how pathways and services will be implemented in order to ensure that they are 'moving the needle' on quadruple-aim metrics for this population. As outlined in RISE brief 6 about population-health management, OHTs may want to use the six components of the 'Chronic Care Model' to work systematically through such decisions. More details about the Chronic Care Model can be found in that RISE brief.

OHTs will ideally develop their population-health management plans in collaboration with:
1) other OHTs focused on the same year 1 priority population;
2) experts who are aware of the many resources available in Ontario to support their efforts; and
3) experts who have experience with one or more of the four steps in population-health management.

As part of the first of these three types of collaborations, OHTs may wish to discuss together:
1) whether to seek agreement about whether their scope includes:
   a. children, youth (including transition-age youth), adults, or all three broad age groups,
   b. people with a single chronic condition, two or more related chronic conditions, two or more discordant chronic conditions or all such combinations (and if it's a single chronic condition, how to address the lack of overlap among the conditions – congestive heart failure, chronic obstructive pulmonary disease, dementia and diabetes – that OHTs singled out in their full application), and
   c. people with low, medium or high risk or the full spectrum of risk; and
2) whether and how to differentiate their work from those focused on related year 1 priority populations, such as:
   a. people with mental health and addictions issues (which can be a chronic condition in its own right), some of whom will also be living with other chronic conditions, including dementia,
   b. older adults with greater needs, many of whom will be living with chronic conditions, and
   c. people at the end of life and/or needing palliative care, again some of whom will be people with chronic conditions.

For all three of these types of collaborations, OHTs may benefit from a planned OHT Forum and the 'learning and improvement' collaboratives that are being considered for each year 1 priority population.

This RISE brief provides a first draft of a summary of the resources available to support the development of a population-health management plan for people with chronic conditions. Priority was given to those resources that are provincial in scope and free to access. Once proposed additions and corrections from the OHT Forum and participating experts has been acted on, an updated version will be made publicly available through the RISE website and newsletter.

We have organized these resources into five groups:
1) resources related to each of the four steps in population-health management;
2) resources related to each of the eight OHT building blocks;
3) provincial organizations;
4) government-supported initiatives; and
5) key legislation.

Resources related to each of four steps in population-health management

While not always directly targeting or using language directly related to the four steps in population-health management (or the first four steps in a 'rapid learning and improvement' cycle to which they correspond), a number of resources can be drawn upon to inform these steps (Table 1). Where relevant, they are organized by: 1) those with a broad focus on chronic conditions; 2) those with a focus on each of the four chronic conditions singled out by OHTs (namely congestive heart failure, chronic obstructive pulmonary disease, dementia and diabetes); and 3) those with a broader focus than chronic conditions but one that is highly related to chronic conditions.

Table 1: Resources by step in population-health management

Steps	Resources

Segmenting the population into groups (or population segments) with shared needs
[or more generally identifying a problem (or goal) through an internal and external review]
	• OHTs were each provided with a data package from the Ministry of Health that includes utilization and referral data on their attributed population, some of which may be relevant to understanding the needs of people with chronic conditions
	• In addition, data and findings from available reports can be used to understand the burden of chronic conditions in the province as well as shared needs and barriers to accessing services:
	  ○ Public Health Ontario and Cancer Care Ontario produced *The burden of chronic diseases in Ontario: Key estimates to support efforts in prevention*
	  ○ Metis Nation of Ontario produced a clinical significance report on cardiovascular disease in the Metis Nation of Ontario
	  ○ Canadian Foundation for Healthcare Improvement produced a brief on care needs and costs associated with chronic obstructive pulmonary disease in Ontario
	  ○ Ontario Health's Quality Business Unit (formerly Health Quality Ontario) published several relevant systematic reviews and qualitative syntheses:
	  ▪ *Chronic disease patients' experiences accessing care in rural and remote areas*
	  ▪ *Experiences of patient-centeredness with specialized community-based care for chronic diseases*
	  ▪ *Patient experiences of depression and anxiety with chronic diseases*
	  ▪ *How diet modification challenges are magnified in vulnerable or marginalized people with diabetes and heart disease*
	  ▪ *Patient perspectives of quality of life with uncontrolled type 1 diabetes mellitus*

