11. Performance

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Key messages for citizens

- Ontario's health system seeks to achieve the 'triple aim' of improving the patient experience and population health while keeping the amount spent per person manageable.
- Timely access to care has been improving in some domains (e.g., home care, primary care, and some surgeries), albeit unequally across the province. And while Ontarians are generally satisfied with the care they receive, care coordination could be improved, as could accountability and transparency.
- Most Ontarians will live longer, healthier lives than previous generations, although they do not exercise as much as the average Canadian.
- The amount of money spent on prescription and over-the-counter drugs for each Ontarian is among the highest in the world and continues to rise.

Key messages for professionals

- Existing evaluations of whether the health system is achieving the 'triple aim' of improving the patient experience and population health while keeping per capita costs manageable do not provide a balanced picture of performance across sectors (with more emphasis on specialty care), conditions (with more focus on cancer care), treatments (with more focus on prescription drugs) or populations (with limited focus on marginalized groups).
- Although most Ontarians are satisfied with the care they receive from their family physician and in hospital, they often have difficulty accessing needed services in a timely manner, and variations in access have been reported in all sectors.
- While the health of Ontarians is improving in many ways, the incidence of certain diseases is increasing (e.g., cancer) and protection against communicable diseases through immunization is decreasing.
- Like most other jurisdictions in Canada and internationally, the amount spent on healthcare (both public and private) for each Ontarian continues to increase, although compared to the rest of Canada, Ontario has the third-lowest per capita expenditure.

Key messages for policymakers

- Recent policy developments (e.g., *Excellent Care for All Act, 2010* and *Patients First Act, 2016*) and monitoring frameworks have established a commitment to addressing the 'triple aim' of improving the patient experience and population health while keeping per capita costs manageable.
- Existing evaluations suggest that improvements are being realized in terms of improving the patient experience and population health, although this progress is not equally distributed across regions. While overall healthcare spending per person in Ontario is lower than in other provinces, rising per capita drug spending and inefficiencies continue to be a challenge.
- These evaluations do not address the 'triple aim' features comprehensively or address all sectors, conditions, treatments or populations comprehensively, and they typically lack the longitudinal data to assess whether progress is being made over time.

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In this second of two chapters focused on change and progress, we provide a brief overview of what we are learning from evaluations of the health system's performance. We first discuss how health-system goals can be defined, which directly influences how performance is measured, and introduce the 'triple aim' – enhancing the patient experience, improving population health, and keeping per capita costs manageable – as an orienting framework for goal definition and performance measurement. We then provide an overview of how Ontario's stated health-system goals align with the 'triple aim.' In the remainder of the chapter we present a summary of what is being learned from formal evaluations of performance against the 'triple aim' by sector and for select conditions, treatments and populations.

Stated goals of the health system

The stated goals of any health system can change to reflect shifts in the political orientation of the government in power, trends in population health, and the realities of the socio-economic context. As such, evaluations of whether the existing governance, financial and delivery arrange-

ments in a particular health system (i.e., its 'building blocks') are achieving stated goals can be hampered by moving targets. However, health systems around the world are increasingly aligning their reform goals with the 'triple aim' framework, either implicitly or explicitly.(1) This framework was developed by the Institute for Healthcare Improvement in the U.S., and states that health-system transformation initiatives need to simultaneously pursue three broad goals:

1) improving the patient experience of care;
2) improving population health; and
3) keeping per capita costs manageable.(2)

Given the increasingly widespread use of the 'triple aim,' we organized this chapter around these three broad goals, acknowledging that the specific ways in which they are operationalized in other countries, across provinces and territories in Canada, and in Ontario specifically, can vary tremendously. In an attempt to ensure the contents of this chapter are relevant to as many of these different approaches to operationalization as possible, we adopted broad, rather than narrow, definitions of each goal.

In addressing the first dimension of the 'triple aim' – improving the patient experience of care – we focused on Ontarians' access to care (including how timely access is, and whether access is equitable), how care is experienced once accessed (including whether care is coordinated, evidence-based, safe and effective) and Ontarians' satisfaction with these experiences, as well as whether the processes underpinning the planning and delivery of care are transparent, and whether those responsible for planning and delivering care are held accountable for performance. We also focused on aspects of provider experience in this dimension, which is increasingly being referred to as a 'fourth aim' and which is seen as an essential component of ensuring a good patient experience (while also having potential implications for health outcomes and per capita costs).(3)

In addressing the second dimension of the 'triple aim' – improving population health – we focused on both measurable health outcomes (e.g., disease burden, life expectancy, health-related quality of life, and mortality rates) and measurable risk factors that can lead to poor health outcomes in a population (e.g., rates of obesity and smoking). However, as we note in the corresponding section of the chapter, many measures of population health

can be affected by factors such as housing, income and social supports, which are beyond the control of the health system per se, and shaped in powerful ways by both governments and markets.

In addressing the third dimension of the 'triple aim' – keeping per capita costs manageable – we focused on the total amount spent per person (i.e., per capita costs), efficiency (i.e., getting the most out of every dollar spent), financial protection (i.e., the measures in place to ensure citizens avoid bankruptcy when they need care), and equity in financing (i.e., ensuring financial protections are in place for those who need them most).

Provincial goals

In Ontario, like many other jurisdictions around the world, the 'triple aim' has increasingly worked its way into many of the most important strategic plans and system reforms, although the language used is often unique to the province. We will focus on three important examples here: 1) the *Excellent Care for All Act, 2010*; 2) Health Quality Ontario's (HQO) definition of quality care and the dimensions of its Common Quality Agenda; and 3) 'Patients first: A proposal to strengthen patient-centred care in Ontario,' which has since been operationalized as the *Patients First Act, 2016*. While the 'triple aim' framework is not mentioned explicitly in the stated goals contained within these strategic plans and system reforms, they align in a number of ways. Below, we briefly outline the ways in which the stated goals in the health system align with the dimensions of the 'triple aim,' and provide a summary of these linkages in Table 11.1.

The *Excellent Care for All Act, 2010* articulated a number of health-system goals in the preamble to the legislation. A paraphrased list of these goals include:

1) improving the patient experience;
2) promoting high-quality care that is accessible, appropriate, safe, effective, efficient, equitable, integrated, patient-centred and population-health focused;
3) supporting healthcare providers to use the best available research evidence;
4) promoting transparency in the system;
5) ensuring healthcare organizations are accountable to the public;
6) ensuring patients and their caregivers realize their best health; and

7) ensuring that the system is sustainable, and that Ontarians continue to receive publicly funded care.(4; 5)

Table 11.1: Stated goals of the health system in relation to the 'triple aim'

Examples of how stated health-system goals align with dimensions of the 'triple aim'		
Dimension 1: improving patient experience of care (access, care experience, transparency and accountability)	Dimension 2: improving population health (health outcomes and risk factors that can lead to poor health outcomes)	Dimension 3: keeping per capita costs manageable (total amount spent per person, efficiency, financial protection and equity in financing)
Excellent Care for All Act, 2010		
• Improving the patient experience is an explicitly stated goal • Several goals outlined in the preamble to the legislation relate to patient experience, including ensuring care is accessible, appropriate, effective, equitable, integrated, patient-centred, and safe • Promoting transparency in the system is an explicitly stated goal • Ensuring healthcare organizations are accountable to the public is an explicitly stated goal • Supporting healthcare providers to use the best available scientific evidence is an explicitly stated goal	• Ensuring patients and their caregivers realize their best health is an explicitly stated goal • Focusing on population health is an explicitly stated component of the goal of ensuring high-quality care	• Ensuring health-system sustainability is an explicitly stated goal • Efficiency is an explicitly stated component of the goal of ensuring high-quality care
Health Quality Ontario's definition of quality, and their Common Quality Agenda framework		
• Adopted definition of quality states that quality care is safe, effective, patient-centred, timely and equitable • Patient experience included as a key component of quality-monitoring framework (particularly in the home and community care sector and the specialty sector – specifically in hospitals) • Access and timely care included as a key component of quality-monitoring framework	• Several dimensions of population health outcomes and risk factors included as a key component of quality-monitoring framework	• Adopted definition of quality states that quality care is efficient • Per capita system spending a key component of quality-monitoring framework

