Chapter 3
Section
3.03

Health Quality Ontario

1.0 Summary

Health Quality Ontario (HQO) is a government agency funded by the Ministry of Health and Long-Term Care (Ministry) to act as the Province's advisor on the quality of health care in the province. Its stated mandate is "to continuously improve the quality of health care in Ontario." In 2017/18, it spent $44.2 million on its operations and employed the equivalent of 291 full-time staff.

HQO provides various tools (such as clinical care standards and priority indicators for areas in the health-care system requiring improvement) and information (such as performance reporting on the health-care system, and individualized reports to physicians and hospital CEOs) that health-care providers can use to improve the quality of care they provide. This is in line with HQO's mandate to support quality improvement in the health-care system.

However, despite spending $240 million over the seven years from the time its mandate was expanded in April 2011 to March 31, 2018, HQO has had difficulty assessing and demonstrating its impact on the quality of health care in Ontario. This is in large part because its recommendations and advice are not required to be implemented by the Ministry or Local Health Integration Networks (LHINs), two parties that provide funding to and have accountability agreements with health-care providers.

The Ministry, the LHINs, HQO and health-care providers all share responsibility for quality improvement in the health-care sector. However, the focus of the LHINs and health-care providers is to meet their own performance goals, which may not always correspond to the areas that HQO identifies as needing improvement. This is evident as most hospitals are not focusing improvement efforts on areas HQO has identified as provincial priorities (for example, emergency department length of stay and hospital readmission rates), and the Ministry and the LHINs do not ensure that they do so.

Similarly, the Ministry and the LHINs both have the ability to enforce HQO's clinical care standards, but they are not taking action to do so. (Clinical care standards describe the care patients should be offered by health professionals and health services for a specific medical condition in line with current evidence of best practices.)

Even though HQO does not have the authority to enforce its recommendations in the areas of clinical care standards, and Ministry-accepted medical device and health-care services, it could be doing more to bring about greater impact from its work. It is currently not monitoring the adoption rate of clinical care standards it develops, and Ministry-accepted medical devices and health-care services it recommended. Nor is it assessing what impact its

work, including the annual performance data it publishes, is having on the overall quality of health care.

Some of the specific issues we found are:

- **It is unclear whether HQO's priority performance indicators have served as a catalyst for improvement in the health-care sector.** When performance is measured and monitored, improvement is more likely to occur because people will focus their efforts on improving the performance indicator being measured. We followed up on areas HQO identified as priorities for improvement in the hospital sector and primary care sector over a number of years. We noted that results were mixed. For example, there was improvement in the rate of hospital-acquired infections (hospital-acquired infections from *clostridium difficile* dropped significantly (31%) from 0.35 per 1,000 patient days in 2011/12 to 0.24 per 1,000 patients days in 2016/17). However, access to primary care and hospital readmission rates have not improved. Specifically, a lower percentage of people were able to see their primary care provider or nurse practitioner on the same day or next day when they were sick or had a health concern (45.3% in 2013 compared to 43% in 2016). As well, the rate of unplanned readmissions to hospital within 30 days of a patient being discharged, for either medical or surgical treatment, increased slightly (13.6% in 2012/13 to 13.9% in 2015/16 for a medical treatment).
- **Individualized reports for primary care physicians, long-term-care home physicians and hospital CEOs aimed at improving quality do not include performance data on all key provincial improvement priorities**. In May 2014, HQO began producing individualized reports for primary care physicians, providing them with information on their practice's performance in some priority improvement areas HQO has identified (that is, cancer screening rates, diabetes management, opioid prescribing rates, and health service utilization), comparison with others in the same sector, and ideas on how they could improve quality. However, these reports only include information on four out of HQO's eight priority areas for primary care. Similar reports prepared for long-term-care home physicians (starting in 2015) and hospital CEOs (starting in 2016) only provide data on one of eight, and one of 12, priority improvement areas, respectively.
- **Most physicians are not volunteering to receive individualized reports aimed at improving their practice's performance.** As of July 2018, only 32% of primary care physicians and 23% of long-term-care home physicians (primary care physicians caring for residents of long-term-care homes) had signed up to receive an individualized practice report. Although an HQO promotional campaign in 2017/18 tripled enrolment, participation is still low, in part because physicians would like the report to include specific patient information. Data provided is at the overall practice level, which makes it difficult for physicians to identify which patients they might treat differently. Contrary to individual physicians, 90% of executive directors of community health centres and family health teams have signed up for their organization's individualized report.
- **Accountability for data quality and reliability is not clearly outlined between HQO and data providers.** HQO paid about $525,000 in 2017/18 to external data providers for collecting data on health performance indicators used for public reporting. However, HQO has not clearly established and documented each provider's responsibility to ensure that the data has been verified and is reliable.
- **HQO could save time and money by collaborating with the federal Canadian Agency for Drugs and Technology Health (CADTH)**

in assessing medical devices and health services to be funded. One of HQO's four core functions is the assessment of medical devices and health-care services to determine whether the Ministry should fund them. For the most part, HQO conducts its own assessments, whereas six other provinces we looked at rely on the CADTH to perform such assessments. In 2017, HQO started collaborating with the CADTH on a limited basis. Greater collaboration has the potential to reduce duplicated efforts and costs.

- **Health-care organizations need more guidance in implementing clinical care standards recommended by HQO.** According to stakeholders, HQO's clinical care standards are not being fully implemented, in part because health-care providers may be overwhelmed by the number of standards being released, along with the many quality statements and recommendations that accompany them. Between May 2015 and September 2018, HQO had publicly released 14 clinical care standards with a total of 166 quality statements and 235 recommendations for implementation. Without guidance on priorities and additional support (for example, local-level training focused on how to implement a standard), health-care providers struggle to implement them.
- **HQO does not currently plan to monitor whether its clinical care standards will have reduced the variation of care across the province.** In 2017/18, HQO published nine clinical care standards aimed at reducing variation in care across the province. The areas of focus included opioids prescribing, dementia, hip fractures and pressure ulcers. Although HQO devoted considerable resources to develop these standards, it was not planning to monitor whether they are being implemented, or, if so, what impact they are having. HQO told us it does not have the resources to do this follow-up monitoring.
- **Care varies across the province but HQO does not set ideal ranges for performance targets.** Although HQO sets priority performance indicators for the different health-care sectors, it does not identify a minimum target for each indicator, nor an ideal target range. Therefore, health-care organizations set their own targets. We found there were large variations in targets set by health-care organizations in their quality improvement plans, meaning that the quality of care patients receive will likely continue to vary widely depending on where they receive their care. For example, for 2015/16, one long-term-care home set a target of 0% of residents to be given antipsychotic medication without a psychosis diagnosis within the seven days preceding their resident assessment, while another set a target of 45%. The home with the more stringent target of 0% achieved better results: 5% vs 26%.
- **Cost savings expected from the consolidation of five entities did not materialize.** With the consolidation of five organizations into Health Quality Ontario in 2011/12, the government expected cost efficiencies that could result in expenditures decreasing from the original organizations' combined budgets of $23.4 million in 2010/11 to a projected $18.8 million by 2013/14. However, the Ministry added a further $13.9 million for what were initially expected to be one-time initiatives, bringing the 2013/14 estimate to $32.7 million. As of March 31, 2018, however, HQO's annual expenditures had increased to about $44.2 million (excluding expenditures of the Patient Ombudsman's Office) and staffing had increased from the equivalent of 111 full-time employees to 291. Expenditures increased because HQO's mandate was expanded to include promoting patient relations, HQO increased its spending on governance and support functions, and some quality improvement initiatives were transferred from the Ministry to HQO.

This report contains 12 recommendations, with 29 action items, to address our audit findings.

Overall Conclusion

We found that Health Quality Ontario (HQO)is monitoring and reporting on the quality of health services in Ontario. HQO is also making evidence-based recommendations to the Minister of Health and Long-Term Care on which health-care services and medical devices should be publicly funded, and is developing clinical care standards to reduce variability in patient care and promote better patient outcomes.

However, HQO has had difficulty demonstrating its impact on the health system because the Ministry and Local Health Integration Networks are not ensuring that HQO's recommendation and advice are acted on.

At the very least, HQO should be measuring and reporting on the acceptance and adoption rates of its recommendations on medical devices, health-care services and clinical standards for health-care providers (currently not done); the number of physicians who are requesting individualized reports prepared by HQO (currently tracked); the use by health-care service providers of HQO's prioritized indicators in their quality improvement plans (currently tracked); and the trend in performance results in the health-care system in all of the areas emphasized by HQO through its quality improvement activities (currently not assessed). The trending results would determine if improvement is being made.

HQO is also not preparing adoption strategies or supports to help health-care providers implement its recommendations. As well, it does not follow up with health-care organizations to encourage them to include in their quality improvement plans areas that HQO has identified as priorities for improvement.

Further, since its mandate was expanded, the agency's costs have increased almost 80%, and since 2013/14, its staff size increased by almost 90%. The Ministry needs to assess whether HQO's growth in expenditures and staffing is reasonable in relation to its mandate.

OVERALL HEALTH QUALITY ONTARIO RESPONSE

Health Quality Ontario (HQO) thanks the Office of the Auditor General of Ontario for its comprehensive review of HQO's mandated activities.

HQO generally agrees with the recommendations and acknowledges that they offer useful guidance for the organization's evolution, in alignment with the health-care system's changing priorities.

HQO appreciates that every dollar it has been entrusted with should be spent effectively on initiatives that support the provision of high-quality care for the people of Ontario.

HQO's mandate is broad, and the Auditor General has reviewed key activities under the objectives of her audit. Over the past five years, the initiatives referenced in the audit have grown significantly. As the report observes, initially Quality Improvement Plans were submitted only by hospitals, and today over 1,000 organizations submit annual plans to HQO. Individualized *MyPractice* reports for physicians were made broadly available by HQO in 2014 and are now used by more than 3,400 physicians. The clinical care standards program referenced in the audit was initiated in 2016 and as of November 2018 has completed 16 standards on common conditions.

HQO routinely monitors the reach and usefulness of many of its products. We will evaluate and report publicly on the longer-term impact of our work as programs mature.

HQO commits to delivering on its mandate efficiently and effectively.

We will work with the Ministry of Health and Long-Term Care and other health system partners to ensure that the work we do is relevant and delivering a positive impact on the health outcomes of all Ontarians.

OVERALL MINISTRY RESPONSE

The Ministry of Health and Long-Term Care (Ministry) appreciates the Auditor General's audit and welcomes the Auditor's advice on how the Ministry and Health Quality Ontario (HQO) can ensure HQO is delivering on its mandate of supporting improvement in the quality of health care in Ontario. We acknowledge the recommendations made to HQO and to the Ministry, and are committed to ensuring that the actions we take in response ensure strengthened accountability and value for money, and lead to continued improvements in the quality of health care for all Ontarians.

The Ministry acknowledges HQO's role as a leader and champion of evidence-based care delivery, measuring and reporting on what matters and supporting continuous quality improvements across an increasingly complex health system. The Ministry also recognizes that there are further opportunities to increase the value and impact of HQO's programs and tools, as well as opportunities to work with HQO to build on current efforts. While many of these can be realized through HQO's existing legislative role to, among other things, support continuous quality improvement, the Ministry recognizes that it may be necessary to strengthen accountability across many system partners to bring about a faster pace of change, where appropriate, and will work with HQO to assess those opportunities going forward.

2.0 Background

2.1 Overview

Health Quality Ontario (HQO) is a government agency funded by the Ministry of Health and Long-Term Care (Ministry) to act as the Province's advisor on the quality of health care in Ontario. In 2011, under the authority of the *Excellent Care for All Act, 2010*, the Ontario Health Quality Council was consolidated with two not-for-profit transfer payment agencies and two Ministry programs, which were divested to the organization. The Ontario Health Quality Council assumed the business name Health Quality Ontario in 2011 to reflect the new mandate given to the Council under the Act. For more details, see **Appendix 1**.

2.2 Key Functions

HQO has four key functions:

- **Reporting on the provincial health system's performance:** HQO collects health services data and publicly reports on the quality of health care in Ontario (discussed in **Section 4.2**). It produces an annual report, *Measuring Up*, which provides an overview of the state of Ontario's health-care system, and identifies areas where the system is functioning well and areas needing improvement. The 2017 report measures the performance of the health-care system using 56 performance indicators (for example, percentage of patients who saw a family doctor or specialist within seven days of discharge after hospitalization for lung disease or heart failure.) Thirty-two indicators are reported in *Measuring Up* and the remaining 24 indicators are reported on the Ministry's website in a technical supplement. For each indicator in its public reporting, HQO has defined for health-care providers on its website what needs to be measured and how. HQO also produces specialized in-depth reports on significant health issues, and individualized reports, *MyPractice*, for primary care and long-term-care-home physicians (primary care physicians caring for residents of long-term-care homes). These give the physicians data about their practice compared to others, and provide ideas to promote quality improvement. HQO also provides interactive

online reporting that the public can access for information on such matters as hospital safety and wait times for surgeries.

- **Assessing medical devices and health-care services:** HQO assesses the available evidence and makes recommendations to the Minister of Health and Long-Term Care regarding public funding for health-care services and medical devices (discussed in **Section 4.3**). Assessments are conducted by HQO staff, who provide the assessment reports to HQO's Ontario Health Technology Advisory Committee (see **Section 2.4**). Following public consultation, this committee presents its recommendations to HQO's board of directors, which, if it approves them, submits them to the Ministry. From 2011 to September 2018, HQO completed 86 health technology and services assessments and made recommendations on 85 of them. (HQO does not assess drugs; drug reviews are conducted by the federal Canadian Agency for Drugs and Technology in Health).
- **Developing clinical care standards:** HQO assesses the available clinical evidence and makes recommendations on clinical care standards (discussed in **Section 4.4**). Clinical care standards describe the care patients should be offered by health professionals and health services for a specific clinical condition in line with current evidence of best practices. The intent is to help reduce variability in patient care and promote better patient outcomes, regardless of where patients are treated. For each clinical care standard being developed, HQO establishes a one-time, topic-specific Quality Standard Advisory Committee, comprised of specialists in the topic area who, on a volunteer basis, provide advice and feedback in the development of the standards. Their recommendations are presented to HQO's ongoing Ontario Quality Standards Committee (see **Section 2.4**), which reviews them and presents them to HQO's board of directors for final approval. As of September 2018, HQO had publicly released clinical care standards in 14 clinical areas, such as hip fractures and prescribing opioids.
- **Supporting quality improvement:** Health-care organizations (hospitals, long-term-care homes, home-care teams and primary care teams) are required to develop an annual quality improvement plan and submit it to HQO by April 1 (discussed in **Section 4.4**). This requirement is stipulated in the *Excellent Care for All Act, 2010*, for public hospitals and in accountability agreements for the other types of health-care organizations. Each quality improvement plan is supposed to outline performance indicators (that is, measures) that the entity wants to improve upon, with specified targets and a detailed description of how the entity plans to achieve those targets. Annually, HQO identifies province-wide sector-specific performance indicators (see **Appendix 2**) that it believes should be the focus of quality improvement programs for the upcoming year. HQO compiles all quality improvement plans received from all health-care organizations and summarizes them in a public report, highlighting the key observations at the provincial level and sector level. HQO also offers a number of other programs to support quality improvement (for example, the Ontario Surgical Quality Improvement Network).

2.3 HQO's Responsibilities Handled Differently in Some Other Provinces

Based on our review of six other provinces (Alberta, British Columbia, Saskatchewan, Manitoba, New Brunswick and Nova Scotia), we noted that HQO is unique in its role of conducting health technology and services assessments and developing clinical care standards (see **Appendix 3**):

- Aside from Ontario, all six provinces we reviewed rely on the federal Canadian Agency for Drugs and Technology in Health for their assessment of health technology and services. Alberta and British Columbia also conduct some assessments through other partners.
- Three of the six provinces fund a dedicated agency with a mandate for quality improvement, similar to HQO. The other three provinces have assigned this role to a Ministry department or regional health authority responsible for delivering health care, similar to Local Health Integration Networks (LHINs) in Ontario.
- The role of publicly reporting on health system performance is assigned to a dedicated agency in two other provinces besides Ontario (Saskatchewan and New Brunswick). The other four provinces rely on a Ministry department or regional health authority to report on health performance outcomes.