Co-designing care pathways and in-reach and out-reach services appropriate to each group
[or more generally designing a solution based on data and evidence generated locally and elsewhere]
	• A number of strategies, care standards, and best practice guidelines can be used to inform the co-design of care pathways, including:
	  ○ Ministry of Health's *Chronic disease prevention guideline*
	  ○ Registered Nurses Association of Ontario's best practice guidelines:
	  ▪ *Self-management in chronic conditions: Collaboration with clients*
	  ▪ *Nursing management of hypertension*
	  ▪ *Stroke assessment across the continuum of care*
	  ▪ *Nursing care of dyspnea: The 6th vital sign in individuals with COPD*
	  ▪ *Delirium, dementia, and depression in older adults: Assessment and care*
	  ▪ *Subcutaneous administration of insulin in adults with type 2 diabetes*
	  ▪ *Reducing foot complications for people with diabetes*
	  ▪ *Assessment and management of foot ulcers for people with diabetes*
	• Public Health Ontario published 22 recommendations (in 2016) to prevent chronic diseases in Ontario, and a companion report – *Path to prevention* – outlines specific recommendations for working with First Nations, Inuit and Metis populations in Ontario
	• Ministry of Health in collaboration with Ontario Aboriginal organizations and independent First Nations, developed an *Ontario Aboriginal diabetes strategy*

Implementing pathways and services in a way that reaches and is appropriate to each group [or more generally implementing the plan, possibly in pilot and control settings]	• Ontario Health's Quality Business Unit (formerly Health Quality Ontario) and the Ministry of Health developed a clinical handbook for a number of Quality-Based Procedures, including congestive heart failure
Monitoring implementation and evaluating impact [or more generally evaluating to identify what does and does not work]	• Ontario Health's Quality Business Unit (formerly Health Quality Ontario) developed recommendations related to caring for heart failure in the community that included a measurement guide • The 2017 report of the Auditor General of Ontario included an assessment of the effectiveness of the systems and processes across the Ministry of Health, boards of health and Public Health Ontario for chronic disease prevention

Resources related to the OHT building blocks

A number of resources can also be drawn upon that relate to those OHT building blocks that are most connected to population-health management for people with chronic conditions (Table 2). Where relevant, they are again organized by: 1) those with a broad focus on chronic conditions; 2) those with a focus on each of the four chronic conditions singled out by OHTs (namely congestive heart failure, chronic obstructive pulmonary disease, dementia and diabetes); and 3) those with a broader focus than chronic conditions but one that is highly related to chronic conditions.