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Examples of how stated health-system goals align with dimensions of the 'triple aim'		
Dimension 1: improving patient experience of care (access, care experience, transparency and accountability)	Dimension 2: improving population health (health outcomes and risk factors that can lead to poor health outcomes)	Dimension 3: keeping per capita costs manageable (total amount spent per person, efficiency, financial protection and equity in financing)
Patients First proposal		
• Improving access, connecting services and supporting people and patients to make the right decisions about their health are explicitly stated as goals	• Improving health outcomes listed as one of the ways that meeting the goals of 'Patients First' will benefit Ontarians	• Protecting the universal public health system is explicitly stated as an objective, while realizing efficiencies is listed as one of the potential ways that meeting the goals of 'Patients First' will benefit Ontarians

Sources: 4-7

The 'triple aim' dimension that most closely aligns with the goals described in the *Excellent Care for All Act, 2010* is the first: improving the patient experience of care. This dimension aligns with goal 1 (patient experience), seven of the nine parts of goal 2 (accessible, appropriate, safe, effective, equitable, integrated and patient-centred), goal 3 (evidence-based), goal 4 (transparency), and goal 5 (accountability). The second dimension of the 'triple aim' – improving population health – is aligned with goal 6 (health of patients and caregivers) and with part of goal 2 (population-health focused), while the third dimension – keeping per capita costs manageable – is aligned with goal 7 (sustainable) and part of goal 2 (efficient).(1; 5)

Our second example of provincial health-system goals come from HQO, which is a government agency mandated to advise the Government of Ontario on how to ensure high-quality care in the province, as well as to monitor progress and report on it to the public. In its early years, HQO used a nine-element definition of quality care that effectively matched the list provided in goal 2 above, with the one key difference being that 'appropriate' was changed to 'appropriately resourced.'(4) More recently, however, it has used a 'streamlined operational definition of quality' from the Institute of Medicine, which defines six aims of quality care:

1) safe;
2) effective;
3) patient-centred;
4) timely;

5) efficient; and
6) equitable.(4)

The fifth aim aligns with the third dimension of 'triple aim' (keeping per capita costs manageable) while the rest align with the first dimension (improving the patient experience of care) as we have conceived it here.

The framework adopted by HQO to assess quality in the health system – known as the Common Quality Agenda – contains several elements that align closely with the 'triple aim.'(6) For instance, HQO's approach to monitoring home and community care and specialty (specifically hospital) care (which involves surveys of patients about their satisfaction with services), as well as its measures of access to and timeliness of care, are related to the first dimension of the 'triple aim' (patient experience). The health of Ontarians is also measured in terms of health risk factors (e.g., smoking, physical inactivity, obesity, and inadequate fruit and vegetable intake), broad health outcomes (e.g., life expectancy, infant mortality, self-reported health status, and potentially avoidable deaths), and health outcomes specific to a sector, set of conditions or population (e.g., suicide rates), all of which align with the second dimension of the 'triple aim' (improving population health). The Common Quality Agenda also measures per capita system spending, which relates to the third dimension of the 'triple aim' (keeping per capita costs manageable).

Our third example involves the goals that were introduced through 'Patients first: A proposal to strengthen patient-centred care in Ontario,' which has since been operationalized in the *Patients First Act, 2016*. The proposal provides the most current vision for the health system, and will have broad influence across many sectors for years to come (see Chapter 10 for more details on this and other recent reforms).(7) The goals outlined in the proposal include:

1) improve access (provide faster access to the right care);
2) connect services (deliver better coordinated and integrated care in the community, closer to home);
3) support people and patients (provide the education, information and transparency Ontarians need to make the right decisions about their health); and
4) protect the universal public health system (make decisions based on value and quality to sustain the system for generations to come).

The most explicit connections between the proposal's goals and the 'triple aim' can be found in the first three of the goals stated above, which align with the 'triple aim' dimension of patient experience, while the last goal aligns with the first and third 'triple aim' dimensions (patient experience and per capita costs). Additionally, the proposal clearly states that, by focusing on these goals, health outcomes can be improved (the second 'triple aim' dimension) and efficiencies realized (the third 'triple aim' dimension), while a number of other health-system strengthening approaches (e.g., modernizing delivery) are also positioned as ways to achieve facets of the 'triple aim.'

In sum, this broad overview of the ways in which recently established health-system goals align with the 'triple aim' framework provides a clear indication that, like many other jurisdictions around the world, policymakers in the province want to improve the patient experience of care, improve population health, and keep per capita costs manageable.

Assessment and reporting

In the sections that follow, we draw on formal evaluations of the health system to describe how well the system is performing in terms of achieving the 'triple aim.' Given the large number of organizations in the province engaged in collecting and reporting indicators (see Table 4.12), it was a challenge to piece together all of the relevant formal evaluations. In an attempt to be as systematic and transparent as possible, we used searches of Ontario's health-system documents in Health Systems Evidence (www.healthsystemsevidence.org), as well as frequent screenings of email listservs and websites (e.g., HQO), to find Ontario-focused health-system evaluations. We prioritized recent sources when possible (i.e., from the last two years), as well as sources with a clear intention to evaluate health-system performance.

The two sources of assessments we most consistently drew from were those published by HQO (particularly its annual 'Measuring up' reports and its one-off publications focused on specific sectors, conditions and treatments) and the provincial auditor general (particularly the annual reports). We also found that, while the Commonwealth Fund's International Health Policy Survey results are consistently published and often the centre of media attention because they provide international comparisons of health-system

performance, they were frequently covered by other reports we drew from – particularly HQO's 'Measuring up' series. As such, we did not place additional emphasis on publications from the Commonwealth Fund when the results relevant to Ontario were published elsewhere.

Other sources of evaluations we drew on for this chapter include the Cancer Quality Council of Ontario (most notably the Cancer System Quality Index) and the Institute for Clinical Evaluative Sciences (most notably its one-off reports and stroke report-card series), as well as one-off reports from the Canadian Cancer Society, the Conference Board of Canada, and the Institute for Competitiveness & Prosperity.

Three important observations were made during the process of identifying and reading through evaluations of the health system. First, when limited to documents in the public domain, it is difficult to determine whether all of the potentially relevant information has been identified. There are almost certainly evaluations addressing some of the dimensions of the 'triple aim' that are only available to internal staff at places like the Ministry of Health and Long-Term Care.

The second major observation is that there are imbalances in the coverage of the publicly available evaluations of the health system. Certain 'triple aim' dimensions are not routinely featured, either implicitly or explicitly. For example, we found few evaluations focused on financial protection and equity within the 'keeping per capita costs manageable' dimension of the 'triple aim.' There are also sectors for which few formal assessments exist, and the few that do exist often do not focus on any of the 'triple aim' goals (particularly rehabilitation care and public health). Within sectors, there also are imbalances in terms of which conditions are focused on by publicly available evaluations. For example, in the specialty care sector, while there are numerous reports with an evaluative component published each year, in addition to a monitoring and reporting framework for cancer care (e.g., through the Cancer System Quality Index), the same cannot be said for most other conditions (see Chapter 7 for an overview of these select conditions). There are also few evaluations for select treatments such as dental services (covered in Chapter 8) or for specific populations of interest, such as Indigenous peoples (covered in Chapter 9).