2.4 Organizational and Accountability Structure

As seen in **Figure 1**, HQO is governed by a board of directors that currently consists of 12 voting members appointed by the Lieutenant Governor in Council. The board is comprised of people with extensive health-care expertise, as well as financial and legal expertise. A Ministry representative (currently an Assistant Deputy Ministry) sits on the board as a non-voting member.

In addition, there are three ongoing committees made up of volunteers external to the board of directors, HQO and the Ministry:

- **The Ontario Health Technology Advisory Committee** makes recommendations about whether the Ministry should publicly fund certain health-care services and medical devices. This committee began in October 2003 and pre-dates the creation of HQO, as noted in **Appendix** 1. It reports directly to HQO's board of directors.
- **The Ontario Genetics Advisory Committee** provides advice to the Ontario Health Technology Advisory Committee on the clinical utility, validity and value for money of new and existing genetic and genomic tests in Ontario. The committee began in March 2017. It reports to the board indirectly through the Ontario Health Technology Advisory Committee.
- **The Ontario Quality Standards Committee** makes recommendations directly to the board concerning quality clinical care standards and related performance measures. This committee began in June 2017.

From time to time, HQO also strikes short-term Quality Standard Advisory Committees, each of which is tasked with developing a particular clinical care standard. These volunteer committees report to the board through the ongoing Ontario Quality Standards Committee.

HQO is accountable to the Ministry, which is responsible for defining expectations and providing oversight of HQO's activities. The Ministry is also responsible for reviewing and considering whether to accept HQO's recommendations regarding public funding of medical devices and health-care services, and developing implementation plans for those recommendations it accepts. As of September 2018, the Ministry has accepted 96% of the 79 recommendations it has completed reviewing.

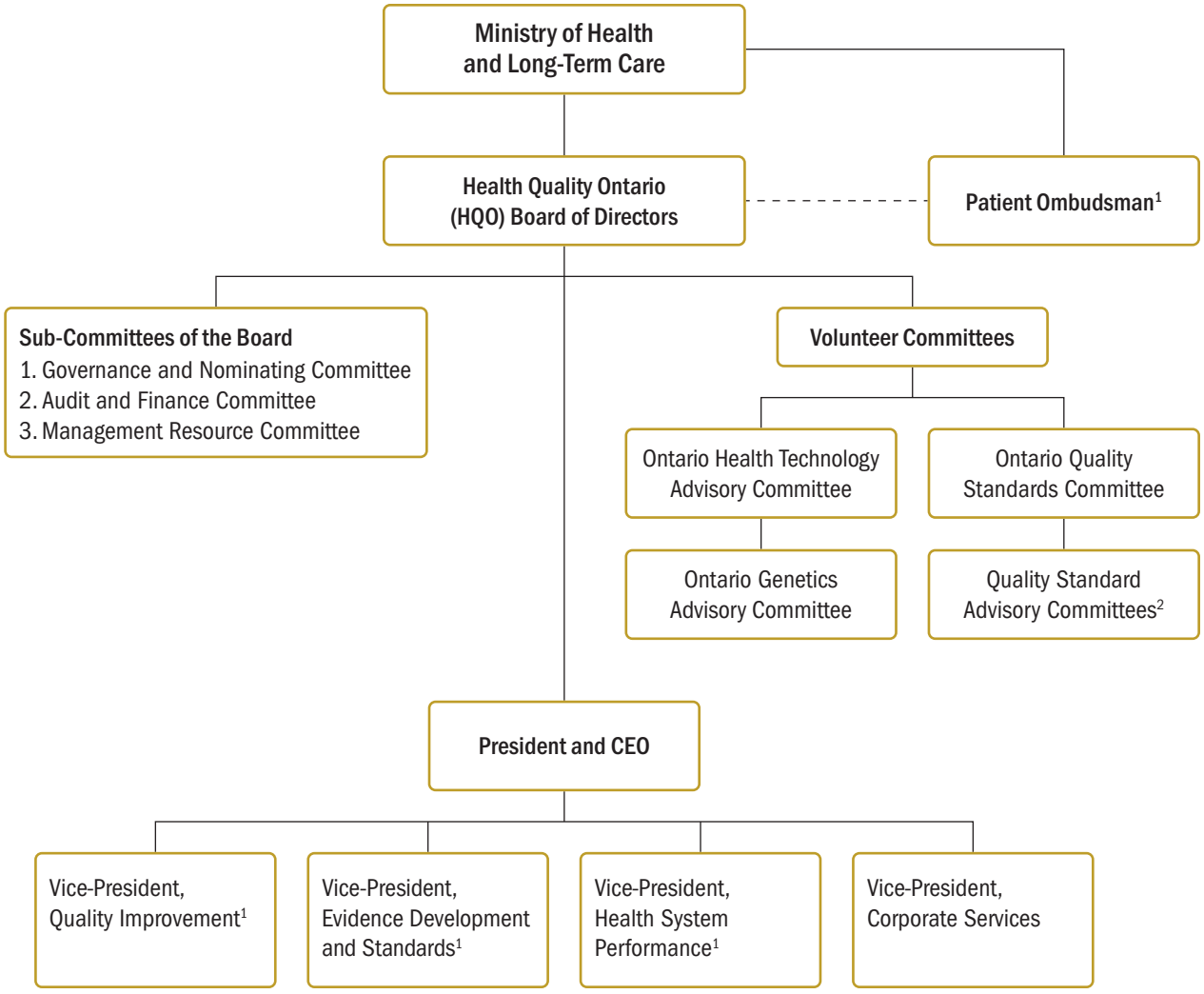
The *Excellent Care for All Act, 2010*, clarifies that HQO acts in an advisory capacity only, and the Minister of Health and Long-Term Care is not required to act on HQO's recommendations regarding funding for health-care services and medical devices, clinical care standards and performance measures.

2.5 Financial and Staffing Information

For the 2017/18 fiscal year, Ministry funding to HQO totalled $49 million. Of that, $3 million was to support the Patient Ombudsman's Office.

Figure 1: Organizational Structure of Health Quality Ontario

Prepared by the Office of the Auditor General of Ontario



– – – – HQO Board only provides administrative support to the Patient Ombudsman; it does not provide oversight over its functions.

1. Mandated function under the *Excellent Care for All Act, 2010*.
2. Each quality standard review has a one-time, topic-specific Quality Standard Advisory Committee.

Expenditures for the year totalled $47.2 million; any unused funds were returned to the Ministry.

Salaries and benefits accounted for about 70% of the 2017/18 expenditures. In addition, HQO's four key functions (discussed in **Section 2.2**) accounted for 64% of its expenditures (see **Figure 2**). In that year, HQO employed the equivalent of about 290 full-time staff.

3.0 Audit Objective and Scope

Our objective was to assess whether Health Quality Ontario (HQO) has effective systems and procedures in place to:

- monitor and publicly report on the quality of health services in Ontario including the health status of the population and patient outcomes;

Figure 2: Health Quality Ontario Expenditures by Function, 2017/18

Source of data: Health Quality Ontario

	$ 000	%
Key Functions	**30,025**	**64**
Quality Improvement	16,537	35
Evidence Development and Standards*	7,744	17
Health System Performance	5,744	12
Other	**17,161**	**36**
Goverance and Operations	13,285	28
Office of the Patient Ombudsman	3,036	6
Patient Engagement	840	2
Total	**47,186**	**100**

* This category includes the assessment of medical devices and health-care services, and the development of clinical care standards.

- promote better health care by making recommendations supported by the best available scientific evidence on clinical care standards and the funding of health-care services and medical devices;
- promote continuous quality improvements in health care aimed at substantial and sustainable positive change; and
- assess and report on its effectiveness in meeting its mandate.

In planning for our work, we identified the audit criteria (see **Appendix 4**) we would use to address our audit objective. These criteria were established based on a review of applicable legislation, policies and procedures, internal and external studies, and best practices. Senior management at HQO reviewed and agreed with the suitability of our objectives and associated criteria.

We conducted our audit primarily between January 2018 and August 2018. We obtained written representation from management at HQO and the Ministry of Health and Long-Term Care (Ministry) that, effective November 9, 2018, they had provided us with all the information they were aware of that could significantly affect the findings or the conclusion of this report.

Our audit work was conducted mainly at HQO's office in Toronto, and focused on HQO's four core functions. These functions, along with corporate services, accounted for over 90% of HQO's expenditures in 2017/18. The remaining functions included patient engagement and the Office of the Patient Ombudsman.

Although our audit considered all four health-care sectors with which HQO is involved—hospitals, primary care, home care and long-term-care homes—we placed particular emphasis on the hospital sector. This is because hospitals were the first sector to adopt quality improvement plans, in 2011/12. The other sectors adopted quality improvement plans later: primary care teams in 2013/14; home care in 2014/15; and long-term-care homes in 2014/15. Because there is a lag in the reporting of annualized health-care data, only the hospital sector had at least five years of data for our analysis.

In conducting our audit, we reviewed relevant documents, analyzed data and information, interviewed appropriate HQO and Ministry staff and reviewed key studies and relevant research from Ontario and other jurisdictions. We attended HQO's annual Audit and Feedback Conference that focuses on improving the impact of reporting to health-care providers and physicians.

We contacted other Canadian jurisdictions (British Columbia, Alberta, Saskatchewan, Manitoba, New Brunswick and Nova Scotia) and international jurisdictions (Australia, England and Scotland) to understand how their quality improvement responsibilities are structured and to compare how they perform health technology and services assessments, set clinical care standards, and promote quality improvement.

We contacted and obtained feedback from various stakeholder groups that represent health-care organizations that are required under provincial legislation to submit annual quality improvement plans to HQO or receive individualized practice reports. The stakeholders we met with included the Association of Family Health Teams of Ontario; Ontario College of Family Physicians;

Ontario Hospital Association; Ontario Long-Term Care Association; and Toronto Central Local Health Integration Network. We corroborated the views of stakeholders included in this report, where possible. We also engaged an independent consultant with expertise in the field of quality improvement in the health-care sector to assist us on this audit.

We also contacted four key data providers that HQO relies on for data it uses in its annual system performance report to discuss their internal processes for ensuring the accuracy and reliability of the source data they use. The data providers we contacted were the Canadian Institute for Health Information, Cancer Care Ontario, Institute for Clinical Evaluative Sciences, and the Ministry.

The Patient Ombudsman's Office, which the Ministry funds through HQO, is excluded from the scope of this audit. The HQO's board of directors does not have oversight responsibility over the functions of the Patient Ombudsman.

We conducted our work and reported on the results of our examination in accordance with the applicable Canadian Standards on Assurance Engagements—Direct Engagements issued by the Auditing and Assurance Standards Board of the Chartered Professional Accountants of Canada. This included obtaining a reasonable level of assurance.

The Office of the Auditor General of Ontario applies the Canadian Standards of Quality Control and, as a result, maintains a comprehensive quality control system that includes documented policies and procedures with respect to compliance with rules of professional conduct, professional standards and applicable legal and regulatory requirements.

We have complied with the independence and other ethical requirements of the Code of Professional Conduct of the Canadian Professional Accountants of Ontario, which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

4.0 Detailed Audit Observations

4.1 Health Quality Ontario's Direct Impact on Health Care Is Difficult to Assess

4.1.1 Health Quality Ontario Provides Tools to Support Improvement in Health Care

Health Quality Ontario (HQO) provides various tools and information that health-care providers can use to improve the quality of care they provide. This is in line with its mandate to support quality improvement in the health-care system. Examples of useful tools include:

- **Identification of priority improvement areas.** In consultation with system partners, HQO identifies areas needing improvement in each health-care sector, and encourages health-care organizations to focus improvement efforts on these priorities and include them in their annual quality improvement plans. In addition, HQO compiles quality improvement plans received from health-care organizations and summarizes them in a public report, highlighting the key observations at the provincial level and health sector level to highlight good initiatives that others can incorporate.
- **Clinical care standards.** The standards outline for medical professionals and patients what high-quality care should look like for specific medical conditions. They also include indicators to help medical professionals and health-care organizations assess the quality of care they are delivering, and to identify gaps and areas for improvement. Each clinical care standard developed by HQO comes with a set of recommendations for adoption geared to specific parties in the health-care system to help them implement the standard.

- **Recommendations on medical devices and health-care services.** HQO makes recommendations to the Minister regarding whether to publicly fund certain health-care services and medical devices based on assessment of available scientific evidence on the effectiveness of the device or service. Topics for assessment are prioritized based on criteria such as the potential clinical benefits and harms, and potential incremental costs or savings.
- **Measuring system performance.** HQO measures and publicly reports on the quality of the health system in Ontario using indicators developed and updated in consultation with health-care experts and health system partners. These indicators are designed to assess whether the health care provided was safe, effective, patient-centred, efficient, timely and equitable. The public reporting of data on a system-wide basis and often regional basis provides transparency. In addition, HQO's individualized reports to primary care physicians and hospital CEOs allow them to assess their own performance in specific areas in relation to the province as a whole to identify areas needing improvement.

Stakeholder feedback indicated that the tools were generally viewed to be useful. However, HQO does not know the extent to which these tools are being used, particularly with respect to the clinical care standards it develops and Ministry-approved health-care services and medical devices it recommends.

4.1.2 Unclear whether HQO Has Been a Catalyst for Improvement in the Health-Care Sector

From April 2011 to March 31, 2018, HQO spent in total around $240 million. When we attempted to assess whether HQO was having an impact, we noted that the results were mixed.

A Ministry document concerning the expanded mandate of HQO expected that HQO "will serve as the principal catalyst for driving system-wide adoption of high quality, evidence-based health care" and "ensure future investments [in health-care] get results and improve patient health." The document also indicated that the Ministry expected HQO to focus on a few new quality improvement initiatives aimed at reducing unnecessary admissions and readmissions to hospitals, and improving quality of mental health services, access to primary care (such that patients can see their health-care provider on the day of their choosing), and appropriateness of referrals to diagnostic services.

We noted that access to primary care and hospital readmission rates have not improved since 2011 when HQO received its mandate. To illustrate:

- The percentage of people who were able to see their primary care provider or nurse practitioner on the same day or next day when they were sick or had a health concern decreased from 45.3% in 2013 to 43% in 2016.
- The number of patients reporting to see their primary care provider within seven days of discharge from hospital for selected conditions (for example, pneumonia, diabetes, stroke, congestive heart failure) improved slightly from 33% in 2013 to 34% in 2016, but still remains an issue, as timely follow-up can help smooth a patient's transition from hospital to home or community.
- The rate of unplanned readmissions to hospital within 30 days of a patient being discharged, for either medical or surgical treatment, also increased slightly (medical: 13.6% in 2012/13 to 13.9% in 2015/16; surgical: 6.9% in 2012/13 to 7.2% in 2015/16).
- The length of stay in the emergency department for admitted patients has increased 3%, from 14.8 hours in 2011/12 to 15.2 hours in 2016/17. However, during the same time period, the number of people going to emergency with severe needs increased by almost 22%.

Other areas HQO focused attention on did show some improvement. For example:

- Hospital-acquired infections from *clostridium difficile* have dropped significantly (31%) from 0.35 per 1,000 patient days in 2011/12 to 0.24 per 1,000 patients days in 2016/17.
- The percentage of Ontario patients who would definitely recommend the hospital they visited to friends and family saw an increase from 73.1% in 2010/11 to 76.2% in 2016/17.

However, HQO cannot be held solely responsible for changes in health-care system performance as it does not have sole responsibility for quality improvement, as discussed in **Section 4.1.5**. It also lacks the authority to enforce the implementation of its recommendations, as described in **Section 4.1.4**.

4.1.3 HQO Not Measuring Its Impact on Quality Improvement

HQO has developed useful measures to monitor and report on the performance of the health-care system as a whole and by region. But it has not done the same for its impact on quality improvement in the health system. Overall, HQO does not evaluate whether the various tools it provides health-care provider organizations are being used and whether they are making a difference to the quality of health care in Ontario.

