

A Primary Care Performance Measurement Framework for Ontario

Report of the Steering Committee for the Ontario Primary Care Performance Measurement Initiative: Phase One

About Health Quality Ontario

Health Quality Ontario (HQO) works in partnership with Ontario's health care system to support a better experience of care, better outcomes for Ontarians and better value for money. HQO's legislated mandate under the [Excellent Care for All Act](#), 2010, is to monitor and report to the people of Ontario on the quality of their health care system, support continuous quality improvement and promote health care that is supported by the best available scientific evidence. HQO is an arms-length agency of the Ontario government. Visit the [HQO website](#) for more information.

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- All the health sector stakeholders who took the time to complete the 2013 Post-Primary Care Performance Measurement Summit Stakeholder Survey

Health Quality Ontario would also like to thank the Canadian Institute for Health Information (CIHI), the co-host of the 2012 Primary Care Performance Measurement Summit, and the Summit participants for their insights and perspectives, which provided a strong foundation for the PCPM initiative.

Abbreviations, Acronyms and Terms

A common language to discuss primary care performance measurement is still evolving. This report has technical content and terms specific to primary care performance measurement that may not be familiar to all readers. Some terms (e.g., “primary care”) have no universally accepted definitions. Please see the following list of the abbreviations, acronyms and terms that this report uses.

Abbreviations and Acronyms

ADP: Assistive Devices Program
AFHTO: Association of Family Health Teams of Ontario
AHAC: Aboriginal Health Access Centre
AOHC: Association of Ontario Health Centres
BIRT: Business Intelligence and Reporting Tools
CAHPS®: Consumer Assessment of Healthcare Providers and Systems
CAPE: Client Agency Program Enrolment
CCO: Cancer Care Ontario
CHC: Community Health Centre
CCHS: Canadian Community Health Survey
CIHI: Canadian Institute for Health Information
CIHI–DAD: Canadian Institute for Health Information–Discharge Abstracts Database
CINAHL: Cumulative Index to Nursing and Allied Health Literature
CPCSSN: Canadian Primary Care Sentinel Surveillance Network
CPDB: Corporate Provider Database
CMGs: Case Mix Groups
CMWF: Commonwealth Fund
CVD: Cardiovascular disease
EHR: Electronic Health Record
EMR: Electronic Medical Record
EMRALD: Electronic Medical Record Administrative Data Linked Database
FHO: Family Health Organization
FHN: Family Health Network
FHT: Family Health Team
HCES: Health Care Experience Survey
HQO: Health Quality Ontario
HRM: Hospital Report Manager
ICES: Institute for Clinical Evaluative Sciences
IHI: Institute for Healthcare Improvement
IOM: Institute of Medicine
LHIN: Local Health Integration Network
MEDLINE®: Medical Literature Analysis and Retrieval System
NPAO: Nurse Practitioners’ Association of Ontario
NPLC: Nurse Practitioner-Led Clinic
NPS: National Physician Survey
OACCAC: Ontario Association of Community Care Access Centres
OCFP: Ontario College of Family Physicians
ODB: Ontario Drug Benefit
OHA: Ontario Hospital Association

OMA: Ontario Medical Association
POI: Physician Office Integration
QIP: Quality Improvement Plan
RNAO: Registered Nurses' Association of Ontario
SMD: Standardized Measure Description
SPIRE: Southwest Physician Office Interface to Regional EMR
TFHT/TDH: Timmins Family Health Team/Timmins District Hospital

Terms

Availability of data: generally refers to province-wide (vs. local/sectoral) data availability.

Conceptual framework: the systematic attempt to represent the domains of primary care in terms of characteristics, activities and, in particular, desired performance outcomes.

Domain: a major dimension of primary care performance.

Ministry: in this report, refers to the Ontario Ministry of Health and Long-Term Care.

Patient-Centredness: Patient-centred care is an approach to the planning, delivery and evaluation of health care that is grounded in mutually beneficial partnerships among health care providers and patients (adapted from <http://www.ipfcc.org/faq.html>)

Performance measurement: assesses the degree to which primary care services achieve desired outcomes. For the purpose of the current initiative, performance measurement is used to refer to data that is regularly collected and analyzed to support all of the following: primary care planning, management and quality improvement. Although performance measures can also be used for accountability, funding and provider payment purposes, those potential uses were not explicitly considered in the selection of performance measures. Systematic performance measurement allows clinicians and primary care organizations to identify opportunities for improvement, track the impact of their improvement efforts and make well-informed decisions about the organization and management of the services they provide. At the health system level, performance can be improved through investments in new services or programs, redesign of existing services or programs, or disinvestment in non-performing services or programs. Continuing high levels of performance provide reassurance that organizational or system redesign are not required.²

Performance measure: a measure of a primary care process or outcome that is useful at one or more levels of the health system (practice, organization, community, regional or province) to support planning, management or quality improvement. Performance measures focus on desired outcomes or processes of care that are evidence-based. Performance measures are also referred to as performance indicators.