The third major observation emerged as the result of having to extract information retrospectively from formal evaluations published by other stakeholders: evaluations of the health system seldom present indicators in consistent or comparable ways. Related to this is the fact that a number of reports and evaluations are prepared as a 'one-off' initiative, with insights that can only be taken as a performance snapshot. As such, it is not always possible to provide insights about trends in health-system performance across sectors or over time, and hence to draw conclusions about relative performance or changes over time.

Improving the patient experience of care

Improving the patient experience of care – the first dimension of the 'triple aim' – is an important aspiration for the health system, as evidenced by the number of stated goals that align with this dimension (Table 11.1). In this section, we provide brief overviews of what has been learned in each sector about three key aspects of this 'triple aim' dimension: 1) access to care; 2) care experience; and 3) transparency and accountability. In the corresponding tables, points are preceded by a symbol indicating whether the assessments we drew from framed them as positive (✓) or negative (✗) observations.

Access to care

Overall, existing assessments of access to care suggest that performance is mixed (Table 11.2). While improvements have been noted in all sectors, inequities continue to exist, and in most sectors access to care depends on where a person lives. Furthermore, the maldistribution of healthcare providers in favour of urban areas over rural areas continues to be highlighted, particularly for physicians, while factors such as socio-economic status and

Table 11.2: Access to care

Summary of findings related to access to care
Cross-sectoral
✗ The maldistribution of physicians has created access challenges for some citizens, particularly those living in rural areas • As of 2011, 95% of physicians practised in urban areas and 5% practised in rural areas, despite the fact that 14% of Ontarians live in rural areas (8)

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Summary of findings related to access to care	
Home and community care	
✓	Among patients referred to a Community Care Access Centre (CCAC) by their family physician, 90% receive their first in-home service within 28 days (8)
✓	From 2007 to 2015, Local Health Integration Network (LHIN) performance measurements showed that there were improvements in wait times for CCAC-funded in-home services (8)
✓	In 2013-14, 94% of home-care patients received nursing services within five days (which was the same as reported in 2012-13) (9)
✗	There are regional variations in access to personal support services, and whether Ontarians in need receive the right amount of support depends on where they live in the province • Patients referred to a CCAC by their family physician receive their first in-home visit in as short as 12 days in some regions, and as long as 82 days in others (8)
✗	There is variation across regions with respect to the percentage of home-care patients who receive nursing services within five days, ranging from 90% in the North West CCAC region to 97% in the Central West CCAC region (9)
✗	Care coordinators in CCACs do not assess and/or reassess client needs in a timely way, causing delays in access to the most appropriate level of care needed (8) • In 2015, 65% of initial home care assessments and 32% of reassessments for chronic and complex clients were not conducted within the required time frame • The average time between referral and initial contact assessments was six to eight days (rather than the Ministry of Health and Long-Term Care, or MOHLTC, standard of three days), and 25 to 28 days between initial assessment and home-care assessment (rather than the MOHLTC standard of seven to 14 days) in regions audited in 2014
✗	Access to respite care for caregivers varies across regions, and services are only provided within the hours allocated to the primary client (8)
Primary care	
✓	From January 2013 to October 2014, there was an increase in the number of patients enrolled in the 25 Nurse Practitioner-led Clinics established to provide access to prim-ary care in underserved communities, from 33,000 to 48,544 (8)
✓	From 2009 to 2012, Family Health Teams (which serve close to 25% of Ontarians) improved access to most health services, with wait times reduced through the establishment of interprofessional primary-care teams, telephone support and after-hours coverage • e.g., 82% of patients reported they definitely or probably would have no difficulty getting care when they needed it, and that they definitely or probably could have got an appointment the same day when they became ill (15)
✗	While 94% of Ontarians have a primary-care provider, only half can get a timely appointment when they are sick, and this varies greatly by region • Only 44% of adults are able to see their primary-care provider on the same day or next day when they are sick • The proportion of people who report being able to get a same- or next-day appointment for primary care when they are sick varies from 28% in the North West LHIN to 57% in the Central West LHIN (9)
✗	56% of citizens report difficulty accessing care after hours (9)

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Summary of findings related to access to care	
Specialty care	
✓	From 2009-10 to 2013-14, the median 'maximum time' patients spent in the emergency department decreased from five (4.7) hours to four hours for low-acuity patients, and from 12 hours to 10 hours for high-acuity patients (9)
✓	From 2008-09 to 2014-15, the percentage of urgent hip replacements completed within the recommended maximum wait time of 42 days increased from 62% to 67%, and the percentage of semi-urgent hip replacements completed within the recommended maximum wait time of 84 days increased from 67% to 72% (9)
✓	From 2008-09 to 2014-15, the percentage of urgent knee replacements completed within the recommended maximum wait time of 42 days increased from 60% to 67%, and the percentage of semi-urgent knee replacements completed within the recommended maximum wait time of 84 days increased from 63% to 73% (9)
✓	The percentage of urgent cardiac procedures completed within access targets from 2009-10 to 2014-15 remained high or improved • The percentage of those receiving percutaneous coronary intervention within the recommended seven days stayed at 95% • The percentage of those receiving diagnostic cardiac catheterization within the recommended seven days improved from 94% to 95% • The percentage of those receiving coronary artery bypass graft surgery within the recommended 14 days improved from 97% to 99% (9)
✗	Between 2012 to 2014, only 60% of the 50 municipalities met the provincial target of an ambulance responding to 90% of emergency calls within 15 minutes (8)
✗	Emergency response-time standards vary significantly across the province, as each municipality sets its own standards for urgent cases that are not choking or cardiac arrest • e.g., some rural municipalities establish a target of 9% of responses within eight minutes, while other municipalities establish a target of 85% within eight minutes (8)
✗	There are variations across LHINs with respect to how long patients wait for hip- and knee-replacement surgeries (8) • In 2015, the best-performing LHIN in the Toronto area provided hip-replacement surgeries within the targeted 182 days for 97% of patients, whereas this target was only met for 49% of patients in the province's lowest-performing LHIN • In 2015, the best-performing LHIN achieved the 182-day target for knee replacements for 95% of its patients, and the worst-performing LHIN met this target for only 44% of patients
✗	Hospital use among Ontarians with low family income was 171% higher than those classified as high family income, with less than half of this attributable to variations in the extent to which they engaged in unhealthy behaviours (31 bed-days in hospital for adults in lower socio-economic groups compared to 13 days for those in higher groups) (10)
Rehabilitation care	
✗	There is variation across LHINs in the supply of regular inpatient rehabilitation beds, which may result in inequitable access to rehabilitation services across the province • The number of beds ranges from 57 per 100,000 people in the Toronto Central LHIN, to only six per 100,000 in the Central West LHIN (with a provincial average of 18 per 100,000) (8)
✗	Patients who are ready to be discharged from an acute-care bed into a rehabilitation bed may not have timely access to the right care, given 25% of the 2,300 alternate-level-of-care patients waiting in acute-care hospital beds in 2014 were waiting for a regular rehabilitation or restorative rehabilitation bed (8)