HQO evaluates its effectiveness by focusing on measures of activities and outreach (for example, the number of views its website receives or the number of times its reports are downloaded); opinions of patients regarding their satisfaction with patient engagement activities; and satisfaction level of participants in quality improvement training sessions.

Specifically, we noted the following shortcomings in its performance reporting:

- For the recommendations HQO makes to the Ministry on medical devices and services, HQO does not report on the rate of acceptance by the Ministry of its recommendations, even though it tracks it. HQO also does not attempt to measure the rate of adoption of its recommended medical devices and health-care services after the Ministry approves them for public funding.
- For the clinical care standards it develops, HQO does not currently track which clinical care standards or recommendations for adoption have been implemented by health-care organizations. For areas identified as a provincial priority for improvement, HQO does not highlight the performance indicators connected with those priorities and report whether progress has been made in those areas.
- For individualized practice reports developed for physicians and hospitals, HQO does not report the percentage of physicians or hospitals that sign up to receive and use the reports.
- Furthermore, HQO is not measuring whether its standards or recommendations are impacting quality of care and leading to better health outcomes for patients. This would help it assess whether it is effective in supporting continued quality improvement in health care.

4.1.4 HQO's Ability to Effect Positive Change Is Limited as Ministry and LHINs Are Not Ensuring HQO's Recommendations Are Being Implemented

One key factor limiting HQO's impact on the quality of health care is that HQO does not have the authority to ensure that organizations adopt the medical devices and health-care services recommended by HQO and approved by the Ministry, nor the clinical care standards HQO has developed. Moreover, it does not have the authority to ensure that organizations at least take steps toward improvement (in whatever manner they choose) in areas that HQO has identified as priorities. None of HQO's improvement activities are mandatory for the health-care sector, further limiting its effectiveness. For example:

- Family physicians are not required to receive and act on HQO's individualized reports aimed at changing physician behaviour.
- Hospitals are not required to participate in HQO's improvement programs. For example, as of June 2018, only 46 hospitals (including two children's hospitals) were participating in the province-wide surgical quality improvement program, partially funded by HQO. (In 2017/18, these hospitals accounted for about three-quarters of adult surgeries.)

In 2012, a report by the Commission on the Reform of Ontario's Public Services, commonly referred to as the Drummond Report, recommended that HQO "become a regulatory body to enforce evidence-based directives to guide treatment decisions and OHIP coverage." According to the Ministry, it decided not to implement this recommendation because it was not aligned with HQO's legislated mandate.

In the latest Ministry–LHIN Accountability Agreement, effective for the period 2015 to 2018, the Ministry requires that each LHIN work with its health-service providers to support the adoption of evidence-based best practices recommended in, among other things, HQO clinical care standards. However, the Ministry is not monitoring the LHINs' actions or implementation activities in response to these standards. Within the Agreement, there are no financial incentives or penalties that could motivate the LHINs to devote the necessary resources to ensure their local health-service providers implement the standards.

The Ministry also noted in its response to the Drummond Report recommendation that enforcement of standards of practice is more appropriately positioned within Ontario's 26 health-sector regulatory colleges. Examples of regulatory colleges in the health sector include the College of Midwives of Ontario, the College of Nurses of Ontario, and the College of Physicians and Surgeons of Ontario. However, HQO told us that its recommendations are made to encourage best practices, thereby improving the quality of care to levels above those assessed by regulatory colleges.

In contrast, in Scotland, the government entity comparable to HQO—Healthcare Improvement Scotland—has enforcement authority in addition to its quality improvement activities.

4.1.5 Lack of Clear Roles and Responsibilities of Various Parties in Promoting Quality Improvement in the Health-Care Sector

Under the *Excellent Care for All Act, 2010*, HQO has the role of supporting quality improvement and a strategic goal of providing system-level leadership for health-care quality. It shares responsibility for quality improvement in the health-care sector with the Ministry, the LHINs, and health-care provider organizations, such as hospitals and long-term-care homes. The focus of the LHINs, hospitals and other health-care providers is to meet their performance indicators, which may not always correspond to the areas that HQO identifies as needing improvement. This brings with it the potential for overlap and competing priorities. (**Appendix 5** notes the responsible parties in the health sector.)

According to various provincial acts and agreements, the following parties are responsible for certain aspects of health quality:

- **Ministry and LHINs:** The standard agreement between the Ministry and each LHIN recognizes that the Ministry and the LHINs have a joint responsibility to achieve better health outcomes for Ontarians and to effectively oversee the use of public funds in a fiscally sustainable manner. It further states that "both parties will…work with Health Quality Ontario, local clinical leaders, health service providers and other providers to advance the quality agenda and align quality improvement efforts across sectors and the local health-care system."
- **Hospital Boards of Directors:** According to the *Public Hospitals Act*, the boards of directors of hospitals are responsible for the quality of patient care at the hospitals.

- **Quality Committees:** The *Excellent Care for All Act, 2010*, requires all hospitals to establish a quality committee. For other health-care entities, such as long-term-care homes and primary care teams, quality committees are optional. Quality committees are generally responsible for:
  - monitoring and reporting to the organization's board of directors on quality issues and on the overall quality of services provided in the health-care organization;
  - considering and making recommendations to the board regarding quality-improvement initiatives and policies;
  - ensuring that information about best practices is shared with staff, and monitoring the use of these materials; and
  - overseeing the preparation of annual quality improvement plans.
- **College of Physicians and Surgeons of Ontario:** The College has a legislated mandate to continuously improve the quality of care provided by physicians. The College is responsible for "monitoring and maintaining standards of practice through peer assessment and remediation" and "investigating complaints about doctors on behalf of the public, and conducting discipline hearings when doctors may have committed an act of professional misconduct or may be incompetent." However, only a small number of physicians are subject to a peer and practice assessment.
- **Public Health Ontario:** The Crown corporation provides scientific and technical advice and support activities, such as population health assessment, public health research, surveillance, epidemiology, and program planning and evaluation to protect and improve the health of Ontarians. It generates public health science and research in communicable diseases, environmental health, and chronic diseases and injuries, and conducts surveillance and outbreak investigations. It also operates Ontario's public health laboratories.

In addition to HQO, other entities are tracking and providing data about health quality performance to the public or other health-care providers. These entities include the Better Outcomes Registry and Network, the Canadian Institute for Health information, Cancer Care Ontario, and the Cardiac Care Network and the Ontario Stroke Network, now collectively known as CorHealth Ontario.

In an attempt to streamline health system reporting, the Ministry has recently moved reporting on emergency length of stay, and wait times for surgeries and diagnostic imaging from Cancer Care Ontario's website, to HQO. However, the issue of multiple parties reporting health performance data remains a concern.

A Ministry-commissioned review of HQO in 2012 also noted the need for a system-wide mapping of who is accountable for quality and what changes may be needed strategically. According to the review, the respective roles of HQO, the Ministry, the LHINs, health-care provider organizations and provincial programs are unclear. Without clear accountabilities and a co-ordinated approach to quality improvement, results have been difficult to achieve as health-care providers are being asked by various organizations to focus efforts toward many different quality improvement areas.

RECOMMENDATION 1

To help bring about continuous quality improvement in health care, we recommend that the Ministry of Health and Long-Term Care clarify the respective roles and responsibilities of key parties in the health-care system—including Health Quality Ontario (HQO), Local Health Integration Networks and hospitals—with respect to requiring the adoption of recommendations made by HQO and the use of quality improvement tools made available by HQO to health-care providers.

MINISTRY RESPONSE

The Ministry of Health and Long-Term Care supports this recommendation and will clearly articulate the various roles and responsibilities of key parties in the health-care system in this regard. It will do so using the most appropriate existing accountability mechanisms (for example, accountability agreements, agency mandate letters, legislative powers) and will select these mechanisms based on how they will best support the adoption of recommendations made by HQO and the use of quality improvement tools made available by HQO to health-care providers.

RECOMMENDATION 2

To determine whether Health Quality Ontario (HQO) is effectively supporting quality improvement, we recommend that HQO measure and publicly report on:

- the rate of acceptance of its recommendations to the Ministry on medical devices and health-care services for funding;
- the rate of implementation/adoption of its clinical care standards;
- the rate of implementation/adoption of its recommendations to the Ministry on medical devices and health-care services for funding;
- the number and percentage of physicians who sign up for individualized practice reports; and
- the impact its activities (such as clinical care standards and priority indicators for quality improvement plans) are having on the quality of health care in the province.

HEALTH QUALITY ONTARIO RESPONSE

Health Quality Ontario (HQO) supports this recommendation and will increase the amount of information in our annual report that describes how effectively we are supporting quality improvement.

As noted in the report, we currently track the rate of acceptance of the recommendations to the Ministry of Health and Long-Term Care (Ministry) regarding medical devices and health-care services for funding and will report this publicly in the next annual report.

The audit report also notes that we monitor the number and percentage of physicians who sign up for their practice report and will also report this publicly in HQO's next annual report.

The implementation and adoption of clinical care standards and medical devices and health-care services involves many partners (for example, frontline health-care providers, organizational leadership, patients, professional societies and the Ministry). The contribution of each is crucial to improvement. Further, it can be challenging to measure implementation/adoption where the data is not captured through billing codes. It may also take time for improvements to be reflected in provincial data. We will build upon our current efforts in order to measure the implementation and adoption rates of clinical care standards as well as the recommendations on medical devices and health-care services, and will publicly report the information.

We will also track and publicly report on the indicators related to the impact that key activities are having on the quality of health care in the province, such as indicators related to clinical care standards and in quality improvement plans.

4.2 HQO's Reporting on Health System Performance Not Clearly Effecting Quality Improvement

4.2.1 Annual Report Measures Performance of the Health System, but Stakeholders Not Using It for Improvement

HQO produces an annual report on health system performance, *Measuring Up*, the purpose of which is to improve the transparency and accountability of the health system, inform the public and those

leading and working in the health system, and stimulate quality improvement at the system level by highlighting areas for improvement. This is in line with the legislative requirement in the *Excellent Care for All Act, 2010* that HQO monitor and report on the quality of the health system in Ontario, including the health status of the population and patient outcomes.

The annual report is a useful tool for identifying areas that need improvement in the health-care system. The transparent measurement of key performance metrics stresses the need for improvement that can be used by the Ministry and health-care providers to drive change in the system.

In the most recent annual performance report available at the time of our audit, the *Measuring Up* released in October 2017, two-thirds of the 32 performance indicators discussed in the document were reported at the provincial level (these included such indicators as time patients spent in the emergency department, and percentage of people who obtained same- or next-day appointments with a primary care provider). The remaining one-third of indicators were reported at the LHIN level (these included such indicators as readmission rates for mental illness patients and wait times for cancer surgery). On HQO's website, a technical supplement to the annual health system performance report provides a regional breakdown of results by LHIN for every indicator in the report.

HQO stated that issues identified in the annual performance report help the Ministry in its policy decisions on health-care spending. The Ministry told us, however, that it does not take specific actions related to the annual system performance report, but that the findings in the report help inform a range of provincial policy and strategy decisions.

A 2017 consultant's report commented on how public reporting on the health-care system could be made more useful. It recommended that HQO focus on providing a greater level of detail in its public reports. The consultant noted that entity-level data should be publicly reported, with specific organizations named, unless there are data limitations that would unfairly categorize performance. (The data limitation could be due to insufficient or unreliable data or the data not being comparable due to different methodologies or definitions being used for the same indicator by the entities being compared. For example, one entity might measure wait time from when the patient enters the emergency department while another measures from triage.)

One stakeholder told us that *Measuring Up* is good for public health data and to flag where things could go wrong in the health system, but that there is not enough advice on how to act on the data. The stakeholder also noted that there are other good reports to identify system-wide problems (such as reports produced by Cancer Care Ontario or the federal Canadian Institute for Health Information).

Another stakeholder told us that the annual health system performance report is not critical to quality improvement—it is a resource for considering high-level provincial health outcomes, but could be further strengthened if it were to help advance quality improvement at the entity level (for example, by hospital or long-term-care home). The lack of information at the entity level limits organizations' ability to fully understand their own performance and focus their quality improvement efforts.

4.2.2 Individualized Reports for Physicians and Hospital CEOs Do Not Address Many of HQO's Key Provincial Priorities for Improvement

For 2016/17, HQO identified priority improvement areas for different health-care sectors in consultation with health-sector partners: eight priority improvement areas for primary care; eight for long-term-care homes; and 12 for hospitals. In its individualized reports to physicians and hospital CEOs, however, HQO reports on their practice's or organization's performance with respect to only some of these improvement areas. Practice reports for primary care physicians provide information on four of eight improvement areas; practice reports

for physicians providing medical care to residents of long-term-care homes report on one of eight; and hospital CEO reports provide data on only one of 12 improvement areas. By not providing comparator data on all provincial priority improvement areas, HQO is missing an opportunity to help drive improvement in those areas. For excerpts of individualized reports for primary care physicians see **Appendix 6**, for physicians providing medical care to residents of long-term-care homes see **Appendix 7**, and for hospital CEOs see **Appendix 8**.

Physician: Physician practice reports for primary care physicians were first made available in May 2014 and were provided annually until 2016/17, when the reports became available semi-annually. The 2017 physician practice report for primary care physicians provides data on the physician's performance in the areas of cancer screening rates, diabetes management, opioid prescribing rates and health-service utilization (e.g., rate of emergency department visits). However, it does not provide data on whether patients were able to access care on the same or next day when they were sick or had a health concern, even though this has been a provincial improvement priority every year since 2011.

Long-term-care home physicians: Physician practice reports for physicians providing medical care to residents of long-term-care homes began in September 2015. They focus on the priority area of reducing the prescribing of antipsychotic medication and benzodiazepine (for insomnia and anxiety) to long-term-care home residents. However, the individualized report for long-term-care home physicians does not report on the physician's performance with respect to other key provincial priorities, such as rate of residents' visits to hospital emergency departments for conditions that are potentially preventable, such as injuries from falls.

Hospital CEOs: In September 2016, HQO issued its first individualized hospital performance report, for the period 2010/11 to 2014/15, to each hospital CEO, to be shared with the hospital administrator, physicians, nurses and the quality improvement specialist. Since then, it has issued the report twice: in February and December 2017. The report was created in collaboration with Choosing Wisely Canada, a national organization focused on reducing unnecessary tests, treatments and procedures, and minimizing unnecessary pre-operative testing before low-risk surgeries. The report provides individual hospitals with data on their own performance compared to other Ontario hospitals on the use of pre-operative tests. However, HQO has identified a number of other provincial priorities for hospitals (such as rate of patients being readmitted within 30 days, and days patients spend in hospital while waiting for a long-term-care bed or home care) that it does not include in the hospital performance report. To get maximum benefit from these individualized reports, HQO could provide hospitals with performance results for all identified provincial improvement priorities.

Although there has been interest from hospitals and Choosing Wisely Canada to continue the report, at the time of our audit, HQO had not committed to releasing another hospital performance report. HQO informed us that it wants to focus its efforts instead on expanding physician practice reports into the hospital sector.

HQO told us that the improvement areas it provides physician information on in the individualized reports is based on a determination of where individual physicians can most influence the priority improvement area and where physician-level data is available. With respect to individualized reports to hospital CEOs, hospitals have access to significant amounts of hospital data from other sources.

4.2.3 Physicians Not Required to Receive Individualized Reports, Thereby Reducing the Potential Overall Effectiveness of These Reports

HQO is attempting to drive quality improvement through individualized reports for primary care and long-term-care home physicians. However, physicians are not required to receive these reports,

and HQO cannot provide them unless the physician has signed up voluntarily. HQO had some success in 2017/18 with a promotional campaign directed at primary care physicians: the number of such physicians receiving the reports increased from 784 participants in 2016/17 to 2,729 in 2017/18. But the majority of physicians (about 70%–80%) still do not receive the report.

Specifically, as of July 2018, only 23% of long-term-care home physicians and 32% of primary care physicians who are not part of a community health centre had signed up to receive the reports. Physicians who work within a community health centre are not able to receive individualized reports because patients are not assigned to a particular physician but can see any available physician within the centre. The executive directors of community health centres and family health teams can sign up for aggregated reports at the centre or team level. As of July 2018, 90% of these executive directors had signed up for the organizational-level reports.

