

### Overview

Ontario Health Teams (OHTs) will need to learn and improve rapidly to achieve specific targets related to the care experiences and health outcomes of their year 1 priority populations (building block #4). They can then build on these experiences in steadily expanding their priority populations (building block #1) and in-scope services (building block #2) in later years, with the goal of eventually optimizing care experiences and health outcomes for the attributed population for which they're accountable, while keeping per capita costs manageable and provider experiences positive (i.e., achieving the quadruple aim).

A key part of this learning and improvement will involve transitioning from responding reactively to the patients seeking care now from OHT partners to being proactive in meeting the needs of the broader population for which the OHT is accountable. OHTs can do this in two ways:

- 1) take population-health perspectives to the delivery of health and other human services in a person-centred manner, which we call 'population-health management' and which is the focus of this RISE brief; and
- 2) use population-based approaches to address the broader social determinants of health (e.g., advocating for or introducing changes to provincial and municipal policy to make it easier to buy healthy foods in neighbourhood stores, to exercise in local parks, and to have a meaningful job and a living wage), which will be the focus of a separate RISE brief.

The former focuses on getting the right services to all the individuals who need them (or, as we will explain below, to segments of the population with shared needs) while the latter focuses on changing the context in which these individuals live, work and play.

Many OHT partners are focused on responding reactively to the patients now seeking care from their organization (see the smallest of the three 'curves' in the top part of Figure 1). Population-health management involves broadening their focus to include being proactive in meeting the needs of the entire population for which they're accountable (see the middle of the three curves) and expanding their 'toolkit' to include both:

- 1) 'in-reach' services, which means proactively offering evidence-based services that can promote health, prevent disease and help people live well with their conditions anytime they are 'seen in' or 'touched by' the health system (within reason); and
- 2) 'out-reach' services, which means proactively connecting with those who are not seeking care now (or have not been 'seen' or 'touched' for some time) and again proactively offering evidence-based services (like those in point 1 above) in a coordinated way, and removing barriers to accessing these services.

The key differences for many OHT partners will be: 1) proactively and opportunistically offering evidence-based services to patients now seeking care from their organizations (in-reach); 2) connecting with and supporting those who aren't (out-reach); and 3) using a person-centred approach that helps people – using a comprehensive array of services that fit their needs (e.g., chronic care, mental health care and palliative care) – to set and achieve health

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

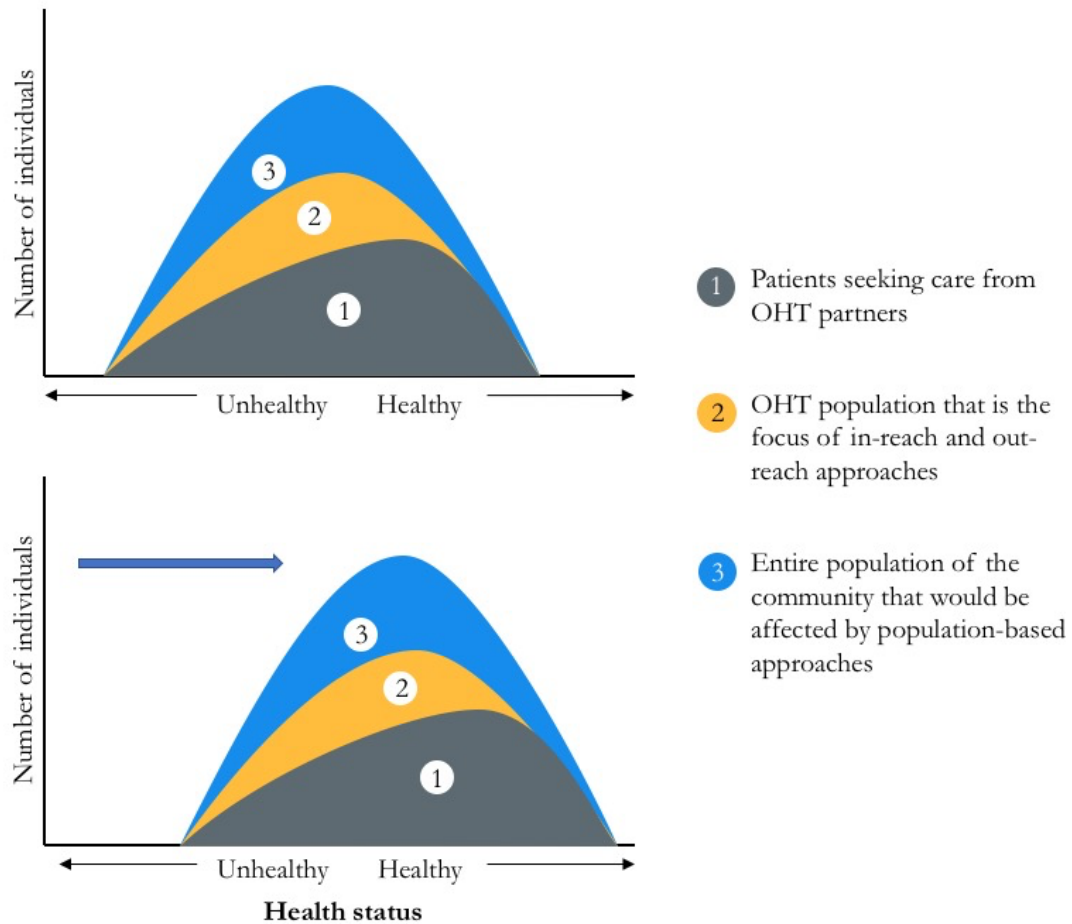
This RISE brief primarily addresses **building block #4** and secondarily **building blocks #1 and #2**:

- 1) **defined patient population** (secondary focus)
- 2) **in-scope services** (secondary focus)
- 3) patient partnership and community engagement
- 4) **patient care and experience** (primary focus)
- 5) digital health
- 6) leadership, accountability and governance
- 7) funding and incentive structure
- 8) performance measurement, quality improvement, and continuous learning

It is relevant to **section 3** (how will you transform care?) and **appendix A** (home and community care) in the [OHT full application form](#).

goals that are appropriate for them (not necessarily to focus on treating every disease or risk factor to a clinician’s high standard). Moreover, all OHT partners will need to coordinate care within and across organizations. The goal is to shift the whole population curve from unhealthy to healthy (compare the lower part of Figure 1, with more healthy people, to the upper part) and to do so in a way that respects each person’s autonomy.

**Figure 1: ‘Curve’ that OHTs are attempting to shift rightward** (adapted from (1))



This RISE brief describes three population-health management activities that OHTs can undertake in beginning to bring population-health perspectives to the delivery of health and other human services in a person-centred manner: 1) segmenting the population into groups (or population segments) with shared needs; 2) designing in-reach and out-reach services appropriate to each group (or population segment); and 3) stratifying these services to support their delivery in a manner that reaches and is appropriate to sub-groups. These activities constitute a first set of activities that can be enriched and added to as OHTs more fully embrace population-health management.

## Segmenting the population into groups with shared needs

Segmenting an attributed population into groups with shared needs involves:

- 1) choosing an initial basis for defining a group (e.g., adults with mental health and substance-use problems, frail elderly, adults with multiple chronic health conditions, individuals with risky health behaviours, or the individuals who are among the top 5% of healthcare users);
- 2) identifying the factors that may help to identify their health needs and any barriers to patients having these needs met, such as:
  - a) severity of their conditions or risk factors (e.g., those at risk of mental health and substance-use problems, those with mild to moderate mental health and substance-use problems, and those with severe and persistent mental illness and addiction, as well as those with one or more concurrent conditions),

- b) utilization (or non-utilization) of health services (e.g., receiving care coordination or home-care services, not enrolled with a primary-care practice, frequent emergency-room visits, past hospitalizations for ambulatory care-sensitive conditions, and resident of or on a wait list for a long-term care home), or broader human services (e.g., social-assistant recipient or resident in supportive housing),
  - c) socio-demographic factors (e.g., age, gender, marital status, education, income, moved in last year, visible minority, speaks a language other than English at home, and/or citizenship/immigration status), and
  - d) attributes of the neighbourhood where they live (e.g., the same factors as in 2c but at the level of, say, a ward);
- 3) analyzing available data to identify groups for whom quadruple-aim metrics are particularly poor and to select the factors that would allow segmentation into groups with shared needs, including gaps in care and care coordination and barriers to having these needs met; and
- 4) prioritizing population segments where the greatest impacts on the quadruple aim can likely be achieved.
- In RISE brief 8 about data analytics, we illustrate the many sources of data that can be drawn upon to assist with population segmentation.