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Summary of findings related to access to care	
Long-term care	
✓	For patients waiting at home, the median wait time for admission to a long-term care home decreased from 190 days in 2008-09 to 116 in 2013-14 (although this is still higher than the 68 days it took in 2004-05) (9)
✗	For patients waiting in hospital, the median wait time for admission to a long-term care home increased from 18 days in 2004-05 to 69 days in 2013-14 (although fewer people are now applying from hospitals given additional home support programs),(9) and wait times for long-term care vary substantially across the province • In 2013-14, the median wait for admission from home was 243 days in the Toronto Central LHIN, and 50 days in the North East LHIN • In 2013-14, the median wait for admission from hospital was 197 days in the Mississauga Halton LHIN and 34 days in the South West LHIN (9)
✗	Timely access to long-term care homes depends on clients' ability to pay, with clients who are able to pay for private or semi-private rooms in a long-term care home getting access to beds more quickly, given such beds constitute up to 60% of available beds in homes, but are only applied for by 40% of people who need a bed (14)
Public health	
—	No assessments identified
Select conditions	
✗	From 2008-09 to 2014-15, the percentage of cancer surgeries completed within the target time improved for all priority levels • the percentage of patients who required and received surgery within 14 days increased from 54% to 78% • the percentage of patients who required and received surgery within 28 days increased from 68% to 83% • the percentage of patients getting surgery within the 84-day maximum recommended wait increased from 88% to 95% (9)
✗	There is significant variation across the regions in the province in terms of wait times from cancer diagnosis to treatment, suggesting much room for improvement • e.g., 48% of lymphoma patients started chemotherapy within 30 days following diagnosis from 2010 to 2013, although this was as high as 61% in some LHINs, and as low as 37% in others (11)
✗	Access to palliative-care beds differs by region, as there are large discrepancies in the total number (both in hospital and in publicly funded hospices) across LHINs (8) • While one LHIN audited in 2014 had 5.9 beds per 100,000 Ontarians, another had triple the amount (18.5 per 100,000), which could not be fully explained by population characteristics or increased demand
Select treatments	
—	No assessments identified
Select populations	
—	No assessments identified

Sources: 8-11; 15

ethnicity still influence which patients have access to the services they need.

In home and community care, wait times for CCAC-funded in-home services have been decreasing, but access to care varies significantly across Local Health Integration Networks (LHINs): wait times for a first in-home visit can differ by as much as 70 days between the best- and worst-performing regions.(8) Variations also exist across regions with respect to how long it takes to get nursing services, the amount of time it takes care coordinators to undertake assessments (and reassessments) for service eligibility, and whether caregivers have access to respite care.(8; 9)

In primary care, there have been improvements in access to interprofessional, team-based care as a result of the introduction and scale-up of new models of delivery that emphasize patient enrolment (e.g., Family Health Teams and Nurse Practitioner-led Clinics). However, despite 94% of Ontarians reporting that they have access to a primary-care provider (which is above the Canadian average, but lower than many other countries), less-than half report being able to get a same- or next-day appointment when sick, and access to after-hours care is still difficult for many Ontarians.(9) Furthermore, it is clear that same- or next-day access varies across LHINs.(9)

In the specialty care sector, the story is much the same, with improvements being realized, but not equally across the province. For example, the total time spent in emergency departments per visit has been decreasing since 2009, and wait times for urgent hip replacements, knee replacements and cardiac procedures (which are areas that were prioritized in the National Wait Times Initiative and that benefited from substantial investments) have all been improving, but this progress varies significantly across regions. Variation still exists in wait times for emergency services, wait times for hip- and knee-replacement surgeries, and time from cancer diagnosis to treatment. Furthermore, access to surgical care has also been noted as a challenge for certain populations. In particular, there is some evidence to suggest that those with lower incomes have fewer referrals to surgery, despite the fact that those with low family incomes are hospitalized more (those with a low income have a 171% higher rate of hospital use than those classified as high income). While this holds true in many instances, comparisons within some regions (e.g., the Toronto Central LHIN) have also found that both low-income and high-income earners use hospital

services more than middle-income earners.(10)

Few assessments that were identified focused on rehabilitation care, although those that did (e.g., the auditor general's annual report from 2015) identified challenges in the sector with respect to access that were similar to those identified for other sectors. For instance, significant variation across LHINs was noted in terms of the number of (and access to) inpatient rehabilitation beds, with the number ranging from as many as 57 per 100,000 in the Toronto Central LHIN, to six per 100,000 in the Central West LHIN. Additionally, timely access to rehabilitation care from acute-care hospital beds has been highlighted as a major challenge.(8)

In the long-term care sector, reductions in wait times suggest that access to long-term care is improving for individuals waiting at home for admission (or placement, as it is commonly called in the sector). However, there are also many challenges that still exist: wait times have increased for those waiting for long-term care home admissions while in hospital, wait times vary across LHINs, and access may depend on individuals' ability to pay for care.

For select conditions, and particularly for cancer care, while wait times are improving for surgeries, there is significant variation across regions.(11) Additionally, there are large variations across regions with respect to the availability of palliative-care beds.(8)

No health-system assessments that focused on access to public health services (e.g., community-based health promotion/disease prevention programs) were identified, nor were any identified in relation to select treatments (e.g., dental services) or populations (e.g., Indigenous peoples).

Patient experience

As Table 11.3 shows, citizen surveys and a number of other measures related to the patient experience (e.g., getting the right care in the right place at the right time), suggest the health system is performing relatively well despite the need for improvement in some areas within each sector.

In home and community care, the vast majority (90%) of patients across the province are satisfied with the services they receive, although care

Table 11.3: Care experience

Summary of findings related to the care experience	
Home and community care	
✓	More than 90% of patients surveyed report having a positive experience with their home care, and satisfaction remains high across regions despite small variations (from 91% in the Mississauga Halton, Central and Central West Local Health Integration Networks, or LHINs, to 94% in the South West and South East LHINs) (9)
✗	The percentage of distressed caregivers increased from 16% in 2009-10 to 33% in 2013-14 (9)
✗	Care coordinators working in Community Care Access Centres (CCACs) experience challenges in appropriately refering clients to needed services, given a lack of centralized information-sharing among service providers (8)
Primary care	
✓	86% of adults in 2014 said their provider 'always or often involves them in decisions about their health-care' (9)
✓	90% of family physicians say they always or often receive a report back from specialists with all relevant health information about their patients, which is higher than the Canadian average (85%) and many other Organisation for Economic Cooperation and Development (OECD) countries (although the proportion is 94% and 96% in Switzerland and France, respectively) (12)
✓	71% of family physicians say they always or often receive a notification from the hospital when their patient is discharged (which is higher than the Canadian average of 65%, and in the middle when compared to other OECD countries) (12)
✗	Internationally, Ontario has one of the lowest reported percentages of physicians communicating with home and community services, with only 29% saying that they, or other personnel in their practice, routinely communicate with their patient's case manager or home care provider about the patient's needs and services to be provided (12) • This is lower than the Canadian average (32%) and, while it is higher than Quebec (22%), it is much lower than many other provinces (e.g., family physicians in Saskatchewan reported they communicated 62% of the time, New Brunswick 47% of the time, and Nova Scotia and Manitoba both reported communicating 39% of the time)
Specialty care	
✓	74% of inpatients surveyed would 'definitely recommend to family and friends the hospital where they received care' (9)
✓	Hospital admissions for conditions that can be managed outside of hospital (ambulatory-care sensitive conditions) decreased by one third from 2003-04 to 2013-14, from 341 per 100,000 people to 233 per 100,000 people (9)
✓	Progress continued to be made from 2013-14 to 2014-15 in a number of domains related to stroke care, including a reduction in the proportion of alternate-level-of-care days to total length of stay from just over 28% to 26% (13)
✗	From 2007 to 2015, the percentage of patients remaining in a hospital bed despite no longer needing the type of resources and services provided there because no appropriate care settings are available (i.e., alternate-level-of-care days) increased (8)