Based on our discussions with HQO staff, we noted that HQO believes that it should not be optional for physicians to receive confidential individualized data focusing on improvement for their practice. However, HQO cannot simply send such reports to all physicians because neither it nor the Ministry has direct access to a valid email address for physicians that is linked to their College of Physician and Surgeons of Ontario number (which is required to ensure confidential data is provided to only the appropriate physician).

We discussed with stakeholder groups the reasons why some physicians are reluctant to sign up for individualized reports. Some stakeholders expressed the opinion that the reports' usefulness is limited because the data provided does not identify for the physician the specific patients referred to. Examples of such feedback include:

- Without patient-level data, physicians are required to search through their medical records to identify the relevant patients. This would be a time-consuming process that takes away from the physician's time seeing patients.
- Some family physicians feel that signing up may lead to physician data being used for punitive purposes.
- Few physicians may be signing up for the report because there are no consequences if a physician does not volunteer to receive the reports.

Neither the *Personal Health Information Protection Act, 2004* nor the *Excellent Care for All Act, 2010* allows HQO to access individuals' personal health records for the purpose of producing reports for physicians. Therefore, HQO is not able to identify in the physician practice reports the specific patients who may not have been treated correctly.

A 2017 consultant's report to HQO recommended that "HQO should commission an independent assessment to better delineate both strategic and technical considerations of holding personal health information in order to better meet its legislative mandate." Eight of the 11 data providers HQO used to produce its 2017 annual report on health system performance have access to patient-level data. At the time of our audit, HQO had not commissioned an independent study as recommended by the consultant.

In March 2018, HQO requested from the Ministry the ability to provide to physicians confidential and secure patient-level data about their prescribing of opioids, using available data from data providers that are currently able to hold patient-level information. The Ministry told us that it is open to considering HQO's request for increased access to personal health information, but legislative and/or regulatory changes would be required to authorize this. Approvals from the government and consultation with the Information and Privacy Commissioner of Ontario would also be required before additional access is granted to HQO. In addition, the Ministry indicated that it would first need to assess if providing HQO with access to patients' personal information would support quality improvements in health-care delivery and improvements in health-care experience for patients and caregivers.

We contacted three provincial organizations (Health Quality Council of Alberta, Saskatchewan Health Quality Council, and New Brunswick Health Council) with a similar mandate for publicly reporting on health system performance and found that all three had the legislative ability to access patient-level data. However, only Alberta was providing to physicians patient-level data on prescribing opioids; it was being provided through the College of Physicians and Surgeons of Alberta.

RECOMMENDATION 3

We recommend that the Ministry of Health and Long-Term Care assess whether it is necessary to provide Health Quality Ontario with access to patient-level data in order for it to better meet its mandate of supporting continuous quality improvement.

MINISTRY RESPONSE

The Ministry of Health and Long-Term Care (Ministry) will assess where it would be necessary for Health Quality Ontario (HQO) to have access to patient-level personal health information in order to fulfill its statutory mandate (for example, for the purpose of including patient-level data in its confidential practice reports). Any Ministry decision in this regard would involve an assessment of the value that patient-level data would bring to HQO's activities and consultation with impacted parties, including the Information and Privacy Commissioner.

4.2.4 HQO Has Not Fully Evaluated Effectiveness of Individualized Performance Reports

It would seem that physician practice reports should be more useful to physicians than the annual system performance report, because they provide performance information specific to the physician's practice. In addition, the reports provide ideas to help drive quality improvement. For example, in the case of patients taking opioids for the management of chronic pain, the report directs physicians to HQO's clinical care standards for opioid prescribing for chronic pain and links to professional development courses designed to assist physicians in helping their patients with pain management. The individualized report for hospital CEOs also provides ideas to help reduce the hospital's rate of use of unnecessary tests by providing a direct link to relevant Choosing Wisely Canada recommendations, tools and pre-operative guidelines.

While such specific practical information intended to effect quality improvement is in line with what some stakeholders have been recommending, HQO has limited information on whether these reports are achieving the intended result. And, at the time of our audit, HQO had not fully evaluated how effective these reports have been in changing physician behaviour and improving health-care outcomes.

We noted only one review conducted by HQO to evaluate the effectiveness of its individualized practice reports. That review occurred in 2017 and was conducted on long-term-care home physicians who signed up for individualized practice reports. The review found a modest improvement in the rate of use of anti-psychotic medication by the long-term-care home residents for whom they were prescribing. Specifically, it noted a 3% reduction in the percentage of days long-term-care residents were on anti-psychotic medication, compared to a 2% reduction by physicians who had not signed up for the physician practice reports.

RECOMMENDATION 4

To maximize the likelihood that organizations and physicians receive individualized performance reports focused on targeted quality improvement and can readily act on the information provided, we recommend that Health Quality Ontario in collaboration with the Ministry of Health and Long-Term Care:

- explore opportunities to increase the participation rate of primary care physicians

and long-term-care home physicians receiving individualized practice reports, and consider making receipt and use of these reports mandatory;

- work toward having physicians receive patient-level data for their own patients, to better target their quality improvement efforts;
- provide improvement ideas on all applicable provincial priority improvement areas in reports to physicians and hospital CEOs; and
- evaluate the effectiveness of physician practice reports in changing physician behaviour and improving health-care outcomes.

HEALTH QUALITY ONTARIO RESPONSE

We support this recommendation. Health Quality Ontario (HQO) acknowledges the current barriers to ensuring that all physicians receive an individualized practice report and look forward to working with the Ministry of Health and Long-Term Care to ensure that all physicians are eventually able to receive and use the reports. We will continue to explore opportunities for marketing and promoting the reports to physicians.

Over the coming years, we envision all family physicians, and physicians in other specialties, receiving and using individualized practice reports. We will work with our relevant health system partners to advance this goal, including working with the Ministry of Health and Long-Term Care on including patient-level data in the reports, which may make the reports more useful to physicians.

As practice reports are developed or refined, HQO will ensure that they reflect improvement ideas on applicable provincial priority improvement areas.

We will also work with evaluators to ensure that the individualized practice reports and accompanying supports reflect growing and changing evidence of how best to support practice improvement, and to evaluate the effectiveness of the practice reports in supporting physicians in improving health-care outcomes. This includes monitoring and publicly reporting on trends in the practice report indicators over time.

MINISTRY RESPONSE

The Ministry of Health and Long-Term Care (Ministry) supports this recommendation.

The Ministry will work with HQO and consult with impacted parties to explore opportunities to increase the participation rate of physicians receiving individualized practice reports and to consider making the receipt of the reports mandatory.

The Ministry is open to exploring opportunities to expand HQO's access to personal health information where that access is demonstrably necessary for HQO to fulfill its statutory mandate.

The Ministry will work with HQO to help determine which provincial priority improvement areas would be of most value to highlight for each respective sector receiving reports (for example, primary care physicians, long-term-care home physicians).

The Ministry supports HQO's continued evaluation of the impact and effectiveness of physician practice reports.

4.2.5 HQO Has Not Always Determined the Quality and Reliability of Data Used in Its Reporting, and Data Errors May Go Undetected

HQO paid about $525,000 in 2017/18 to external data providers for data on health performance indicators used in HQO's reporting. However, it has not always clearly established and documented the provider's responsibility to ensure that the data has been verified and is reliable.

For the purposes of producing its 2017 *Measuring Up*, HQO obtained data from 11 data providers (see **Figure 3**). However, it has contractual

agreements with only five of these data providers. Only one of these agreements—with Cancer Care Ontario—outlines the quality-assurance measures the data provider will undertake to ensure the reliability of the data provided.

We spoke to the four data providers, including Cancer Care Ontario, that provide the data for 70% of the health system indicators HQO reports on. All four data providers have internal processes to ensure data reliability, but HQO has not, with the exception of Cancer Care Ontario, established or documented with them their clear responsibility for data reliability. Only two—the Canadian Institute for Health Information and the Institute for Clinical Evaluative Sciences (ICES)—told us that they verify data on a sample basis against source records maintained at health-care organizations.

Also, our audit found that HQO does not specify procedures staff conducting data reliability reviews should use. Each of the nine HQO staff conducting such reviews use their own technique to assess data quality. Although staff present management with comparison data by year and by LHIN, we found little evidence that management reviews their work to ensure consistency and accuracy. In addition, HQO has not clearly defined unusual results in the data that require further discussion with data providers.

In June 2018, HQO discovered that one of its data providers, Better Outcomes Registry and Network Ontario, had made an error in reporting to HQO data on caesarean birth rates among low-risk pregnancies, which HQO included in its annual report on health system performance. HQO is planning for a public release to correct the error. In order to limit the risk of future errors, HQO plans to implement an internal standardized data request form; develop a standardized process for documenting and addressing errors; and request documentation from data providers on their data quality and assurance process.

Figure 3: Details of Data Providers Health Quality Ontario Used for Its 2017 Annual Report on Health System Performance *(Measuring Up)* and Technical Supplement

Source of data: Healthy Quality Ontario

Data Provider	# of Data Components* for Which It Provided Data	% of All Data Components	Agreement in Place with Data Provider?	Agreement Includes Measures to Ensure Data Quality?
Institute for Clinical Evaluative Sciences	16	23	Yes	No
Cancer Care Ontario	12	17	Yes	Yes
Ministry of Health and Long-Term Care	11	16	No	n/a
Canadian Institute for Health Information	10	14	Yes	No
Statistics Canada	10	14	No	n/a
CorHealth Ontario (previously known as Cardiac Care Network of Ontario)	3	4	Yes	No
Better Outcomes Registry and Network Ontario	2	3	No	n/a
Ontario Hospital Association	2	3	No	n/a
Public Health Ontario	2	3	No	n/a
Commonwealth Fund International Health Policy Surveys	1	1.5	Yes	No
Health Shared Services (previously known as Ontario Association of Community Care Access Centres)	1	1.5	No	n/a
Totals	**70**	**100**		

* The 2017 report has 56 performance indicators. The 56 indicators comprise 70 distinct data components.

n/a: Not applicable since this data provider did not have an agreement with Health Quality Ontario.

RECOMMENDATION 5

To improve the accuracy and reliability of publicly reported data on the health-care system, we recommend that Health Quality Ontario:

- enter into a data-sharing agreement with each data provider that clearly defines the provider's responsibility for data reliability and the verification procedures to be undertaken by the provider;
- implement a standardized verification process for data used for each indicator, with consistent management oversight; and
- develop a process to centrally track all discrepancies and errors, and the corrective measures taken to address them.

HEALTH QUALITY ONTARIO RESPONSE

Health Quality Ontario (HQO) supports this recommendation. As the audit report describes, HQO does not currently have the authority to collect personal health information and instead relies on trusted partners who have the legal authority to do so. HQO will amend its agreements with the providers to strengthen provisions around reliability and will improve its existing processes to detect and correct errors in the data and track this information.

4.3 HQO Missing Opportunity to Save Time and Money through Collaboration on Assessments of Health Technology and Services

4.3.1 HQO Does Not Collaborate with Other Jurisdictions or Rely on Similar Work Already Completed for Its Health Technology and Services Assessments

HQO could potentially reduce the time taken and money spent to complete an assessment of medical devices or health-care services by collaborating with other jurisdictions or relying on similar work already done in other provinces or by the Canadian Agency for Drugs and Technologies in Health (Agency). However, HQO does not have a method for collaborating with other jurisdictions on assessments and does not investigate what other jurisdictions are working on.

HQO makes evidence-based recommendations to the Minister regarding public funding for health-care services and medical devices. According to HQO, the goal of the assessments is to identify new and existing health-care services and medical devices that can best improve the quality of health care in Ontario cost effectively. An example of a health-technology assessment recently completed by HQO is the assessment of a portable ultraviolet-light device to disinfect surfaces and thereby reduce hospital-acquired infections. An example of a recent health-care services assessment is the assessment of individual or group psychotherapy provided by trained non-physicians for major depression and generalized anxiety disorder.

HQO informed us that when it commences an assessment, it is very rare that another province or the Agency has started or completed an assessment on the same topic. We looked at assessments completed by HQO over the last three years and compared them to assessments completed in other jurisdictions. We found four assessment topics (robot-assisted prostate surgery, depression therapy, uterus tumour treatment and cell transplantation for type 1 diabetes) that had been recently assessed by another jurisdiction. Of these, three had been completed by the province of Alberta; the other had been completed by the Scottish government agency, Healthcare Improvement Scotland.

For three of these four assessments, HQO came to the same conclusion as the other jurisdiction as to whether the technology or service was effective. The exception was on the topic of robot-assisted prostate surgery: Alberta partially supported it, but HQO did not. For the three assessments completed by Alberta, HQO was aware of them but only relied on one. According to HQO, this reliance probably saved it time and costs, but it could not quantify the savings. When it began its assessment on the topic

that Healthcare Improvement Scotland was in the process of assessing, HQO was not aware that this work was under way.

Most other jurisdictions in Canada rely on the assessments for medical devices and health-care services prepared by the Agency (see **Appendix 3**), which was created in 1989 by Canada's federal, provincial and territorial governments to focus on a co-ordinated approach to conducting assessments.

According to HQO, similar assessment topics may have already been adopted elsewhere, but depending on the type of device or service being assessed, it needs to ensure that the assessment takes into account the way health services are provided in Ontario and the particular needs of the Ontario population. As well, the economic component of an assessment generally needs an Ontario (or, at least, Canadian) perspective because costs are almost always jurisdiction-specific. HQO consults with clinicians in Ontario to understand how the health-care service or medical device will be used in Ontario.

Nevertheless, in January of 2017, HQO began formal discussions with the Agency about collaborating on assessments. As of July 2018, the two parties were working jointly on three assessments, with HQO as the lead for two of them. These three assessments are on minimally invasive glaucoma surgery, Internet-delivered cognitive behavioural therapy and flash glucose monitoring. Each of these assessments has its own project charter agreement defining the responsibilities of each party and timelines for completion.

Ministry and Stakeholders Support More Collaboration to Expedite Assessments

According to HQO guidelines, the time taken to perform an assessment and have it approved by the HQO board of directors should be from 48 to 52 weeks. For the last three fiscal years (2015/16 to 2017/18), this process has ranged from 37 to 93 weeks (see **Figure 4**). More than 40% of that time is spent performing the assessment; the rest of the time is taken by the Ministry performing an initial review and public consultation, and editing the report. In 2017/18, HQO spent $4.7 million in total ($4.2 million in 2016/17) conducting assessments with the use of the equivalent of 34 full-time staff.

A typical assessment of a medical device includes a clinical review of all relevant published evidence about the benefits and harms of the technology; an economic valuation to determine the costs and potential budget implications for the Province; and a patient engagement plan to consider patient preferences and values related to the technology. HQO told us that the economic aspect of an assessment, particularly the budget impact, must be province-specific.

The Ministry informed us that it has had discussions with HQO about HQO performing assessments more quickly where clear evidence exists on the effectiveness of the technology. A 2018 consultant report on HQO's health technology assessment program stated that the "majority of the stakeholders consulted would like the overall turnaround of HQO recommendations to be quicker to make the program more adaptable to the evolving health technology landscape. Some suggested

Figure 4: Time Taken to Complete a Health Technology or Services Assessment During the Last Three Years
Source of data: Healthy Quality Ontario

	# of Health Technology Assessments Completed	Shortest Time (Weeks)	Longest Time (Weeks)	Median (Weeks)
2015/16	10*	46	87	68
2016/17	11	49	88	70
2017/18	12	37	93	65

* Twelve assessments were completed in total, but only 10 were tracked, as the tracking tool was first introduced during this year.

approaches such as introducing an expedited review methodology by collaborating with other similar organizations." The stakeholders also noted that "collaboration with other health technology assessment programs to develop collective guiding principles and processes [...] would allow for a joint review process for specific technologies that have been identified as priority. This could help reduce duplication of effort for the assessment process."

One key stakeholder group we spoke with felt that a central technology assessment organization for all of Canada with a centralized database that collects assessments from all jurisdictions would streamline efforts and reduce duplication. The stakeholder also felt that, if a technology is being used successfully in another jurisdiction, HQO should be able to make use of the work already completed in that jurisdiction, thereby cutting back on the time and expense required to complete an assessment. In the stakeholder's view, HQO must still complete a due diligence review of the other jurisdiction's assessment to ensure the research used for the assessment was of high quality, and must develop an economic model for Ontario, but there could still be large savings in time and expense.