Table 2: Resources by OHT building block

Building block	Resources
Building block #1: Defined patient population (who is covered, and what does 'covered' mean?): Identified population and geography at maturity and target population for year 1. Process in place for building sustained care relationships with patients. High-volume service delivery target for year. *Year 1 expectations*: Patient access and service delivery target met. Number of patients with sustained care relationship reported. Plan in place for expanding target population. *At maturity*: Teams will be responsible for the health outcomes of the population within a geographic area that is defined based on local factors and how patients typically access care.	• None identified
Building block #2: In-scope services (what is covered?): Existing capacity to deliver coordinated services across at least three sectors of care (especially hospital, home care, community care, and primary care). Plan in place to phase in the full continuum of care and include or expand primary care services. *Year 1 expectations*: Additional partners identified for inclusion. Plan in place for expanding range and volume of services provided. Primary care coverage for a significant portion of the population. *At maturity*: Teams will provide a full and coordinated continuum of care for all but the most highly specialized conditions to achieve better patient and population health outcomes.	• None identified
Building block #3: Patient partnership and community engagement (how are patients engaged?) - Demonstrated history of meaningful patient, family and caregiver engagement, and support from First Nations communities where applicable. Plan in place to include patients, families and caregivers in governance structure(s) and put in place patient leadership. Commitment to develop an integrated patient-engagement framework and patient-relations process. Adherence to the *French Language Services Act,* as applicable. *Year 1 expectations*: Patient declaration of values is in place. Patients, families and caregivers are included in governance structure(s) and patient leadership established. Patient-engagement framework, patient-relations process, and community-engagement plan are in place. *At maturity*: Teams will uphold the principles of patient partnership, community engagement, and system co-design. They will meaningfully engage and partner with - and be driven by the needs of - patients, families, caregivers and the communities they service.	• Ontario Health's Quality Business Unit (formerly Health Quality Ontario) developed a patient conversation guide to support patients, families and caregivers with the management of heart failure, chronic obstructive pulmonary disease, dementia, diabetes (Type 1) (draft), pre-diabetes and diabetes (Type 2) (draft) • The University of Ottawa Heart Institute produced a *Guide for patients and families on managing heart failure* • *Indigenous diabetes health circle* strengthens Indigenous community capacity to reduce the impact of diabetes • The Ontario Native Women's Association administers an *Aboriginal diabetes education and awareness* project
Building block #4: Patient care and experience (how are patient experiences and outcomes measured and supported?): Plans in place to improve access, transitions and coordination, key measures of integration, patient self-management and health literacy, and digital access to health information. Existing capacity to coordinate care. Commitment to measure and improve patient experience and to offer 24/7 coordination and navigation services and virtual care. *Year 1 expectations*: Care has been redesigned. Access, transitions and coordination, and integration have improved. Zero cold handoffs. 24/7 coordination and navigation services, self-management plans, health literacy supports, and public information about the Team's services are in place. Expanded virtual-care offerings and availability of digital access to health information. *At maturity*: Teams will offer patients, families and caregivers the highest quality care and best experience possible. 24/7 coordination and system navigation services will be available to patients who need them. Patients will be able to access care and their own health information when and where they need it, including digitally, and transitions will be seamless.	• Ontario Health's Quality Business Unit (formerly Health Quality Ontario) undertook two relevant analyses o *Self-management support interventions for persons with chronic disease* o *Discharge planning in chronic conditions* • Ontario Health's Quality Business Unit (formerly Health Quality Ontario) developed two relevant sets of recommendations: o *Recommendation on specialized community-based care for chronic diseases*, which included a decision-making framework with seven guiding principles and a decision-making tool o *Recommendations for optimizing chronic disease management in the community (outpatient) setting*, which included effectiveness reviews of discharge planning, in-home care, continuity of care, advanced access scheduling, screening for depression/anxiety, self-management support interventions, specialized nursing practice, and electronic tools for health information exchange

	• Ontario Health's Quality Business Unit (formerly Health Quality Ontario) developed a number of quality standards related to chronic conditions, such as:
	  ○ *Congestive heart failure*
	  ○ *Chronic obstructive pulmonary disease (care in the community for adults with chronic obstructive pulmonary disease)*
	  ○ *Dementia (care for people living in the community)*
	  ▪ *Behavioural symptoms of dementia (care for patients in hospitals and residents in long-term care homes)*
	  ○ *Diabetic foot ulcers*
	  ○ *Diabetes in pregnancy*
	  ○ *Diabetes type 1 (draft)*
	  ○ *Diabetes type 2 (draft)*
	• Ontario Health's Quality Business Unit (formerly Health Quality Ontario) also developed a quality standard for transitions between hospital and home, which would be relevant to many people with chronic conditions
	• CorHealth produced *A roadmap for improving integrated heart failure care in Ontario*
	• Alzheimer Society of Ontario produced a report on *Dementia-friendly communities*
	• Diabetes Canada has developed evidence-based guidelines for diabetes
	• Ministry of Health provides diabetes-related information for both the public and providers
	• The Ontario Federation of Indigenous Friendship Centres has a Life long care program that provides services and care for people of all ages that have physical disabilities, serious health issues, or those who are frail and/or elderly, as well as an Aboriginal diabetes program providing educational resources to prevent and manage Type 2 diabetes
	• Hospital at Home Complex Care Lab explores the possibility of providing acute, hospital-level care at home for people who have been admitted to hospital with congestive heart failure, chronic obstructive pulmonary disease or community-acquired pneumonia
	• Ontario Telehealth Network supports a telehomecare program to support people with chronic disease who are managing their care at home