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Summary of findings related to the care experience	
Specialty care – continued	
✗	While low-acuity emergency department visits declined slightly, high-acuity emergency department visits increased from 2,914,944 in 2009-10 to 3,571,327 in 2013-14, which accounted for nearly 66% of all emergency department visits, indicating an increase in the number of patients requiring more urgent care (9)
✗	The health system performs worse on some measures of system integration and continuity of care compared to other countries, with 10% of respondents surveyed in the province indicating that their specialist physician did not have test results or basic information about the reason for their appointment (compared to 3-5% in other countries) (21)
Rehabilitation care	
✓	Progress (or the maintenance of good performance) continues to be made in a number of domains related to stroke rehabilitation care, and from 2013-14 to 2014-15 (13) • the median number of days between stroke onset and admission to inpatient rehabilitation remains at nine • the proportion of inpatient stroke rehabilitation patients achieving the active-length-of-stay target has increased from 53% to 60% • the mean number of CCAC visits provided to stroke patients on discharge from inpatient acute care or inpatient rehabilitation rose from six to 7.3 • the proportion of patients admitted to inpatient rehabilitation with severe strokes increased from 38% to 41%
Long-term care	
✓	The daily use of physical restraints in long-term care homes decreased from 16% in 2010-11 to 7% in 2014-15, which was better than B.C. and Alberta (11% and 9%, respectively) (9)
✓	Potentially inappropriate anti-psychotic drug use decreased by 34% among long-term care residents from 2010-11 to 2013-14 (8)
✗	The rates of daily physical restraint use vary substantially across the province, with a low of 2.7% in the Toronto Central LHIN to a high of 14.4% in the North West LHIN (9)
Public health	
—	No assessments identified
Select conditions	
✓	From 2010 to 2013, 57% of stage III colon cancer patients aged 65 and older were treated with guideline-recommended chemotherapy (although for patients 80 and older, these rates were lower) (11)
✓	More than three quarters (78%) of people who attended a 'Diagnostic Assessment Program' to improve care coordination during the diagnostic phase of the cancer journey rated their care as 'excellent', while 76% and 78% of patients surveyed about cancer education at their regional cancer centre stated that they received sufficient information to help them understand their cancer and to manage their care, respectively (11)
✓	Average patient-satisfaction scores for outpatient care have remained high over the last three years for 'respect for patient preferences' (81% reported being satisfied in both 2013-14 and 2015-16) and for 'physical comfort' (79% reported being satisfied in both 2013-14 and 2015-16), and there have been slight improvements in satisfaction with 'coordination and continuity of care' (increased from 69% in 2013-14 to 71% in 2015-16) (11)

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Summary of findings related to the care experience	
Select conditions – continued	
✕	Approximately 25% of patients who undergo lung, prostate and colorectal surgery have an unplanned hospital visit following surgery (11)
✕	The rate of emergency-department visits for cancer patients in the last two weeks of life is 40%, indicating lack of timely advanced care planning, lack of community and after-hours care, and lack of appropriate end-of-life supports (11)
✕	Since 2013-14, satisfaction with 'emotional support' in outpatient cancer care has remained the lowest of all aspects of care rated, with just over half of patients reporting being satisfied (53% in 2013-14 and 55% in 2015-16) (11)
✕	There is variation in patient experience and satisfaction across regional cancer centres, with the highest satisfaction with three components of care (communication, self-management and support for shared decision-making) being 78% and the lowest 59% (11)
Select treatments	
—	No assessments identified
Select populations	
—	No assessments identified

Sources: 8; 9; 11-13; 21

coordination remains sub-optimal and there is an increasing number of caregivers who are distressed.(9)

In primary care, satisfaction with services is also high, with most patients (86%) reporting that they feel involved in decisions about their care, and the number of family physicians in Ontario who report receiving adequate information about their patients from other sectors (e.g., specialty care) is greater than the Canadian average and comparable to or higher than other Organisation for Economic Cooperation and Development countries.(9; 12) However, there also appears to be room for improvement in Ontario in ensuring primary-care services are coordinated with home and community care services, based on low rates of communication between providers in the two sectors.(12)

In the specialty care sector, three quarters of inpatients are satisfied with their hospital services, while a growing number of people are being treated in more comfortable settings outside of the hospital when appropriate.(9) While these are positive developments, health-system leaders continue to grapple with increasing numbers of 'alternate-level-of-care' days (when a

patient remains in a hospital bed, despite no longer needing the type of resources and services provided there, because no appropriate care settings are available), as well as high and growing rates of emergency department visits and hospital readmissions among a number of patient groups (e.g., high-acuity patients).(8; 9) This is in addition to a number of integration challenges.

While few assessments were identified that focused on care experience in the rehabilitation sector, those that were identified indicated that there have been improvements in a number of domains related to stroke rehabilitation (e.g., days between stroke onset and admission to rehabilitation, length-of-stay targets, and the number of home and community care visits after discharge).(13) Similarly, while few sources were identified that captured care experience in long-term care explicitly, the use of daily physical restraints and potentially inappropriate anti-psychotic drugs in long-term care homes have declined. This could be an indication that the patient experience is improving in this sector, although variations across LHINs also indicate that this is not the case for all long-term care home residents in the province.(8; 9)

For select conditions, results are also mixed. For instance, assessments showed that the majority of cancer patients are satisfied with various aspects of their care (e.g., diagnostic-assessment programs, patient education, and outpatient services), and that they are increasingly being treated with guideline-recommended chemotherapy.(11) However, results also show that emotional support continues to be the lowest-rated aspect of outpatient services.(11) Furthermore, there are regional variations in patient satisfaction with outpatient services, and there is still a significant proportion who are making unplanned visits to hospital after surgery and are accessing emergency departments instead of appropriate community and after-hours care at the end of life.(11)

No assessments that directly or indirectly focused on citizens' experience with public health services were identified, nor were any identified that focused on select treatments or populations.

Transparency and accountability

There were no assessments identified in which specific measures were used to evaluate progress in the health system within the domains of transparency and accountability (Table 11.4). As such, it is not possible to present findings about how well the system performs in these domains per se. However, a number of auditor general reports were identified that did provide insights from select sectors (primary care and rehabilitation excluded), about how each performs in this domain through specific critiques of system monitoring, oversight and compliance – although the majority of these sources pointed to challenges, rather than progress. For example, the lack of transparency around how the Ministry of Health and Long-Term Care measures LHIN performance, and the lack of consistent enforcement of mechanisms established to hold each of these regional planning units accountable, were highlighted in the 2015 auditor general's report as areas that need improvement.(8)

Table 11.4: Transparency and accountability

	Summary of findings related to transparency and accountability
Cross-sectoral	
✗	In overseeing the function of Local Health Integration Networks (LHINs), the Ministry of Health and Long-Term Care (MOHLTC) has not defined what constitutes a 'fully integrated health system,' when it should be achieved, or how to measure how LHINs are performing as planners, funders and system integrators (8) • The MOHLTC has not set timelines for when all LHINs are expected to meet their long-term performance targets, and as of 2015 only four of the 11 provincial targets were met • Little action is taken to hold LHINs accountable when low performance continues year after year with respect to measured performance indicators, and the MOHLTC responds differently to different LHINs when challenges are faced (e.g., in some instances performance targets were reduced, and in others they were tightened or maintained)
✗	No common complaint-management process has been established across LHINs, and there are no processes to ensure patient complaints are appropriately resolved • At least three LHINs did not track complaints at all (or only partially tracked them) as of 2014 (8)
Home and community care	
✗	LHINs do not consistently monitor the quality of health services provided, and performance information submitted by health-service providers is not verified
✗	Non-performing health-service providers are not consistently dealt with in accordance with guidelines established by the MOHLTC (8)
✗	Community Care Access Centres (CCACs) are not providing adequate oversight of contracted services, and do not consistently ensure service providers are complying with contract requirements (8) • Missed visits and failures to provide needed services on time are not routinely or accurately reported