We noted that organizations in countries such as Australia, England and Scotland are also conducting health technology and services assessments. Potential opportunity also exists for HQO to collaborate with such organizations, or rely on assessments conducted in other countries.

In 2016, the European Union started an initiative toward increasing co-operation among its member countries on conducting health technology assessments. The goal of the proposed co-operation is to "remove some of the existing divergences in the internal market for health technologies caused by procedural and methodological differences in clinical assessments carried out in member states along with the considerable duplication of such assessments across the European Union."

RECOMMENDATION 6

To complete health technology and services assessments in a more efficient and timely manner, we recommend that Health Quality Ontario:

- streamline the process for health technology and service assessment where other jurisdictions have already successfully implemented the medical technology or health-care service under consideration; and
- evaluate whether it would be more timely and cost-effective to adopt, where appropriate, the results of assessments performed by the Canadian Agency for Drugs and Technologies in Health or to jointly work on health technology and services assessments for Ontario.

HEALTH QUALITY ONTARIO RESPONSE

We support this recommendation.

In the spring of 2018, Health Quality Ontario (HQO) began developing a streamlined process that will be used when other jurisdictions have already assessed and implemented the medical technology or health-care service under consideration. A high-level process map has been developed, and at least one topic will be started through this expedited process by the end of this fiscal year.

Over the last year, HQO developed a partnership agreement with the Canadian Agency of Drugs and Technologies in Health. This agreement was formally signed in September 2018, and as noted in the report, we have already begun working jointly on three assessments.

4.3.2 Assessments of Health Technology and Services Cost almost $5 Million in 2017/18, but HQO Does Not Monitor If They Are Used

The average cost of a health technology and services assessment completed in 2017/18 was $380,000. HQO completed 12 assessments that

fiscal year at a total cost of about $4.7 million. However, neither HQO, the Ministry nor the LHINs is actively monitoring whether medical devices and health-care services recommended by HQO and accepted or endorsed for use by the Ministry are being used by individual health-care service providers. Without measuring the actual adoption rate of the HQO-recommended technology or service by health-care providers, and linking the use of the device or service to appropriate health system performance measures, HQO cannot determine whether its assessments have had any real impact on the quality of health care.

HQO projected the 12 assessments completed in 2017/18 could affect over 300,000 Ontarians annually. Of these 12 assessments, seven led to HQO recommending the government fund the device or service. Doing so could cost the Province between $40 million and $115 million per year. For four of the remaining five assessments, HQO recommended the government not fund the medical devices or services assessed; one assessment did not lead to a recommendation due to poor evidence. Despite the significant actual costs to conduct the assessments, and the projected costs and benefits, neither the Ministry, the LHINs nor HQO is monitoring the actual adoption of, or measuring the financial and health impact of, the recommended medical device or health-care service. The latest program review, in 2018, by an external consultant, made similar observations about the lack of monitoring of the impact of recommendations.

HQO's position is that it does not have the resources necessary to monitor actual adoption of the recommended device or service approved by the Ministry.

On the other hand, the Ministry has the ability to track the implementation of Ministry-accepted HQO-recommended health services by setting up fee-for-service billing codes. However, the Ministry does not track this, and told us that it could not definitively provide the financial impact of HQO recommendations it had implemented.

The Ministry is not always able to track implementation of Ministry-accepted HQO recommendations related to medical devices and equipment because it does not fund health-care service providers directly for these. Instead, health-care service providers, such as hospitals, receive funding from the LHINs for their overall operations, from which they may choose to purchase medical equipment. To measure whether health-care providers have followed the Ministry-accepted HQO recommendation and purchased the equipment would require contacting them directly. Neither the Ministry nor the LHINs (which fund the health-care providers) nor HQO are following up with health-care service providers.

In 2009, prior to the expansion of HQO's mandate in 2011, the Ministry and the then Ontario Health Technology Advisory Committee (see **Appendix 1**) produced a report that tracked the adoption of certain recommendations made by the committee, where data was available, by monitoring the use of the device or service over time and by region. HQO also produced a similar tracking report in both 2013 and 2014, but it stopped because, it told us, the report was resource-intensive and did not provide significant value, as it was difficult to tell with the data available whether health-care services and medical devices were being used appropriately.

Based on our discussions with the Ministry, HQO and other stakeholders, we noted that there is no party currently responsible for ensuring implementation of recommended medical devices or health-care services at the service-provider level. It is up to each individual organization to implement the use of approved medical devices, technologies or health-care services.

Furthermore, HQO does not prepare adoption strategies or supports to help health-care providers implement the approved devices or services it recommended. In contrast, HQO prepares adoption strategies for the clinical care standards it develops (referred to as recommendations for adoption).

RECOMMENDATION 7

To increase implementation of recommendations regarding medical devices and health-care services made by Health Quality Ontario (HQO) and accepted by the Ministry of Health and Long-Term Care, we recommend that HQO provide the guidance and supports required to assist health-care providers to implement the recommended devices and services in cases where the adoption rate is found to be low.

HEALTH QUALITY ONTARIO RESPONSE

Health Quality Ontario (HQO) is keen to help ensure that its evidence-based recommendations about what health-care services and medical devices are publicly funded are implemented and lead to meaningful improvement in health outcomes for Ontarians.

Determining whether an adoption rate is too low, too high or approximately right is difficult, and in itself can be a resource-intensive task. Where evidence indicates that adoption rates are too low, HQO will provide guidance and supports to assist with implementation in a variety of ways. The nature of the support will depend on the specific device or service, and also on whether or not there is a partner organization that may also be well-placed to support implementation. We will work with the Ministry of Health and Long-Term Care and other partners to ensure that the right organization is providing support to health-care providers in cases where adoption rates are found to be low.

4.4 Clinical Care Standards Recommended and Improvement Areas Identified by HQO Not Followed

4.4.1 Health-Care Organizations May Need More Guidance in Implementing Clinical Care Standards Recommended by HQO

In 2017/18, HQO published nine clinical care standards (see **Figure 5**) that it estimates could affect between 13,000 and 4.3 million patients. The clinical care standards focus on conditions or topics where there are large variations in how care is delivered, or where there are gaps between the care provided in Ontario and the care patients should receive. As an example of the variations in care that occur: in 2014/15, the percentage of patients who waited longer than 48 hours for surgery due to a hip fracture ranged from 2% to 45% by hospital.

For each clinical care standard, HQO sets out multiple quality statements and recommendations for adoption. For example, for the hip fracture clinical care standard released in October 2017, there were 15 quality statements meant to guide and educate both clinicians and patients on what high-quality care looks like for a hip fracture patient. As an example, one of the 15 quality statements outlines that patients with a hip fracture should have surgery within 48 hours of arrival at a hospital. In addition, HQO develops recommendations for adoption that are meant to assist the health-care sector in implementing the standard. The hip fracture clinical care standard had 18 recommendations. HQO identifies which parties in the health-care system are responsible for taking action on each recommendation. These include the Ministry, the LHINs, system partners (regulatory associations and advocacy and education programs), hospitals, long-term-care homes and other health-care organizations and providers.

Between May 2015 and September 2018, HQO publicly released 14 clinical care standards with a total of 166 quality statements and 235 recommendations for implementation (see **Figure 5**).

Figure 5: Clinical Care Standards, Quality Statements and Recommendations for Implementation Developed by Health Quality Ontario, May 2015–September 2018

Source of data: Healthy Quality Ontario

	Date Launched	Clinical Care Standard	# of Quality Statements	# of Recommendations for Implementation
1	October 2016	Behavioural Symptoms of Dementia	14	11
2	October 2016	Major Depression	12	14
3	October 2016	Schizophrenia (Acute Care)	11	7
4	October 2017	Heavy Menstrual Bleeding	14	11
5	October 2017	Hip Fracture	15	18
6	December 2017	Diabetic Foot Ulcer	12	18
7	December 2017	Venous/Mixed Leg Ulcers	13	20
8	December 2017	Pressure Injuries	13	18
9	March 2018	Dementia (Community)	10	19
10	March 2018	Opioid Use Disorder	11	27
11	March 2018	Opioid Prescribing Acute	9	17
12	March 2018	Opioid Prescribing Chronic	10	18
13	April 2018	Palliative	13	23
14	April 2018	Vaginal Birth after Caesarean	9	14
Total			**166**	**235**

About one-quarter of the recommendations made in 2017 and 2018 were aimed at multiple health-care organizations.

According to stakeholders we spoke with, stakeholders would welcome more guidance on implementing standards. HQO does not currently assess the training and potential resources required by health-care providers to implement a clinical care standard.

One stakeholder noted that, with so many clinical care standards already released by HQO, and with many more coming, there is a need for action plans and supports for hospitals, community care and primary care physicians to guide the implementation of these standards. The stakeholder also noted that it would be helpful to know what Ontario's improvement strategies are and which standards are a priority, as health-care providers cannot work on implementing them all at once. It further suggested that the Ministry should be taking a leadership role in helping the sectors adopt the new standards.

HQO informed us that the clinical care standards it had released or was developing, although designed to apply consistently regardless of the setting in which patients receive care, would not affect all sectors to the same extent. They would also not necessarily apply equally to all health-care providers in the same sector. However, HQO noted that for each newly developed standard of care, it has not mapped in detail how each quality statement applies to a particular sector. This may be contributing to organizations feeling overwhelmed because there is an assumption that all the statements apply to them. HQO plans to address stakeholder feedback.

RECOMMENDATION 8

To have health-care providers implement clinical care standards on a timely basis and to reduce the variation of care across Ontario, we recommend that Health Quality Ontario, in conjunction with the Ministry of Health and Long-Term Care:

- prepare training and support material for each clinical care standard, where appropriate; and
- assess the potential benefits of enforcing the use of clinical care standards through the Local Health Integration Networks.

HEALTH QUALITY ONTARIO RESPONSE

We support this recommendation. Health Quality Ontario (HQO) agrees that appropriate supports are important for helping providers implement and adopt clinical care standards. We currently provide guidance to accompany the quality standards that health-care provider organizations and other partners can use to help make it easier for them to use the quality standards for evidence-based quality improvement (that is, recommendations for adoption). We agree that additional training and support may be helpful and will consider what we can do here in collaboration with the Ministry of Health and Long-Term Care (Ministry) and other health system partners.

HQO will work with the Ministry to assess the benefits of enforcing clinical care standards. Our assessment will explore what other comparable jurisdictions have done to support the timely adoption of clinical care standards.

MINISTRY RESPONSE

The Ministry of Health and Long-Term Care (Ministry) supports this recommendation. The Ministry will encourage HQO to continue using tools and resources to support providers in using the clinical care standards, and explore the potential development of more targeted training and support materials where there is an identified need. The Ministry also agrees to explore opportunities to strengthen the uptake and adoption of HQO's clinical care standards through the Local Health Integration Networks.

4.4.2 Hospitals Risk Underperforming by Not Focusing Improvement Efforts on Priority Areas

Some hospitals are not incorporating HQO indicators relating to priority improvement areas into their quality improvement plans. Some of these hospitals are underperforming relative to other hospitals. All public hospitals and long-term-care homes in Ontario, as well as all inter-professional team-based primary care groups (such as family health teams and community health centres) and all LHINs (as this relates to their home-care function) must develop and submit their quality improvement plan to HQO on or before April 1 of every year. For 2017/18, HQO received about 1,070 quality improvement plans from across all health-care sectors.

Other sectors listed in **Appendix 5** (such as mental health and addictions, land ambulance and assisted living) are not required to complete an annual quality improvement plan that identifies areas of focus for improvement along with performance targets that hold the entity accountable for its improvement goals.

In the guidance documents for preparing quality improvement plans, HQO encourages health-care organizations to assess their performance and, where relevant, to incorporate in their plans improvement areas that HQO has identified as being a priority. However, health-care organizations are not required to select the improvement areas identified by HQO, and HQO does not follow up with them to ensure that they do so. HQO told us that it does not do so because responsibility for the selection of priorities lies with the boards of the organizations.

Through extensive consultation with stakeholders, HQO annually identifies priority improvement areas for each of these four sectors: hospitals, long-term care, primary care and home care. (Priority improvement areas for the last three fiscal years are included in **Appendix 2**.) In certain cases, as highlighted in **Appendix 2**, HQO has removed improvement areas from the list of priorities due

to stakeholder feedback or poor participation by the sector. In these cases, HQO did not consider whether the area of focus had shown sufficient improvement and was eligible for removal based on performance improvement.

The use of HQO priority indicators varies by sector. Based on our analysis, primary care teams and home-care organizations were most likely to select priority indicators developed by HQO for inclusion in their quality improvement plan (see **Figure 6**).

Hospitals were least likely to select priority indicators developed by HQO for their quality improvement plans, even in cases where they were performing below the provincial average. For example, 29 hospitals (21%) that were performing below the provincial average in 2015 on the indicator that measures the "risk-adjusted 30-day all cause readmission rate for patients with congestive heart failure" did not select that indicator for their quality improvement plan in 2017/18. (Because of a lag in reporting times, at the time the hospitals were submitting their annual improvement plans for 2017/18, the latest results available for these two indicators were for the 2015 calendar year.) Similarly, 21 hospitals (15%) that were performing below the provincial average in 2015 on the indicator that measures the "30-day readmission rate for patients with stroke" did not select that indicator for their quality improvement plan in 2017/18. These indicators help identify cases of early discharge from hospital or discharge without proper support that result in the patient being readmitted to hospital. As a result of not including these priority areas in their quality improvement plans, these hospitals may not be focusing on these areas and may continue to underperform in these areas relative to other hospitals.

One stakeholder told us that the hospital sector would prefer a small number of priority improvement areas that focus on provincial issues, and that hospitals would like the autonomy to focus on additional local and regional priorities when selecting indicators for quality improvement plans.

4.4.3 Hospital Executives Choose Which, if Any, Improvements in Quality Are Tied to Their Compensation

According to the *Excellent Care for All Act, 2010*, public hospitals are required to tie executive compensation to the achievement of targets set in the organization's quality improvement plans.

Figure 6: Rates of Adoption of Health Quality Ontario's Priority Areas in Quality Improvement Plans, by Health-Care Sector, 2017/18 and 2016/17

Prepared by the Office of the Auditor General of Ontario

	Sector			
	Hospital (Acute Care)	**Long-Term Care**	**Primary Care**	**Home Care**
# of HQO priority indicators for 2017/18	**11**	**5**	**3**	**6**
% that selected 100% of priority indicators	13	57	88	93
% that selected ≥ 50% and <100% of priority indicators	25	22	6	7
% that selected >0% and <50% of priority indicators	47	17	2	0
% that selected 0% of priority indicators	15	4	4	0
Total	**100**	**100**	**100**	**100**
# of HQO priority indicators for 2016/17	**12**	**8**	**8**	**6**
% that selected 100% of priority indicators	8	28	92	93
% that selected ≥ 50% and <100% of priority indicators	25	38	6	7
% that selected >0% and <50% of priority indicators	48	32	1	0
% that selected 0% of priority indicators	19	2	1	0
Total	**100**	**100**	**100**	**100**

However, hospitals are free to select the indicators that will be tied to executive compensation, and they are not required to select priority indicators identified by HQO or their LHIN. Since the indicators are selected by executives, with the approval of their board of directors, there is a risk that they would not select indicators in areas where the hospital is performing poorly, as this could negatively impact their compensation. We found instances where hospitals did not select indicators in areas where they were performing poorly.

We looked at five priority indicators for 2017/18, and identified hospitals that had both performed below the provincial average for the indicator (based on the latest available results in April 2017) and did not select it as an area of focus in their 2017/18 quality improvement plans. These ranged from 15% to 24% of hospitals depending on the priority indicator. Given these priority indicators were not included in these hospitals' quality improvement plans, it is unlikely that these hospitals would focus efforts in these areas in which they were performing poorly. Yet it is possible the executive teams at these hospitals received additional compensation even though they did not focus on these areas needing improvement. HQO did not have information on how much additional compensation relating to quality improvement the executives at these hospitals received for 2017/18.