Building block #5: Digital health (how are data and digital solutions harnessed?): Demonstrated ability to digitally record and share information with one another and to adopt/provide digital options for decision support, operational insights, population-health management, and tracking/reporting key indicators. Single point of contact for digital-health activities. Digital-health gaps identified and plans in place to address gaps and share information across partners.
Year 1 expectations: Harmonized information-management plan in place. Increased adoption of digital-health tools. Plans in place to streamline and integrate point-of-service systems and use data to support patient care and population-health management.
At maturity: Teams will use digital health solutions to support effective healthcare delivery, ongoing quality and performance improvement, and better patient experience.
	• Ontario Health's Quality Business Unit (formerly Health Quality Ontario) conducted two relevant health technology assessments:
	  ○ *Health technologies for the improvement of chronic disease management*
	  ○ *Chronic disease management systems for the treatment and management of diabetes in primary healthcare practices*

Building block #6: Leadership, accountability and governance (how are governance and delivery arrangements aligned, and how are providers engaged?): Team members are identified and some can demonstrate history of working together to provide integrated care. Plan in place for physician and clinical engagement and inclusion in leadership and/or governance structure(s). Commitment to the Ontario Health Team vision and goals, developing a strategic plan for the team, reflecting a central brand, and where applicable, putting in place formal agreements between team members. *Year 1 expectations*: Agreements with ministry and between team members (where applicable) in place. Existing accountabilities continue to be met. Strategic plan for the team and central brand in place. Physician and clinical engagement plan implemented. *At maturity*: Teams will determine their own governance structure(s). Each team will operate through a single clinical and fiscal accountability framework, which will include appropriate financial management and controls.	• None identified

Building block #7: Funding and incentive structure (how are financial arrangements aligned?): Demonstrated track record of responsible financial management and understanding of population costs and cost drivers. Commitment to working towards integrated funding envelope, identifying a single fundholder, and reinvesting savings to improve patient care. *Year 1 expectations:* Individual funding envelopes remain in place. Single fund holder identified. Improved understanding of cost data. *At maturity:* Teams will be prospectively funded through an integrated funding envelope based on the care needs of their attributed patient populations.	• None identified
Building block #8: Performance measurement, quality improvement, and continuous learning (how is rapid learning and improvement supported?): Demonstrated understanding of baseline performance on key integration measures and history of quality and performance improvement. Identified opportunities for reducing inappropriate variation and implementing clinical standards and best evidence. Commitment to collect data, pursue joint quality-improvement activities, engage in continuous learning, and champion integrated care. *Year 1 expectations*: Integrated quality-improvement plan in place for the following fiscal year. Progress made to reduce variation and implement clinical standards and best evidence. Complete and accurate reporting on required indicators. Participation in central learning collaborative. *At maturity*: Teams will provide care according to the best available evidence and clinical standards, with an ongoing focus on quality improvement. A standard set of indicators aligned with the quadruple aim will measure performance and evaluate the extent to which Ontario Health Teams are providing integrated care, and performance will be reported.	• ICES's research program on chronic conditions tracks the epidemiology, management and outcomes of chronic conditions over time and among population sub-groups and geographic area • Ontario Health's Quality Business Unit (formerly Health Quality Ontario) conducted an economic evaluation of implementing the quality standard on optimizing chronic disease management

Provincial organizations as resources

A number of provincial organizations support the development, implementation, delivery and evaluation of best practices in the care of people with chronic conditions (Table 3). These organizations offer information, evidence and pre-packaged resources relevant to OHTs' efforts to improve outcomes for people with chronic conditions. They are organized below by: 1) organizations with a broad focus on chronic conditions; 2) those with a focus on each of the four chronic conditions singled out by OHTs (namely congestive heart failure, chronic obstructive pulmonary disease, dementia and diabetes); and 3) those with a broader focus than chronic conditions but one that is highly related to chronic conditions.