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Summary of findings related to transparency and accountability	
Home and community care – continued	
✗	Some of the costs reported by CCACs as 'direct patient care' do not involve actual interactions with patients (e.g., providers' overhead and profit) (18) • On average 72% of total expenditures involve direct patient care that includes interactions with patients
Primary care	
✗	There is an expectation that interprofessional primary-care teams submit annual Quality Improvement Plans to Health Quality Ontario,(16) but the extent to which Family Health Teams in Ontario engage in quality-improvement planning and standardized reporting varies significantly across the province (15)
Specialty care	
✗	As of March 2012, 12% of Independent Health Facilities have not been assessed by the College of Physicians and Surgeons of Ontario within the past five years, to help ensure that diagnostic images are being read correctly by the physicians working there (14)
✗	As of March 2012, 60% of facilities providing X-ray services had not been inspected as frequently as required to ensure safety of the machines (14)
Rehabilitation care	
—	No assessments identified
Long-term care	
✓	The *Long-Term Care Homes Act, 2007* has made it a requirement that every long-term care home has an unannounced inspection at least once per year (although not all inspections have to be comprehensive) (8) • In 2013 the MOHLTC committed to ensuring that each long-term care home be subject to a comprehensive inspection each year, and by December 2014 the commitment had largely been met, with 95% of long-term care homes in the province having been subject to a comprehensive assessment that year (the remaining 5% were completed by January 2015)
✗	The MOHLTC does not provide clear guidance on how much time long-term care homes should be given to comply with orders, and practice varies across regions (8) • In 2014, homes in one region were given an average 34 days to comply with orders, while inspectors in another region gave an average of 77 days to comply
✗	There are no processes in place for the MOHLTC to monitor compliance with orders requiring follow-up, which may place residents at risk (8) • Approximately two thirds of compliance orders due in 2014 had not been followed up within 30 days, and it took an average of two months for the MOHLTC to perform a follow-up inspection • Non-compliance remains high among homes in certain regions (with 40% non-compliance reported among homes in one region in 2014) • Timeliness of the inspection process varies across regions, with some regions experiencing significant delays
✗	The backlog of complaints and critical incidents that required MOHLTC follow-up more than doubled from December 2013 to March 2015, from 1,300 to 2,800 (8) • Nearly 40% of high-risk and critical complaints took longer than three days to inspect, and a quarter of these took between one and nine months • Sixty per cent of medium-risk cases that should have taken 30 days took 62 days to inspect

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Summary of findings related to transparency and accountability	
Long term care – continued	
✕	In 2014 there were a total of 9,520 enforcement actions taken by the MOHLTC against long-term care homes, including: • 4,030 written notifications; • 4,450 voluntary plans of correction collected from homes; and • 1,040 compliance orders (8)
Public health	
✕	There is minimal coordination among, and oversight of, the 36 municipally governed local public health agencies with respect to the delivery of the immunization program in the province, with each acting independently and with no accountability to the Chief Medical Officer of Health (14)
Select conditions	
—	No assessments identified
Select treatments	
—	No assessments identified
Select populations	
—	No assessments identified

Sources: 8; 14-16; 18

In home and community care, a lack of consistent oversight of Community Care Access Centres (CCACs) by LHINs, and of service providers by both LHINs and CCACs, in addition to inconsistent use of accountability measures, were highlighted in the sector.(8) In specialty care, the oversight of physicians working in Independent Health Facilities and of the facilities themselves was identified as a challenge.(14)

The only strongly positive assessment made by the auditor general was for the long-term care sector, where efforts by the Ministry of Health and Long-Term Care to inspect all long-term care homes in the province annually have been quite successful, achieving a 95% inspection rate in the first year of the initiative.(8) However, like the other sectors, there are also challenges in ensuring non-performers are held accountable, including:

- a lack of clarity around timelines for compliance with ministry orders following inspections;
- no processes to monitor compliance with orders (e.g., no follow-up and variation in inspection timelines);
- a growing backlog of complaints and critical incidents requiring ministry follow-up; and
- a high number of enforcement actions on the books.(8)

In public health, the major challenge that was noted relates to a lack of coordination between municipally governed local public health agencies, as well as a lack of oversight of the province's immunization programs.(14) No assessments were identified that addressed transparency and accountability in primary care – although there are indications that despite expectations that interprofessional care teams in primary care submit annual Quality Improvement Plans, engagement in quality improvement and standardized reporting varies significantly across established Family Health Teams in the province (15; 16) – and no assessments were identified for rehabilitation care or for select conditions, treatments or populations.

Improving population health

Improving population health is the second dimension of the 'triple aim,' and is central to some health-system goals. Within this objective, addressing risk factors for poor health is also important, and in many health systems, including Ontario's, these are the focus of many assessments. That said, many measures of population health are affected by factors beyond the control of the health system (e.g., housing, income and social supports), in which case they may be poor measures of health-system performance per se. Also, interpreting some of these measures as indicators of either good or poor performance can be a challenge: rising cancer cases may be the result of better detection (which could be interpreted as good performance), but may also be the result of inadequate efforts to support lifestyle and other changes that raise the risk of cancer (which could be interpreted as poor performance). In this section, we highlight some of the key themes that can be drawn from identified assessments of population health outcomes and risk factors for poor health, with additional detail provided in Table 11.5. Points are again presented in each table depending on whether the assessments we drew from framed them as positive (✓) or negative (✗) observations.

Overall, assessments of health outcomes paint a generally positive picture of health. Life expectancy has risen over the last decade, and two thirds of Ontarians say they are in very good or excellent health.(9) People are dying less frequently from stroke, and five-year cancer survival ratios (i.e., comparing survival between cancer patients and members of the general

Table 11.5: Population health outcomes

Summary of findings related to population health outcomes
Health outcomes
✓ Life expectancy rose from 80.5 years in 2003-05 to 81.5 years in 2007-09 (9)
✓ Nearly 66% of Ontarians say their health is 'excellent or very good' (9)
✓ Ontario's rate of potentially avoidable deaths (183 per 100,000 people) is the second lowest in Canada (9)
✓ Risk-adjusted stroke mortality rates dropped from 11.7 to 10.6 per 100 patients from 2013-14 to 2014-15 (13)
✗ Cancer survival ratios are among the highest in the world, and from 2005 to 2009, five-year relative survival ratios for the most common cancers were either the highest in the world (e.g., 65% for colon cancer and 68% for rectal cancer), or similar to the jurisdictions with the highest rates in the world (e.g., 86% for female breast cancer compared to 89% in the U.S., and 95% for prostate cancer, compared to 97% in the U.S.) (11)
✗ While the rate of potentially avoidable deaths in Ontario (163 per 100,000) is lower than the Canadian average (171 per 100,000), it varies significantly across the province (9) • The highest rate is 258 per 100,000 people (North West Local Health Integration Network, or LHIN) and the lowest rate is 114 (Central LHIN)
✗ The annual number of new cancer cases has more than doubled since 1984, with roughly 85,600 new cases estimated to be diagnosed in 2016 (11)
✗ In 2012, mortality rates for the most common cancers were higher (and in some cases much higher) than the best performing jurisdictions internationally (11)
✗ From 2010-11 to 2013-14, patient outcomes in long-term care homes worsened (8) • There was a 7% increase in the number of residents who experienced worsened pressure ulcers • There was a 6% decrease in the number of residents experiencing improved physical functioning, and a 5% increase in the number experiencing worsened physical functioning • Number of falls and worsened depressive mood both increased by 2% among long-term care home residents
Risk factors for poor health
✓ Among the provinces, Ontario has the second-lowest smoking rate (18%), and this decreased by 3% from 2007 to 2013 (9)
✓ The rate of obesity in Ontario (17%) is among the lowest in Canada, although it slightly increased (by 0.5%) between 2007 and 2013 (9)
✓ Fruit and vegetable intake has slightly increased, from 58% in 2007 to 61% in 2013 (9)
✗ While physical inactivity declined from 50% to 45% from 2007 to 2013, this is higher than the Canadian average of 44% (9)
✗ Among Ontarians aged 65 and older, there was a reduction in immunization rates from 75% in 2007 to 71% in 2012 (22)