HQO has not analyzed whether tying a priority indicator to executive compensation results in greater improvement in that indicator compared to other indicators.

RECOMMENDATION 9

To improve the effectiveness of the quality improvement plan initiative, we recommend that:

- the Ministry of Health and Long-Term Care (Ministry) require that all health-care organizations that are performing below the provincial average on a priority indicator identified by Health Quality Ontario (HQO) include the indicator in their quality improvement plans and tie those indicators to their executives' compensation;
- the Ministry assess whether other health-care sectors (such as mental health providers and land ambulance operators) should be required to submit quality improvement plans to HQO; and
- HQO remove improvement areas from the list of provincial priorities only when there is evidence of sustained improvement over several years.

HEALTH QUALITY ONTARIO RESPONSE

We will work with the Ministry of Health and Long-Term Care to ensure that quality improvement plans continue to be effective tools for organizations to focus their efforts on their most important priorities. We agree that sustained focus is required to produce lasting improvement and that improvement areas should be removed from the list of provincial priorities for quality improvement plans only after careful consideration. To ensure transparency in the decision to remove improvement areas, Health Quality Ontario commits to publicly reporting on the rationale for such changes through the guidance materials for preparing quality improvement plans.

MINISTRY RESPONSE

The Ministry of Health and Long-Term Care (Ministry) will investigate options to require the inclusion of indicators where performance is below the provincial average in quality improvement plans. The Ministry will also explore options to require all health-care organizations that submit quality improvement plans to HQO to tie executive compensation to those priority indicators.

The Ministry and HQO are working with the community mental health and addictions sector to prepare it for the submission of quality improvement plans. Full rollout in this sector is

contingent on sector readiness and when data systems are in place to support data collection and reporting. The Ministry will investigate options for requiring other health-care sectors, such as land ambulance operators, to provide HQO with a quality improvement plan.

4.4.4 Care Varies Across the Province, but HQO Does Not Set Ideal Range for Performance Targets

We found that although HQO sets priority areas where quality improvement is needed, it does not identify specific targets—or even a target range—that health-care organizations should meet according to best practices, nor does it set minimum targets. Health-care organizations set their own targets, which can create or perpetuate variations in the standard of care Ontarians receive in different parts of the province.

We noted large variances in targets set for the same indicator by different organizations that may affect the quality of patient care. For example, in 2015/16:

- One long-term-care home set a target of 0% of residents to be given antipsychotic medication without a psychosis diagnosis within seven days preceding their resident assessment, while another long-term-care home set a target of 45%. Ideally, the target for this should be extremely low. For the long-term-care home that set a target of 0%, the actual percentage of residents given antipsychotic medication without a psychosis diagnosis was actually 5% for the 12-month period ending in September 2016, while the other home achieved actual results of 26% over the same 12-month period. In this example, only the second long-term-care home met its target; however, it performed worse than the first home.
- One primary care team set a target of 97% of patients being able to see a doctor or nurse-practitioner on the same day or next day, when needed, while another set a target of 41%. At the first primary care team, in 2015/16, 96% of patients were seen by a doctor or nurse-practitioner on the same day or next day, when needed, while at the other, only 44% of patients were seen on the same day or next day.

In 2016/17 and 2017/18, there were health-care organizations that set improvement targets in their quality improvement plans that were worse than the latest available performance for that indicator. These are called retrograde targets. HQO does not regularly follow up with organizations that set retrograde targets. However, when submitting their quality improvement plans to HQO online, organizations receive a system prompt when they enter a retrograde target suggesting they consider adjusting it.

The only instance where HQO follows up with organizations regarding retrograde targets is when multiple organizations in a sector set retrograde targets for a particular performance indicator. HQO publicly reported on the issue in its 2016/17 summary report of quality improvement plans and has consistently provided guidance against the use of retrograde targets. However, the number of health-care organizations setting a retrograde target for at least one priority indicator increased from 12% of organizations in 2016/17 to 16% in 2017/18. We also noted the issue of significant variation in target-setting in our 2015 audit of Community Care Access Centres—Home Care Program and our audit of Community Health Centres in 2017.

RECOMMENDATION 10

In order to support continuous quality improvement and reduce variation in care across the province, we recommend that Health Quality Ontario:

- establish ideal ranges for performance targets;
- investigate all significant variances in target-setting for priority indicators among providers in the same sector; and

- in consultation with the Ministry of Health and Long-Term Care and the Local Health Integration Networks, ensure all organizations are setting targets toward improvement in health quality and that the targets are for better than current performance (not retrograde targets).

HEALTH QUALITY ONTARIO RESPONSE

We concur that effective target-setting is an important component of quality improvement. Setting aspirational yet realistic targets for quality improvement can be challenging for organizations, particularly for indicators where there is no single ideal range that would apply across all health-care provider organizations. One of the most frequent requests the Quality Improvement Plan program receives from organizations is about setting appropriate targets in their quality improvement plans.

Health Quality Ontario (HQO) will establish ideal ranges for quality improvement performance targets and communicate this through the guidance documents for preparing quality improvement plans.

HQO will also analyze variances in target-setting for priority indicators. We will also work with the Ministry of Health and Long-Term Care and the Local Health Integration Networks to advance appropriate target-setting.

MINISTRY RESPONSE

The Ministry of Health and Long-Term Care (Ministry) agrees that organizations should set aspirational, rather than retrograde, targets, and that this would help strengthen quality improvement efforts and achieve better outcomes. The Ministry will work closely with HQO and the Local Health Integration Networks to support organizations in setting appropriate quality improvement plan indicator performance targets.

4.4.5 No Assessment of Whether Quality Improvement Initiatives Are Being Completed

HQO is unable to determine whether initiatives reported by health-care organizations to help bring about improvement are being completed and are having a positive impact.

For each performance indicator selected by a health-care organization in its quality improvement plan, it is expected to outline a "change idea" that will help the organization achieve its improvement goals. For example, in the hospital improvement plans we reviewed for 2015/16, one hospital selected the indicator of "90th percentile emergency department length of stay" (that is, the maximum amount of time that nine out of 10 patients are expected to complete their emergency department visit) and set a target of 25 hours (based on its actual performance of 30 hours for the 2014 calendar year). We noted that the hospital self-reported that it had implemented 13 out of the 17 change ideas between April 1, 2015, and March 31, 2017, including initiatives like matching physician hours of coverage to the volume of patients in the emergency room and investigating discharge delays. As a result, the hospital was able to reduce the length of stay in the emergency department for nine out 10 patients to 9.8 hours in the 2016 calendar year.

HQO does request organizations to self-report in the following year whether the change ideas have been implemented. As well, due to the limitations of its current information system, HQO is not able to summarize the data or analyze the relationship between the implementation of the change idea and its impact on quality improvement. As a result, HQO is unable to determine the percentage of change ideas implemented and whether or not the implementation improved performance. In turn, HQO is unable to identify and share with other organizations in the sector any best practices resulting from the change ideas reported.

RECOMMENDATION 11

To maximize the impact of quality improvement plans on health-care quality, we recommend that Health Quality Ontario, in collaboration with the Ministry of Health and Long-Term Care and the Local Health Integration Networks (LHINs):

- track whether health-care organizations are implementing the change ideas included in their improvement plans and whether the ideas have resulted in positive improvement;
- follow up with and encourage organizations that are not showing improvement in their performance to implement the change ideas; and
- share effective change ideas put forth by health-care organizations as part of their quality improvement plans that may benefit other health-care organizations.

HEALTH QUALITY ONTARIO RESPONSE

To date, Health Quality Ontario (HQO) has undertaken a limited analysis of the change idea data to determine impacts of collective effort on improvement. HQO agrees that we could learn more about what is required to achieve improvements in care through a more rigorous analysis of organizations' practices in implementing change ideas. We will therefore look at enhancing our capacity to track whether organizations are implementing the change ideas included in their plans and whether those change ideas are having a positive impact, and to follow up with organizations on their use of change ideas when they are not showing improvement. To encourage the sharing of best practices, HQO will share effective change ideas through the Quality Improvement Plan Insights Reports or on HQO's online quality improvement community of practice, Quorum.

MINISTRY RESPONSE

The Ministry of Health and Long-Term Care agrees that change ideas are a rich opportunity for quality improvement and will work with HQO and the LHINs to:

- develop options for tracking the implementation of change ideas set out in quality improvement plans;
- measure the impacts of implemented change ideas;
- follow up to encourage organizations that are not showing improvement in their performance on a particular indicator, and have not implemented relevant change ideas in their quality improvement plans, to implement those ideas; and
- share effective change ideas.

4.5 Cost Savings Expected from Consolidation of Five Organizations Did Not Materialize

The government expected to reduce operational costs and maintain or reduce staffing when it consolidated five quality-improvement organizations or programs with HQO in 2011 (see **Appendix 1**). However, funding and staffing have doubled over the last seven years as HQO's mandate expanded.

With the consolidation in 2011, the government expected cost efficiencies to reduce the original combined budgets of the five organizations of $23.4 million in 2010/11 to $18.8 million in funding for HQO by 2013/14. The Ministry also planned to provide additional one-time project funding ranging from $10.4 million to $13.9 million per year over the three years ending 2013/14. Including the one-time project funding, HQO's spending was expected to be around $32.7 million in 2013/14. The focus of the one-time project funding was expected to include quality improvement initiatives aimed at reducing unnecessary admissions and readmissions to hospitals, and improving the quality of mental health services, access to primary

care (such that patients can see their health-care provider on the day of their choosing), and appropriateness of referrals to diagnostic services.

According to Ministry documents, the Ministry did not expect to increase the staffing complement above 111 full-time equivalent (FTE) employees, which was the total staff for the five organizations combined in 2011. Instead, there was an expectation that the staffing level could be reduced through operational and administrative efficiencies, especially by consolidating senior management positions.

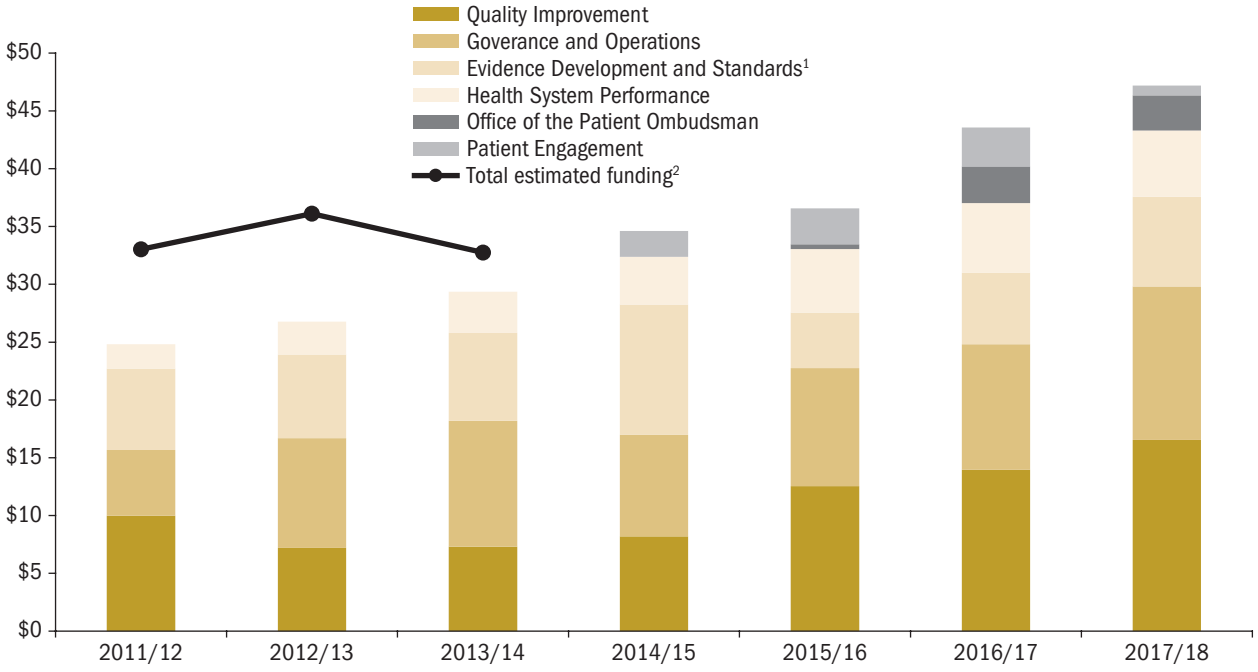
As of March 31, 2018, HQO's annual expenditures had increased to about $44.2 million (see **Figure 7**) (including the cost of time-limited projects but excluding expenditures of the Patient Ombudsman's Office), with 291 FTEs (see **Figure 8**).

Expenditures increased partially because HQO's mandate was expanded beyond what was originally envisioned: to monitor and publicly report on the health system's performance, to make recommendations to the Minister on whether to publicly fund health-care services and devices, to make recommendations on standards of care to health-care organizations, and to support continuous quality improvement. In December 2014, the *Excellent Care for All Act, 2010*, was amended to add patient relations and Patient Ombudsman responsibilities to HQO. These two new functions increased expenditures by $840,000, and $3 million respectively, by March 31, 2018. However, these additional responsibilities do not account for the entire increase in expenditures and staffing.

Other significant increases were mainly due to the following:

- Corporate Services grew more than 150%, or 44 FTEs, from 2013/14 to 2017/18 to become the largest division in HQO, with 73 FTEs. The functions in this area include finance, human resources, information technology, digital product design and development, and project management. The last two functions account for 30 FTEs who work primarily delivering the four core mandated functions.

Figure 7: Health Quality Ontario's Expenditures by Function, 2011/12–2017/18 ($ million)
Source of data: Health Quality Ontario



1. Evidence Development and Standards includes health technology and service assessments, and development of clinical standards.
2. Total estimated funding for these three years was according to Ministry of Health and Long-Term Care documents.

Figure 8: Number of Health Quality Ontario's Full-Time Equivalent Staff, by Function, 2013/14–2017/18
Source of data: Health Quality Ontario

						5-Year Change	
	2013/14[1]	2014/15[1]	2015/16	2016/17	2017/18	#	%
Communications and Patient Engagement	6	9	18	21	25	19	317
Corporate Services	29	35	37	50	73	44	152
Evidence Development and Standards[2]	46	21	45	57	60	14	30
Health System Performance	29	32	46	45	49	20	69
Strategic Partnerships (leads external projects)	12	4	5	5	6	(6)	(50)
Quality Improvement	31	48	62	64	69	38	123
Other	1	2	7	9	9	8	800
Total	**154**	**151**	**220**	**251**	**291**	**137**	**89**

1. The employee information for 2013/14 and 2014/15 is based on total number of employees—full-time and part-time—because full-time equivalent data was not available. It therefore may not be comparable to staffing levels in later years.
2. Evidence Development and Standards includes health technology and service assessments (performed since 2011), and development of clinical standards (performed since May 2015).

The consolidation of five organizations in 2011 was expected to produce savings in overhead, thereby leading to greater focus on health-care improvement; the growth in Corporate Service staff has not helped in achieving that goal.

- The Quality Improvement division had a $9 million (130%) increase in expenditures and a 123% increase in staff (38 FTEs) from 2013/14 to 2017/18. The division has taken on more quality improvement initiatives, with the number of initiatives increasing from six to 18 during this period. Examples of new initiatives include clinical quality leads for each Local Health Integration Network, holding provincial round tables focusing on quality improvement and developing recommendations for adoption for clinical care standards. In addition, the Ministry transferred quality improvement initiatives projects to HQO, which in total cost around $5 million per year.

RECOMMENDATION 12

To support Health Quality Ontario in using its resources efficiently, we recommend that the Ministry of Health and Long-Term Care assess whether the agency's growth in expenditures and staff size is reasonable in relation to its current mandate.

MINISTRY RESPONSE

The Ministry of Health and Long-Term Care (Ministry) supports this recommendation. The Ministry will review and assess Health Quality Ontario's growth, expenditures and activities, taking into account the current context of the health-care system as well as the government's health system priorities.