Table 3: Organizations as resources

Organization	Description
Ontario Chronic Disease Prevention Alliance	• Provides collaborative leadership to support a comprehensive chronic disease-prevention system for Ontario
Health Quality Ontario (now Ontario Health, Quality business unit)	• Monitors health-system performance, develops quality standards, and supports quality improvement across a range of areas, including care for people with chronic conditions
CorHealth Ontario (formerly Cardiac Care Network of Ontario and Ontario Stroke Network)	• Supports evidence-informed practice; informs planning, access and resource allocation; and measures and reports on quality and outcomes
Heart and Stroke	• Provides education and links to community-based initiatives to support heart health, including a free online risk assessment and six-month guided wellness program
March of Dimes - After stroke	• Offers support, education and community programs for stroke survivors, their caregivers and families
Ontario Lung Association	• Supports patients and those diagnosed with lung disease, advocates for healthy breathing and the search for future solutions, and sponsors local support groups across the province as well as a free Lung Health Information Line
Alzheimer Society - Ontario	• Improves the quality of life for Ontarians living with Alzheimer's disease and other dementias and advances the search for the cause and cure
Ontario Brain Institute	• Provides access to data and research on brain health, including dementia and other neurodegenerative disorders

Diabetes Canada, including its Ontario regional offices	• Provides information, resources and tools to help people with diabetes better understand and manage their health
Ontario Caregiver Organization	• Access to information to support caregivers
ICES – Chronic disease and pharmacotherapy research program	• Carries out population-based health research relating to chronic conditions and pharmacotherapy in Ontario and develops provincial indicators for system monitoring and evaluation
ICES – Cardiovascular research program	• Carries out population-based health research relating to cardiovascular care in Ontario and develops provincial indicators for system monitoring and evaluation
Ontario Telemedicine Network	• Supports virtual care and virtual communities of practice, evaluates virtual care products • Specific portals for virtual and team-based management of COPD, CHF and diabetes

Government-supported initiatives as resources

Many government-supported initiatives are underway that aim to increase access to, and quality of, care for people with chronic conditions (Table 4). OHTs can draw on these existing initiatives to complement and strengthen their services for this priority population.

Table 4: Other initiatives as resources

Health Links	• Coordinated care planning for patients who often see multiple healthcare providers, access a range of services, and may find it difficult to navigate the health system
	  ○ Development of a patient-centred care plan based on the individual's needs and goals
	  ○ Coordination of the care plan across multiple health providers, services, and sectors
	• Geographically based, inter-sectoral collaboration
	• In full implementation in 82 networks of providers

Ontario Drug Benefit program, Special Drugs Program, and Exceptional Access Program	• Ontario Drug Benefit (ODB) covers most of the cost of prescription drugs listed in the formulary (including most types of insulin, and blood testing strips) for Ontarians over the age of 65 or in receipt of social assistance • Special Drugs Program covers the full cost of a specific set of medications • Exceptional Access Program may provide coverage for drugs not listed on the ODB formulary in exceptional circumstances
Assistive Devices Program	• Provides coverage and grants for specific assistive devices, including home oxygen to Ontarians with a physical disability of at least six months' duration, and insulin supplies to patients 65 or older who inject insulin daily and those with Type 1 diabetes who qualify
Ontario Monitoring for Health Program	• Covers the testing supplies for Ontario residents who use insulin and are pregnant or who are visually impaired and have no additional funding for these supplies (funded by the Ministry of Health and managed by the Canadian Diabetes Association)
Primary Care Asthma [and Chronic Obstructive Pulmonary Disease] Program sites	• Deliver direct patient care to support children and adults in the diagnosis and treatment of asthma and chronic obstructive pulmonary disease to improve health outcomes, decrease emergency department visits, and decrease missed days of school and work (with 13 sites across the province) ○ This work is complemented by additional asthma-related work by three community-based providers, including the Ontario Physical Health and Education Association, Ontario Asthmas Surveillance Information System (OASIS), and The Lung Association – Ontario

Key legislation

While many pieces of legislation touch on the lives of people with chronic conditions, none are particularly key to the development of population-health management plans in the way that legislation can be for the three other year 1 priority populations. Information about relevant legislation in the health sector more broadly can be found in chapter 2 of *Ontario's health system: Key insights for engaged citizens, professionals and policymakers*, which is available for free online.

Additional tips about how to draw on evidence sources to improve patient care and experience can be found in RISE brief 9 on evidence sources.

As noted in the introduction, an updated version of this RISE brief will be made publicly available through the RISE website and newsletter once proposed additions and corrections from the OHT Forum and participating experts have been acted on. If you would like to propose additions or corrections, please email your input to rise@mcmaster.ca.

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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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