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Summary of findings related to population health outcomes	
Risk factors for poor health – continued	
✕	Early-childhood immunization rates have fallen below federal government targets, and in most cases below the level of immunization required to prevent the transmission of disease (14) • Diphtheria has dropped to 75% coverage (99% target), measles and mumps immunization coverage have both fallen to 88% (99% target), and polio has fallen to 74% (99% target)

Sources: 8; 9; 11; 13; 14; 22

population) are among the best in the world for the most common cancers (e.g., breast, colon, prostate and rectal cancers).(11; 13)

However, there are still challenges that have been highlighted. For instance, while the average Ontarian is living longer than ever before, potentially avoidable deaths are much higher in some regions than others. The number of new cancer cases continues to increase, and while five-year survival ratios are some of the best internationally, we cannot say the same for cancer mortality rates (i.e., the number of deaths due to cancer).(11) Additionally, the health of residents of long-term care homes appears to be getting worse (although this could be because, with Ontarians being cared for at home longer than in the past, long-term care residents are older and have more complex health conditions), and there has been an increase in depressive moods, pressure ulcers and falls, and a decrease in physical functioning.(8; 9)

There is a lot to be positive about in terms of risk factors for poor health in Ontario. Smoking and obesity rates are among the lowest in the country, and more Ontarians are incorporating fruit and vegetables in their diets.(9) However, Ontarians are less physically active than the average Canadian, and immunization rates among children and the elderly continue to decline, reducing the ability of Ontario's immunization program to protect citizens against a range of communicable diseases.(8; 9)

Keeping per capita costs manageable

The third dimension of the 'triple aim' focuses on keeping the amount of money spent per person on the health system (i.e., per capita costs) manageable. In this section, we consider what publicly available assessments tell us about how the health system is performing in this domain, and when information was available we also sought to highlight findings for two related dimensions:

1) whether the money spent on healthcare is being used efficiently (i.e., maximizing the outcomes we are getting for every dollar spent); and
2) whether Ontarians are financially protected (i.e., what out-of-pocket costs they face), and whether this protection is equitably distributed.

In this section, the intention is not to review in detail how the health system is financed and how this money is spent, which is covered in detail in Chapter 3. Rather, we aim to provide high-level 'snapshots' of what formal evaluations tell us about performance in these domains. Readers are encouraged to review Chapter 3 for additional details not covered here. As in previous sections, points are presented in each table depending on whether the assessments we drew from framed them as positive (✓) or negative (✗) observations. When it was not clear from an assessment whether an observation was positive or negative, we used a chevron (›).

Per capita spending and efficiency

Overall, the most consistent message related to per capita spending is that, like most other jurisdictions in Canada and internationally, the amount spent on healthcare for each individual citizen continues to increase, and this includes both public spending (i.e., government) and private spending (i.e., private insurance and out-of-pocket). When compared to the rest of Canada, Ontario has the third lowest per capita expenditure (after Quebec and B.C.), and it spends approximately $450 more per person than Quebec (the province with the lowest per capita expenditure) and $1,000 less per person than Newfoundland and Labrador (the province with the highest per capita expenditure).(9) While there are few assessments of overall health-system efficiency, technical efficiency shortfalls have been noted in the province, particularly as these relate to how technology is leveraged (e.g., use of electronic health records).(17)

Few sector-specific assessments were identified that focus on per capita spending and/or efficiency, although some trends might be gleaned from the results presented in Table 11.6. In home and community care, costs are increasing as more patients with complex health conditions are receiving care outside of hospital settings.(18) In primary care, shifts in how physicians are paid have likely contributed to an increase in spending in that sector.(19) In specialty care, assessments point to mixed results, with efficiency found to be improving in some areas (e.g., radiation treatment

Table 11.6: Efficiency and per capita costs

Summary of findings related to efficiency and per capita costs	
Cross-sectoral	
>	Based on 2012 data, Ontario spends less per capita than the Canadian average, and has the third lowest per capita health expenditure in the country, spending an average of $450 more per person than Quebec (the lowest-spending province) and about $1,000 less than Newfoundland and Labrador (the highest-spending province) (9) • Total per capita spending increased from $3,115 per person in 2000, to $4,022 per person in 2012 (9) • In the same time period, public per capita spending increased from $2,072 to $2,661, and private per capita spending increased from $1,043 to $1,361
X	The health system lags in technical efficiency (17) • The large scale adoption and implementation of information technology has the potential to enhance efficiency as well as increase safety and quality • eHealth Ontario data (from fiscal year 2012-13) indicate that 66% of family physicians use electronic medical records (EMRs), whereas EMRs are used by 92-98% of physicians in some comparator countries (e.g., the Netherlands, Norway, and the U.K.)
Home and community care	
>	From 2009-10 to 2013-14 Community Care Access Centre expenses increased by 26% to provide more hours of care to a patient population with more complex chronic health conditions (18)
Primary care	
>	In 2007-08, physicians participating in alternate funding arrangements were being paid at least 25% more than their fee-for-service counterparts, and by 2009-10 the 66% of family physicians participating in alternate funding arrangements received 76% of the total amount paid to physicians, although no analyses about whether these arrangements are more beneficial have been conducted (19)
X	In 2009-10 there were approximately 8.6 million patients enrolled in either a Family Health Organization or Family Health Group, and although 1.9 million (22%) did not visit their physician that year, physicians in these practices received $123 million just for having them enrolled (19) • Nearly half of these enrolled patients visited a different physician, and the Ontario Health Insurance Plan was billed separately for these visits
X	In 2009-10 nearly 27% of all services provided to patients enrolled in a Family Health Organization were not covered by the capitation arrangements established between the Ministry of Health and Long-Term Care (MOHLTC) and physicians, so an additional $72 million was billed by physicians for providing these services (30% of which were flu shots and Pap-smear technical services that may have been more cost-effective as an inclusion in the routine package of care covered under capitation payments) (19)
Specialty care	
X	From 2004-05 to 2011-12, MOHLTC funding to municipalities for land ambulance services nearly doubled, although the number of patients transported only increased by 18% over the same period (and it was not clear if the increase in funding contributed to faster response times or better patient outcomes). MOHLTC funding increased a further 17% from 2011-12 to 2014-15, with the number of patients only increasing by 6% over the same period (8)
X	From 2008-09 to 2012-13, the MOHLTC paid $40 million for a 'patient offload nurse' program to reduce ambulance wait times at hospitals, but during this same period ambulance wait times while stationed at hospitals funded under this initiative increased by 20% (8)