Appendix 1: Creation of Health Quality Ontario

Prepared by the Office of the Auditor General of Ontario

The Ontario Health Quality Council was the precursor organization to Health Quality Ontario (HQO). The Council was created on September 12, 2005, under the *Commitment to the Future of Medicare Act, 2004*. Its original function was to monitor and publicly report on health-care quality in Ontario. Under the *Excellent Care for All Act, 2010* (Act), the Council's mandate was expanded to also include the development of standards for care and to promote quality improvement.

The Act also merged the following organizations or programs with the Council, because they had overlapping mandates:

- **Medical Advisory Secretariat**: a branch of the Ministry of Health and Long-Term Care (Ministry) that specialized in conducting evidence-informed analyses of health technologies being considered for use in Ontario.
- **Ontario Health Technology Advisory Committee**: an expert committee with members appointed by the Deputy Minister of Health and Long-Term Care, created to make recommendations to the Ontario health-care system and the Ministry about emerging health-care technologies.
- **Quality Improvement and Innovation Partnership**: a Ministry-funded organization that was responsible for providing quality improvement supports to the primary health-care sector.
- **Centre for Healthcare Quality Improvement**: a Ministry-funded program at the Change Foundation, an independent health policy research organization, that provided quality improvement supports to Local Health Integration Network-funded providers, particularly hospitals and Community Care Access Centres.

HQO, in its new form, began operations on April 1, 2011, in Toronto.

Appendix 2: Health Quality Ontario's Priority Performance Indicators for 2015/16–2017/18

Prepared by the Office of the Auditor General of Ontario

Below is a list of performance indicators, by health-care sector, set by HQO to be considered for inclusion by health-care organizations in their quality improvement plans for 2015/16, 2016/17 and/or 2017/18.

Hospital (Acute Care)	2015/16	2016/17	2017/18	
Clostridium difficile infection	✓	✓		1
90th percentile emergency department length of stay for complex patients	✓	✓	✓	
Medication reconciliation at admission	✓	✓	✓	
Medication reconciliation at discharge			✓	
Readmission within 30 days for selected health-based allocation model inpatient group (e.g., pneumonia or diabetes)		✓		2
Risk-adjusted 30-day all-cause readmission rate for patients with congestive heart failure		✓	✓	
Risk-adjusted 30-day all-cause readmission rate for patients with chronic obstructive pulmonary disease		✓	✓	
Risk-adjusted 30-day all-cause readmission rate for patients with stroke		✓	✓	
Total number of alternate level of care (ALC) days contributed by ALC patients	✓	✓	✓	
% of patients responding positively to "Overall, how would you rate the care and services you received at the emergency department?"	✓	✓		3
% of patients responding positively to "Overall, how would you rate the care and services you received at the hospital?"	✓	✓		3
% of patients responding positively to "Would you recommend this emergency department to your friends and family?"	✓	✓	✓	
% of patients responding positively to "Would you recommend this hospital to your friends and family?"	✓	✓	✓	
Readmission within 30 days for selected case mix groups	✓			3
% by which total revenues exceed or fall short of total corporate expense	✓			4
% of palliative care patients discharged home from hospital with the discharge status "home with support"			✓	
% of patients responding positively to "Did you receive enough information from hospital staff about what to do if you were worried about your condition or treatment after you left the hospital?"			✓	
Long-Term Care				
Number of emergency department visits for modified list of ambulatory care-sensitive conditions (potentially avoidable emergency department visits for long-term-care residents)	✓	✓	✓	
% of residents responding positively to: "What number would you use to rate how well the staff listen to you?"	✓	✓	✓	
% of residents who fell during the 30 days preceding their resident assessment		✓		5
% of residents who responded positively to the question: "Would you recommend this nursing home to others?/Would you recommend this site or organization to others?"	✓	✓	✓	
% of residents who responded positively to the statement: "I can express my opinion without fear of consequences"	✓	✓	✓	
% of residents who were given antipsychotic medication without psychosis diagnosis	✓	✓	✓	
% of residents who were physically restrained	✓	✓		5

Long-Term Care (continued)	2015/16	2016/17	2017/18	
% of residents who had a pressure ulcer that recently got worse	✓	✓		5
% of residents who had a recent fall (in the last 30 days)	✓			3
% of residents with worsening bladder control during a 90-day period	✓			5
Primary Care				
% of patients who stated that when they see the doctor or nurse practitioner, they or someone else in the office (always/often) spend enough time with them	✓	✓		6
% of patients who stated that when they see the doctor or nurse practitioner, they or someone else in the office (always/often) involve them as much as they want to be in decisions about their care and treatment	✓	✓	✓	
% of patients/clients who saw their primary care provider within seven days after discharge from hospital for selected conditions	✓	✓	✓	
% of respondents who responded positively to the question: "When you see your doctor or nurse practitioner, how often do they or someone else in the office give you an opportunity to ask questions about recommended treatment?"	✓	✓		6
% of patients and clients able to see a doctor or nurse practitioner on the same day or next day, when needed	✓	✓	✓	
% of patients with diabetes, aged 40 or over, with two or more glycated hemoglobin (hba1c) tests within the past 12 months		✓		5
% of screen eligible patients aged 50 to 74 years who had a test for traces of blood in stool within the past two years, other investigations (e.g., flexible sigmoidoscopy) within the past 10 years or a colonoscopy within the past 10 years		✓		5
% of women aged 21 to 69 who had a papanicolaou (pap) smear within the past three years		✓		5
Home Care				
Five-day wait time—nursing visits: % of patients who received their first nursing visit within five days of the service authorization date	✓	✓	✓	
Five-day wait time—personal support for complex patients: % of complex patients who received their first personal support service within five days of the service authorization date	✓	✓	✓	
% of home-care clients who responded “good”, “very good” or “excellent” on a five-point scale to any of the client experience survey questions: • overall rating of home-care services • overall rating of management/handling of care by care co-ordinator • overall rating of service provided by service provider	✓	✓	✓	
% of adult long-stay home-care clients who have a documented fall on their follow-up assessment	✓	✓	✓	
% of home-care clients who experienced an unplanned readmission to hospital within 30 days of discharge from hospital	✓	✓	✓	
% of home-care clients with an unplanned, less-urgent emergency department visit within the first 30 days of discharge from hospital	✓	✓	✓	

Reasons why indicators were removed:

1. Indicator has shown improvement.
2. Indicator was retired because few organizations were selecting it for their quality improvement plans.
3. Indicator was replaced by a new indicator.
4. Indicator was not relevant for quality improvement.
5. Indicator was changed from a priority indicator to an optional indicator to streamline the indicators.
6. Indicator was retired because it was similar to another existing indicator.

Appendix 3: How Various Jurisdictions Deliver Key Functions Performed by Health Quality Ontario

Prepared by the Office of the Auditor General of Ontario

Jurisdiction	Public Reporting of Health System Performance	Conducting Health Technology Assessments	Developing Clinical Care Standards	Promoting Quality Improvement
Ontario	Provincial Agency (HQO)	Provincial Agency (HQO)	Provincial Agency (HQO)	Provincial Agency (HQO)
British Columbia	Ministry Department and Health Authorities[1]	Independent Federal Agency (CADTH) BC Ministry of Health contracts health technology assessments-producing institutions to prepare assessments on its behalf	Other Provincial Body (College of Physicians and Surgeons of British Columbia)	Provincial Agency (BC Patient Safety and Quality Council)
Alberta	Alberta Health and Alberta Health Services[1] Provincial Agency (Health Quality Council of Alberta)	Independent Federal Agency (CADTH) Alberta also partners with: • Alberta Health Services[1] • The Institute of Economics • University of Alberta • University of Calgary	Alberta Health Services[1]	Provincial Agency (Health Quality Council of Alberta) Alberta Health Services[1] Other Provincial Body (Alberta Medical Association) College of Physicians and Surgeons of Alberta
Saskatchewan	Provincial Agency (Saskatchewan Health Quality Council)[2] Ministry of Health	Independent Federal Agency (CADTH)	Ministry Department and Saskatchewan Health Authority[1]	Provincial Agency (Saskatchewan Health Quality Council) Ministry of Health
Manitoba	Ministry Department (Health, Seniors and Active Living)	Independent Federal Agency (CADTH)	Ministry Department (Health, Seniors and Active Living)	Ministry Department (Health, Seniors and Active Living)
Nova Scotia	Ministry Department (Health and Wellness)	Independent Federal Agency (CADTH)	Nova Scotia Health Authority[1]	Ministry Department (Health and Wellness) and Nova Scotia Health Authority[1]
New Brunswick	New Brunswick Health Council	Independent Federal Agency (CADTH)	Regional Health Authorities[1]	Regional Health Authorities[1]
Canada	Independent Federal Agency (CIHI)	Independent Federal Agency (CADTH)	Independent Federal Agency (Health Standards Organization)	Independent Federal Agency (CFHI)

Jurisdiction	Public Reporting of Health System Performance	Conducting Health Technology Assessments	Developing Clinical Care Standards	Promoting Quality Improvement
Scotland	Healthcare Improvement Scotland	Healthcare Improvement Scotland	Healthcare Improvement Scotland	Healthcare Improvement Scotland
England	Public Health England	National Institute for Health and Care Excellence	National Institute for Health and Care Excellence	National Health Service (NHS) Improvement

Ministry Department or Provincial Health Authority overseeing the health system
Dedicated Agency for Quality Improvement
Independent Federal Agency
Regulatory Agency

HQO – Health Quality Ontario
CADTH – Canadian Agency for Drugs and Technology in Health
CIHI – Canadian Institute for Health Information
CFHI – Canadian Foundation for Healthcare Improvement

1. Provincial and Regional Health Authorities and Health Services are similar to Local Health Integration Networks (LHINs) in Ontario.
2. New mandate added through a review in December 2016. Saskatchewan previously relied on the Canadian Institute for Health Information for health system performance.

Appendix 4: Audit Criteria

Prepared by the Office of the Auditor General of Ontario

1.	Effective governance and accountability structures are in place to ensure Health Quality Ontario meets its legislative mandate of supporting health system improvement in Ontario cost effectively.
2.	Health system performance indicators monitor all characteristics of good quality health care (i.e., that the care is safe, effective, patient-centred, timely, efficient and equitable). Measures are in place to provide assurance on the quality and comparability of the data used by Health Quality Ontario to monitor and report on health system performance.
3.	Health Quality Ontario makes timely, evidence-based recommendations to the Ministry of Health and Long-Term Care on public funding for health-care services and medical devices. The impact of implemented recommendations is periodically evaluated to determine whether desired benefits are being achieved.
4.	Health Quality Ontario makes timely, evidence-based recommendations to the Ministry, health-care organizations and other entities concerning clinical care standards. Sufficient support is provided to organizations to implement clinical care standards recommended by Health Quality Ontario, and the impact of recommendations is periodically evaluated to determine whether desired benefits are being achieved.
5.	Processes are in place to support health-care organizations in developing quality improvement plans with specific targets that focus on provincial priorities. Sufficient support is provided to the organizations in implementing the plans.
6.	Processes are in place to ensure resources are managed with due regard for economy and efficiency and used for the purposes intended.
7.	Performance measures and targets are established, monitored and compared against actual results and publicly reported to ensure that the intended outcomes of Health Quality Ontario's activities are achieved and corrective actions are taken on a timely basis when issues are identified.

Appendix 5: Parties with Responsibilities for Health-Care Quality Improvement in Ontario

Prepared by the Office of the Auditor General of Ontario

Parties Involved in the Health-Care System	Funding Provider	Accountability Arrangements	Who Has Oversight Responsibility for Quality?	Required to Prepare and Submit Quality Improvement Plans to Health Quality Ontario	2017/18 Overall Expenditures ($ million)
Hospitals	Ministry of Health and Long-Term Care (Ministry) through Local Health Integration Networks (LHINs)	Hospital Service Accountability Agreement with the LHIN (HSAA) and Individual Hospital Board of Directors	• LHIN through the assessment of the performance indicators set by the hospital • Hospital Board of Directors • Quality Care Committee of Hospital Board (mandatory)	Yes—All, including psychiatric hospitals	17,967
Physicians (excludes physicians employed by Community Health Centres)	Ministry	**For fee-for-service physicians:** Physician Services Agreement between the Ontario Medical Association and the Ministry (refers to the Schedule of Benefits) or **For physicians paid through alternative payment plans:** Contracts between the physician groups, the Ministry, and the Ontario Medical Association	• College of Physicians and Surgeons of Ontario • Primary care team boards • Quality Committees of the primary care teams (optional)	Yes—only interdisciplinary primary health care models/teams (e.g., Family Health Teams)	14,940
Long-Term-Care Homes	Ministry through LHINs	Long-Term Care Home Service Accountability Agreement with the LHIN (LSAA) and Board of Directors of individual long-term-care homes	• LHIN through the assessment of the performance indicators set by the long-term-care home • Boards of Directors of long-term-care homes • Quality Committees of the Boards of Directors (optional) • Ministry through the inspection program	Yes—All	3,782
Local Health Integrated Networks (LHINs)	Ministry	Ministry–LHIN Accountability Agreement (MLAA)	• Ministry through similar performance indicators included in the MLAAs of each LHIN • LHIN Boards of Directors • Quality Committee for each LHIN	Yes—only for Home and Community Care Program within the LHIN (formerly the Community Care Access Centres)	2,960*

Parties Involved in the Health-Care System	Funding Provider	Accountability Arrangements	Who Has Oversight Responsibility for Quality?	Required to Prepare and Submit Quality Improvement Plans to Health Quality Ontario	2017/18 Overall Expenditures ($ million)
Mental Health and Addiction Service Providers	Ministry through LHINs	Multi-sector Service Accountability Agreement with the LHIN (MSAA) and Individual Boards of Directors	• LHIN through the assessment of performance indicators set by each entity • Community health agency Boards of Directors • Quality Committees (optional)	No	1,053
Ambulance Services	**Air**: Ministry **Land**: generally Ministry (50%) and municipalities (50%)	**Air**: Performance Agreement between ORNGE and the Ministry; Air Ambulance Certification **Land**: Ministry; The *Ambulance Act* outlines certification requirements and standards for ambulance service documentation, patient care and transportation, and basic and advanced life support patient care.	• Ministry through a review of ambulance operators, dispatch operators and base hospitals every three years • Ministry certifies ambulance operators • Ministry through assessment of performance indicators set in agreements	No	922
Community Support Services, Assisted Living Services and Supportive Housing Providers	Ministry through LHINs	Multi-sector Service Accountability Agreement with the LHIN (MSAA) and Individual Boards of Directors	• LHIN through the assessment of performance indicators set by each entity • Community health agency Boards of Directors • Quality Committees (optional)	No	920
Community Health Centres	Ministry through LHINs	Multi-sector Service Accountability Agreement with the LHIN (MSAA) and Individual Boards of Directors	• LHIN through the assessment of performance indicators set by each entity • Community health agency Boards of Directors • Quality Committees (optional)	Yes	419
Independent Health Facilities (imaging services, such as x-rays and ultrasounds)	Ministry	Ministry through licensing of facilities under the *Independent Health Facilities Act*.	• Regulatory colleges, e.g., College of Physicians and Surgeons of Ontario, and College of Midwives • Ministry through its X-ray Inspection Services Unit	No	48

* This includes Ministry funding for the LHINs' operations and home-care services, but not Ministry funding for hospitals, long-term-care homes and other health-care services funded through the LHINs.