As noted in the introduction, teams on an OHT readiness path will need to focus initially on selecting and segmenting their year 1 priority populations and prioritizing population segments where they think they can have the greatest impact, ideally in a way that can be easily documented and then scaled up to other populations (and population segments) in future. Over time an OHT may emphasize segmentation for one or more of:

- 1) high-risk populations (e.g., patients at high risk of unplanned hospitalization) to support what is sometimes called micro-level integration (that can even be individualized);
- 2) sub-populations (e.g., patients older than 75 and/or with a specific chronic condition such as diabetes) to support meso-level integration around each segment; and
- 3) whole population (e.g., the London Health Commission segmented the entire population of London into 15 segments based on a combination of age and a variety of health and social conditions) to support a macro-level integration initiative organized around each segment.(2)

## **Designing in-reach and out-reach services appropriate to each group**

Once population segments have been prioritized for attention, OHTs can engage patients, families and caregivers and draw on the best available research evidence to co-design:

- 1) in-reach services, which means making decisions about what types of services will be offered (to promote health, prevent disease and help people live well with their conditions) and how these services will be offered proactively, opportunistically and in a coordinated way to patients seen by any of their partners; and
- 2) out-reach services, which means making similar decisions about what types of services will be offered proactively, and making decisions about how and when those not seeking care now will be contacted, how and when services will be offered proactively, and how to approach removing barriers to accessing these services.

Care needs to be taken to ensure that these services are designed in ways that are sensitive to the barriers that each group may face in having their needs met. In RISE brief 9 about evidence sources, we provide the many sources of evidence that can be drawn upon to assist with designing in-reach and out-reach services.

Teams on an OHT readiness path will need to focus initially on the in-scope services provided by their current partners while looking for opportunities to expand these partners over time to those offering complementary services that are also needed for specific population segments. They will also need to develop mechanisms to track patients and their needs to facilitate both in-reach and out-reach services.

## Stratifying services for delivery

Once population segments have been prioritized for attention and in-reach and out-reach services have been co-designed, OHTs can plan for which partners will deliver these services and how (which we call stratifying services for delivery). This activity involves assessing OHT partners' capacity to:

- 1) deliver certain types of services;
- 2) work with groups that share a condition (such as severe and persistent mental illness), service-utilization profile (e.g., social-assistance recipient) and/or socio-demographic profile (e.g., recent immigrants who speak French at home); and
- 3) work in particular neighbourhoods.

This activity may identify gaps in service provision that need to be filled and barriers to patients accessing services that need to be removed. It may also require conversations about which partners can reach which groups in which neighbourhoods with which services most efficiently and equitably, and about how partners need to coordinate their roles to ensure they are delivering services in a person-oriented manner. Filling gaps, addressing barriers and having conversations about the roles of different partners are likely necessary to achieve the quadruple aim of improving care experiences and health outcomes at manageable per capita costs and with positive provider experiences.

Teams on an OHT readiness path will ideally apply a rapid learning and improvement lens to this work. In addition to the above, which corresponds to steps 1-3 below, applying this lens also includes steps 4-6 to support further learning and improvement:

- 1) identifying a problem (or goal) through an internal and external review (which in this case means segmenting the population into groups with shared needs and understanding the barriers to having these needs met);
- 2) designing a solution based on data and evidence generated locally and elsewhere (which in this case means designing in-reach and out-reach services appropriate to each group);
- 3) implementing the plan – in this case, the population-health management plan – possibly in pilot and control settings (which includes but goes well beyond stratifying services);
- 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 population-health management approaches across their local health system.

We return to steps 1-3 in RISE brief 8 about data analytics and in RISE brief 9 about evidence sources. The essential points from RISE briefs 6 (this one), 8 and 9 are captured in a [RISE summary sheet](#).

## References

- 1) Washington AE, Coye MJ, Boulware LE. Academic health systems' third curve: Population-health improvement. *JAMA* 2016; 315(5): 459-460.
- 2) Vuik SI, Mayer EK, Darzi A. Patient segmentation analysis offers significant benefits for integrated care and support. *Health Affairs* 2016; 35(5): 769-774.

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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.

ISSN: 2562-7309 (online)



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