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Summary of findings related to efficiency and per capita costs	
Specialty care – continued	
✗	From 2006-07 to 2013-14, one in four low-risk births and one in five very low-risk births (i.e., those for which caesarean may be unnecessary) were caesarean deliveries (9)
Rehabilitation care	
✗	In two sites audited, nearly one third of patients receiving inpatient rehabilitation care in stroke programs might have been better served in less costly outpatient programs if they were available in the province, given they were assessed as having only mild functional impairment (8)
Long-term care	
—	No assessments identified
Public health	
>	The total operating cost of the immunization program was approximately $250 million in 2013-14 (which was the same as it was the previous year) (14) • The MOHLTC does not track the information required to determine the total costs of delivering the immunization program, and as a result cannot ensure that the program is being delivered in a cost-effective manner (14) • There has been no assessment of whether costs incurred by local public health agencies in implementing the immunization program are reasonable, and there are significant variations in the amount of funding received by each unit (ranging from $2 to $16 per person across regions) • During the 2013-14 flu season, the MOHLTC paid physicians and pharmacists for administering the flu vaccine more than once to the same person nearly 21,000 times
✗	Nearly $3 million in vaccines expired before their use (and were wasted) due to over-ordering in 2013-14, and there is no cost to agencies or providers who over-order vaccines (14)
Select conditions	
✓	Between 2006 and 2015 the capacity and efficient use of radiation machines has increased along with increases in new capital investment and radiation equipment (11) • e.g., the number of treated cancer cases increased by 32%, wait times decreased from 14 to seven days, and the number of patients treated per linear accelerator increased from 329 patients per machine in 2013 to 350 patients per machine in 2015
✗	In 2014, 90% of imaging tests (4,561) for stage 1 breast cancer patients may have been unnecessary based on clinical practice guidelines (11)
Select treatments	
✗	Average per capita spending on drugs in Ontario is among the highest in the world, with nearly U.S.$800 dollars spent in total per person, which is lower than the U.S., but higher than Australia, France, Germany, Netherlands, Norway, Sweden and Switzerland (9)
✗	The health system has shown an inability to control pharmaceutical spending (17) • From 2000 to 2011, Canadian Institute for Health Information data indicate that Ontario's per capita drug spending increased at an average annual rate of 3.5%, which is greater than the average annual rate in similar Organisation for Economic Cooperation and Development countries (2.5%)
Select populations	
—	No assessments identified

Sources: 8; 9; 11; 14; 17-19

for cancer), and poor efficiency reported in other areas (e.g., emergency services).(8; 9)

In rehabilitation care, efficiency may also be a challenge given many patients are still receiving care in settings that are more resource-intensive than their conditions require, and while the public health sector's immunization costs have remained steady, there are many examples of waste that have been highlighted by the auditor general.(8)

For select conditions, efficiencies in cancer care are being realized in some aspects of care (e.g., use of radiation equipment) while challenges remain in others (e.g., unnecessary imaging tests).(11) With respect to select treatments, assessments suggested that controlling drug spending is an ongoing challenge: Ontario's total per capita spending on drugs is among the highest in the world and, as we describe in Chapter 8, health-system leaders continue to struggle to reign in pharmaceutical spending.(9)

No assessments were identified that focused on efficiency and per capita costs in long-term care or for select populations.

Financial protection and equity in financing

There were very few systematic evaluations of health-system performance in terms of financial protection and equity in financing (Table 11.7). Overall the main messages that can be distilled are similar to those already mentioned several times throughout this book (see Chapter 3, for example): compared to many other jurisdictions around the world, public coverage in Ontario is relatively narrow given the focus on full financial protection only for hospital-based and physician-provided services, with inequitable protection for many other services (e.g., select treatments including prescription drugs and dental services).(17) Additionally, while not commonly highlighted, the rapidly aging population has also been identified as a source of intergenerational inequity in financing. In particular, the 'pay-as-you-go' financing model, where younger generations pay for the healthcare consumed by older generations, means that an increasingly higher proportion of costs are being borne by younger people through their taxes.(17)

Table 11.7: Financial protection and equity in financing

Summary of findings related to financial protection and equity in financing	
Cross-sectoral	
>	Relative to comparator jurisdictions (excluding the U.S.), Ontario's public healthcare spending is considered 'low' due to narrow public coverage (17)
>	Intergenerational inequities exist as a result of the current 'pay-as-you-go' healthcare financing model, where tax revenue is allocated toward healthcare expenditures that arise within the same year (17) • The growth in the number of adults 65 and older relative to the working-age population means government revenues are being extracted at increasingly higher proportions from the younger, smaller working population to provide for healthcare services • "As a result, the working generation is financially obliged to fund the healthcare cost for the generation that precedes it, carrying a disproportionately high financial burden."(p. 31)
Home and community care	
—	No assessments identified
Primary care	
×	The percentage of diabetes patients receiving a routine eye exam declined from 72% to 67% from 2003-04 to 2012-13, which may be associated with the confusion created when routine eye exams were delisted (while still covered for diabetes patients) (9)
Rehabilitation care	
—	No assessments identified
Long-term care	
—	No assessments identified
Public health	
—	No assessments identified
Select conditions	
—	No assessments identified
Select treatments	
—	No assessments identified
>	Inequitable drug access results from the limited scope of public insurance (17)
×	In 2014, 8% of Ontarians aged 55 or older (approximately one in 12) skipped medications because of cost, which is three to four times higher than many comparable countries (e.g., France, Germany, the Netherlands, Norway, Sweden, Switzerland and the U.K.) (9)
Select populations	
—	No assessments identified

Sources: 9; 17

Conclusion

While a review of the stated goals for the health system makes it clear that the pursuit of the 'triple aim' is important in the province, existing sources provide neither definitive nor comprehensive answers about whether each sector and the system as a whole are making progress towards achieving these goals. It can be said that progress is being made in improving some elements of the patient experience in a number of sectors, that the health of Ontarians is improving (although not all such improvements can be attributed to the health system), and that despite increases in the amount being spent on healthcare, the growth in per capita spending is similar to that in many other jurisdictions in Canada and internationally. It can also be said that significant challenges remain – and in some instances performance appears to be getting worse – within each of the 'triple aim' dimensions.

What is perhaps the most important take-away message from this chapter, however, is that the existing health-system performance evaluation landscape is not conducive to undertaking comprehensive assessments of system performance, particularly when measured against high-level system goals tied to the 'triple aim'. Some of the specific issues noted while preparing this chapter include:

- the lack of a centralized repository that enables access to systematically and transparently conducted health-system performance evaluations;
- the inconsistencies with which existing evaluations – even if published by the same organization – measure and report performance, including the indicators used, as well as the sectors, conditions, treatments and populations that are assessed;
- an imbalance in reporting, with some sectors getting more attention than others in assessments (e.g., specialty care), some conditions getting more attention than others (e.g., cancer), and some treatments getting more attention than others (e.g., drugs);
- notwithstanding initiatives such as HQO's 'Measuring up,' there are few routinely conducted performance evaluations that align indicators with stated health-system goals in order to provide information about whether progress is being made over time;
- critical health indicators that may be most appropriate from a patient perspective, such as health-related quality of life, are rarely measured and reported on (and there are no evaluations, to our knowledge, that

have measured this indicator over time);(20) and
- there is an abundance of one-off evaluations and reports that can only provide health-system performance 'snapshots.'

On a positive note, the *Patients First Act, 2016* presents a unique opportunity for health-system policymakers and stakeholders to converge upon a core set of goals that can be used to inform monitoring and evaluation efforts. Furthermore, efforts like HQO's 'Measuring up' reports and its Common Quality Agenda framework for integrated performance measurement, as well as the Cancer System Quality Index, suggest that those responsible for monitoring and evaluating system performance in Ontario are increasingly aware of the importance of ensuring consistency and comparability of indicators over time, as well as the importance of framing evaluations within stated goals. One challenge that remains to be addressed is the need to ensure the indicators selected to assess health-system performance are the right ones, and that focusing on some dimensions does not lead to the neglect of other dimensions. Regardless of any potential challenges, with time and the right investments, a clearer picture will likely emerge about how the system is performing, which will benefit the policymakers making decisions about how to improve the system, the health professionals working in the system, and the citizens whom the system serves.

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