Appendix 6: Excerpt from a Physician Practice Report for a Primary Care Physician

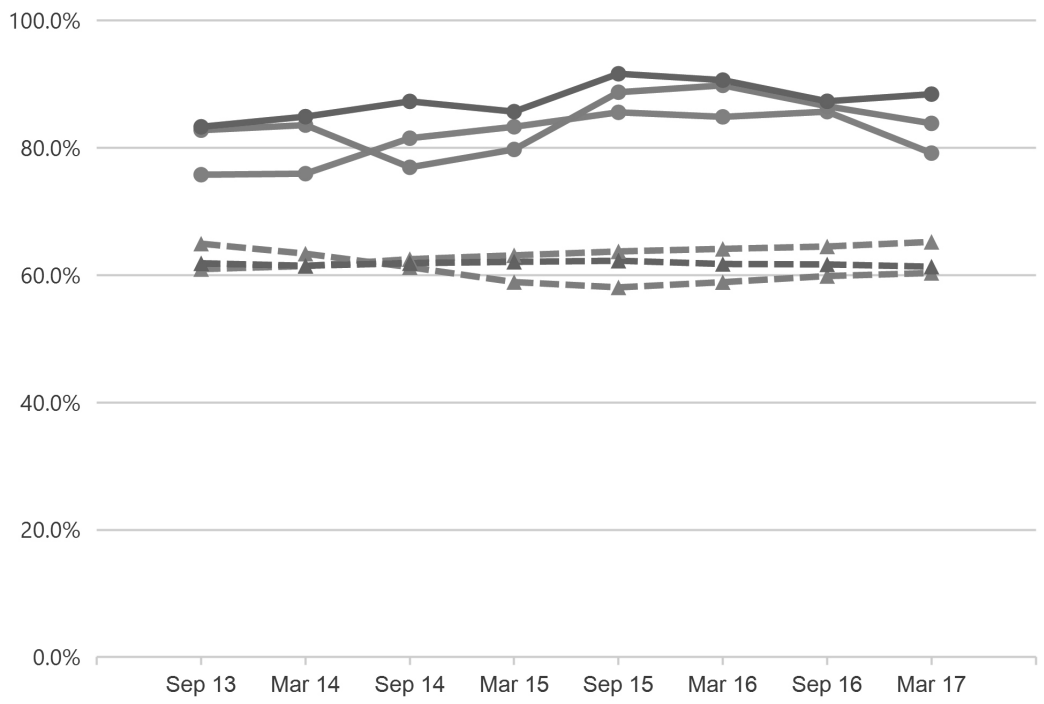
Source of data: Health Quality Ontario

***MyPractice:* Primary Care Report** | **Health Quality Ontario**

Cancer Screening Indicators Summary | Data as of March 31, 2017

Summary of my cancer screening indicators

- My practice is **higher than** the Ontario average in **CRC** screening.
- My practice is **higher than** the Ontario average in **Pap smear** screening.
- My practice is **higher than** the Ontario average in **Mammogram** screening.



My Practice

Colorectal

Pap smear

Mammogram

Ontario

Colorectal

Pap smear

Mammogram

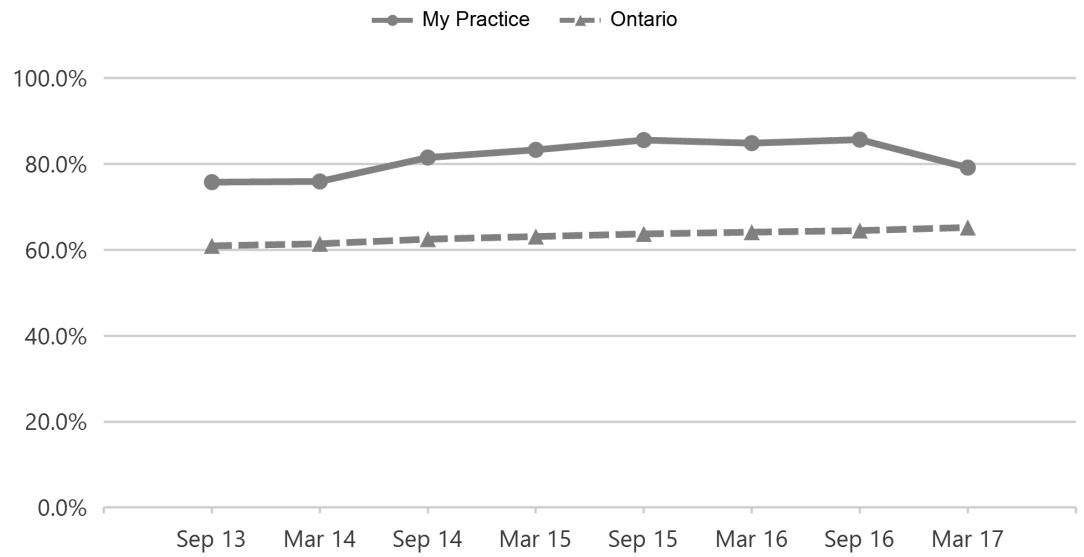
MyPractice: Primary Care Report — Health Quality Ontario

CRC Screening

Data as of March 31, 2017

What percentage of my eligible patients aged 52-74 are up-to-date with any colorectal screening (FOBT within the past two years, colonoscopy within the past 10 years, or other investigations i.e. sigmoidoscopy within the past five years)?

- As of March 31, 2017, 79.2% of my patients were up-to-date with colorectal screening. My group and LHIN percentages are 73.0% and 69.1%, respectively.
- My practice is **higher than** the provincial percentage of 65.3%.



† Data suppressed as per ICES' privacy policy (e.g. number of patients between 1 to 5); N/A: Data not available; ¨ Please interpret with caution, denominator ≤ 30

A small proportion of FOBTs performed as diagnostic tests could not be excluded from the analysis. Tests performed in hospital laboratories or paid through alternative payment plans are not captured.

Number of my eligible patients not screened
31

Evidence for CRC screening continues to evolve. Health Quality Ontario will continue to monitor screening guidelines and modify the indicator, as appropriate (2).

How can I improve my CRC screening? (page 16)

To identify patients requiring follow up for CRC screening, please access your screening activity report (SAR) through the Cancer Care Ontario Portal

SAR Report Portal

Appendix 7: Excerpt from a Physician Practice Report for a Physician Providing Medical Care to Residents of Long-Term-Care Homes

Source of data: Health Quality Ontario

***MyPractice:* Long-Term Care** — **Health Quality Ontario**

Summary: Jul 01, 2017 - Sep 30, 2017

What are my overall prescribing rates?

	My Rate (unadjusted)	Ontario Rate (unadjusted)	How does my prescribing compare to my peers?
Antispsychotic Prescibing for dementia without psychosis	**32.7%**	**24.1%**	My prescribing rate is higher than 60 percent of my peers
Benzodiazepine Prescribing	**11.1%**	**13.4%**	My prescribing rate is similar to many of my peers (between the 25th & 60th percentile)
3 or more Specified* CNS-Active Medications	**Data Suppressed**	**16.6%**	My rate for the most recent quarter is suppressed (e.g. number of residents between 1 and 5)

Exclusions: All indicators exclude residents under 66, in palliative care, or new to the LTC home (in home for less than 100 days).
*Specified CNS-active medications include antipsychotics, opioids, oral benzodiazepines and antidepressants (including trazadone).

Who are my residents?

Total residents	Mean age (years)	Female	New residents
60	**85**	**73.3%**	**Data Suppressed**

MyPractice: Long-Term Care — Health Quality Ontario

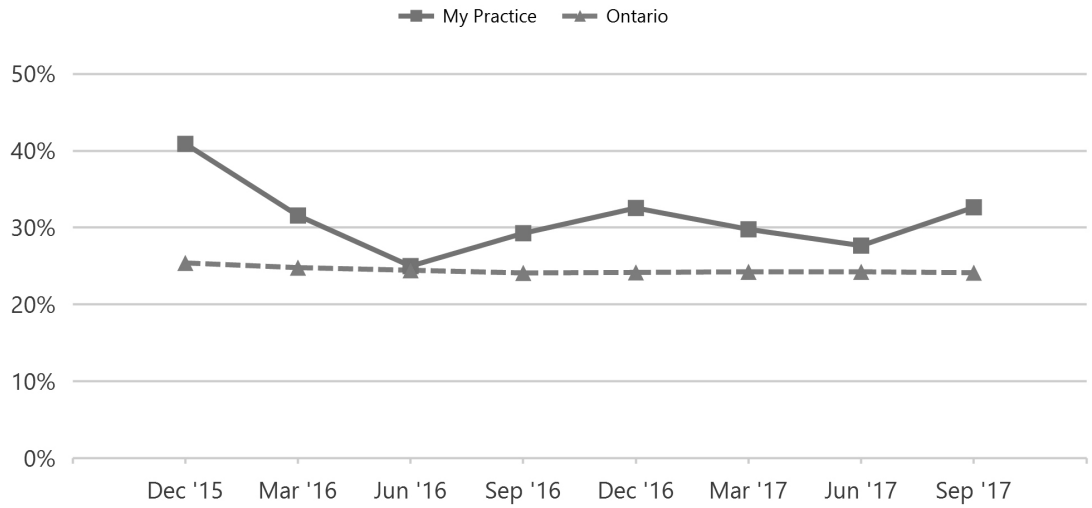
Antipsychotic prescribing

Reporting Period: Jul 2017 - Sep 2017

What percentage of my residents aged 66 and older who have dementia without psychosis were prescribed antipsychotics?

Between Jul 01, 2017 and Sep 30, 2017

- **32.7%** of my residents with dementia, without psychosis, were prescribed an antipsychotic.
- My overall rate is **higher than** the provincial rate of **24.1%**. The rate in my LHIN is **29.7%**.
- **22.5%** of my residents were prescribed antipsychotics for at least 90 continuous days.[2–3]
- 1 to 5 of my residents were newly prescribed an antipsychotic (i.e. no prescription in previous 12 months).[4]



Exclusions: Residents who are under 66 years old, diagnosed with psychosis, in palliative care, or new to the LTC home (in the home for less than 100 days). Diagnoses are captured through previous five years of OHIP/DAD/OMHRS data and one year of ODB data.

Number of my residents with dementia (without psychosis) prescribed an antipsychotic
16

In some cases, antipsychotics are indicated for management of responsive behaviours and BPSD.[5] The data cannot weigh the benefits against the possible harms for a particular resident, but they can point to practice patterns worthy of reflection.

The **Change Ideas: BPSD** suggest ways you can optimize your antipsychotic prescribing.

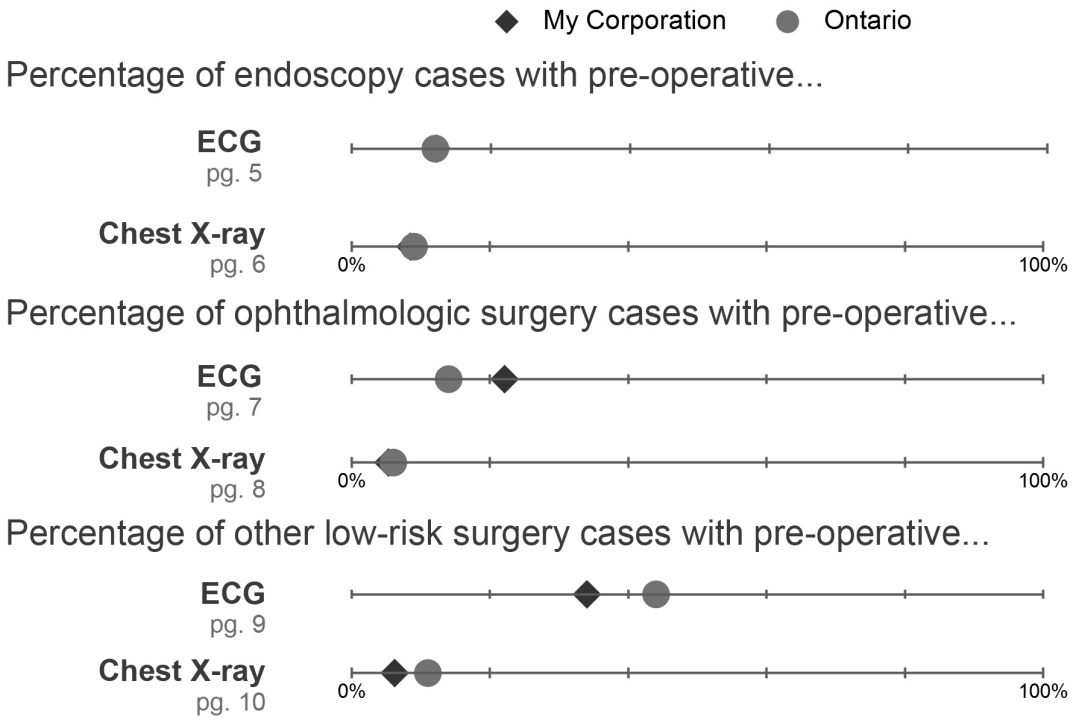
Appendix 8: Excerpt from an Individualized Hospital Performance Report (Hospital with Two Sites)

Source of data: Health Quality Ontario

My Dashboard

My Corporation Name:
Hospitals within my corporation that performed low-risk surgeries are:

My corporation's performance in fiscal year (FY) 2016/17



How many surgeries were done in FY2016/17 in my corporation?

Endoscopy Procedures

2,456

Ophthalmologic Surgeries

8,267

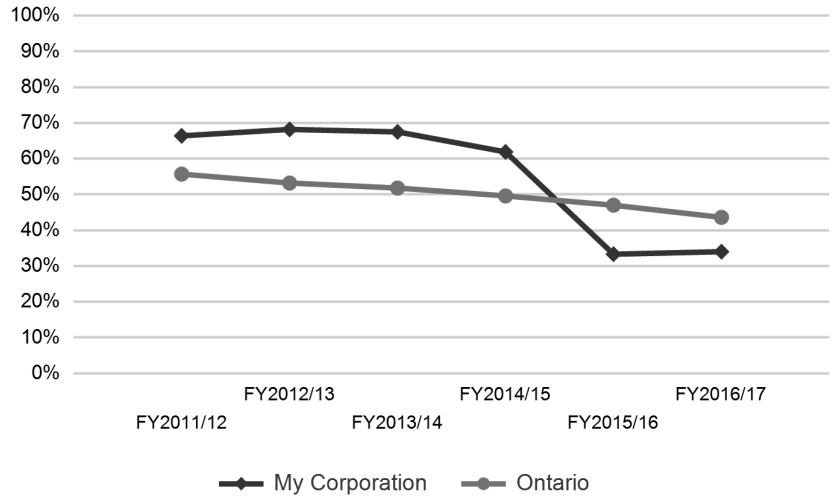
Other Low-risk Surgeries

3,139

Data sources: Discharge Abstract Database (DAD), National Ambulatory Care Reporting System (NACRS), Ontario Health Insurance Plan (OHIP) Claims History Database and Registered Persons Database (RPDB), provided by the Institute for Clinical Evaluative Sciences (ICES).

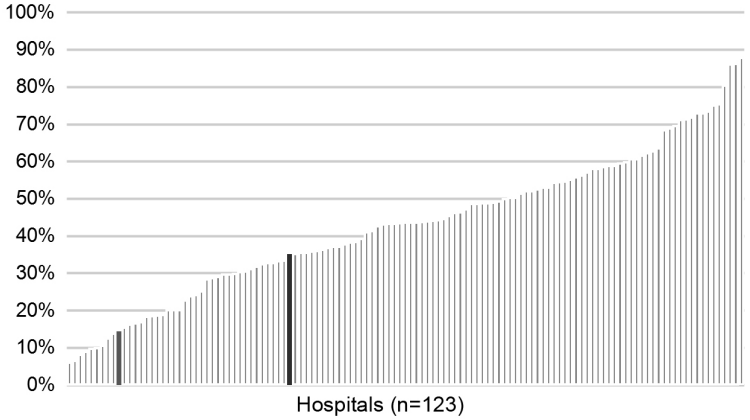
My Corporation's Performance: ECG Test before Other Low-Risk Surgery

Percentage of other low-risk surgery cases with pre-operative ECG, from FY2011/12 to FY2016/17



Period	FY 2011/12	FY 2012/13	FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17
My Corporation	66.4%	68.2%	67.5%	61.9%	33.3%	34.0%
Ontario	55.7%	53.2%	51.8%	49.6%	47.0%	43.6%

How did my hospitals compare with others in FY2016/17?



Note: This graph and the analysis included in the table below do not include hospitals with suppressed data or hospitals without low-risk surgeries within the reporting period.

	FY2016/17
Site	35.2%
Site	14.5%
Minimum value	6.3%
25th percentile	30.3%
Median	43.8%
75th percentile	55.7%
Maximum value	88.0%

Key Findings

In FY2016/17, 1,068 pre-operative ECG tests were conducted before 3,139 other low-risk surgeries in my corporation. My corporation's rate was 34.0% in FY2016/17, which is lower than the provincial rate of 43.6%. For the same time period, the rates ranged from 6.3% to 88.0% across Ontario hospitals that performed these procedures.