Performance measurement framework: a set of primary care domains, measurement priorities (aspects of primary care that are important to measure) and specific measures that capture those measurement priorities.

Practice lens: from the perspective of clinicians, managers and governors at the primary care practice or organization level.

Primary care: the point of entry into the health care system and where the majority of health care services are initiated and coordinated.^{3,4} “Primary care is first-contact, continuous, comprehensive and coordinated care provided to populations undifferentiated by gender, disease, or organ system. The elements of first contact, continuity, comprehensiveness and coordination are included in most definitions proposed by professional organizations, agencies and commissions.⁵

Public reporting: Public reporting of organizational performance can help motivate providers to improve performance and also potentially by patients who can choose between different providers.⁶ Public reporting of performance measurement data can enable comparisons over time and between organizations or systems and can help identify the key features of the best-performing systems.^{7,8} Public reporting is also a form of transparency to stakeholders and the public, and supports a culture of accountability regarding the use of public resources and the impact of publicly funded health care services.

Quality improvement: efforts that address system deficiencies and improve the effectiveness and efficiency of health care processes.^{9,10} Performance monitoring identifies gaps between current and desired performance, which can then become a focus of quality improvement. Benchmarking against performance standards (or the achievements of high-performing organizations or systems) helps establish performance targets and quantify the potential for improvement. Ongoing performance measurement tracks the impact of quality improvement initiatives.

System lens: from the perspective of decision-makers and the public at the community, regional or provincial level.

Executive Summary

Introduction

A strong primary care sector can serve as a solid foundation for a high-performing health systems, which is why Ontario has focused on strengthening primary care delivery in the province.

Ontario does not have a coordinated and comprehensive approach to collect, analyze and report on the performance of the primary care system, although clinicians, managers and policymakers increasingly recognize that systematic and ongoing feedback is essential to building a strong primary care sector.

The limited data available on primary care performance at the provincial level indicate that Ontario's primary care performance compares favourably with other provinces, but lags behind international peers, particularly in timely access to care and primary care infrastructure (e.g., primary care teams, EMR systems, and processes for performance measurement and improvement). Almost no information on their performance has been available to individual primary care practices or organizations, other than data they collect and analyze themselves and many, if not most practices lack the capacity to generate their own performance data. In the absence of such information, including time trends and peer comparisons, primary care providers are challenged to recognise areas of possible improvement.

Partners across the province are working towards the triple aim of better health, better care and better value for Ontarians. Since 2012, the Primary Care Performance Measurement Steering Committee has been working to develop a structure to measure primary care performance at both the practice and system levels. This committee is comprised of a wide range of organizations, representing patients, primary care providers, data holders, researchers, managers and policymakers from across Ontario. Phase One of this work is now complete and the result – the Primary Care Performance Measurement Framework – is outlined in this report.

Approach

The PCPM Framework is the product of a rigorous engagement process with organizations and individuals representing a broad range of stakeholders, who worked to identify what is valuable to measure on a regular basis to inform primary care planning, management and quality improvement. This process included:

- An environmental scan, conducted by HQO, provided an overview of past and present initiatives in Canada and around the world addressing the measurement of performance in primary care settings.
- A Primary Care Performance Measurement Summit in November 2012 hosted in collaboration with the Canadian Institute for Health Information (CIHI) that brought together 61 key primary care data partners and information users in Ontario. Using the environmental scan findings, the Summit participants identified priority areas for primary care performance measurement at the practice and the system levels.
- In spring 2013, over 850 people from organizations representing primary care stakeholders responded to a survey on the aspects of primary care performance deemed most valuable to measure.
- Over the past year, the Steering Committee, a Measures Working Group and a Technical Working Group have collaborated to select specific measures for the framework and to identify the infrastructure required for implementation. The members of the working groups brought a mix of technical expertise and front-line experience (patients, providers and the public). Aligning the PCPM initiative with existing performance-measurement and quality-improvement initiatives was a top priority.

The PCPM Framework

The PCPM Framework has nine domains that align with Health Quality Ontario's nine attributes of a high-performing health care system:

- Access
- Patient-Centredness
- Integration
- Effectiveness
- Focus on Population Health
- Efficiency
- Safety
- Appropriate Resources
- Equity

Each domain has a set of measurement priorities and each measurement priority includes a set of recommended measures at the practice and system levels. Some measurement priorities apply to more than one domain and are cross-referenced in the framework. Equity was identified as a cross-cutting domain that will be assessed based on a variety of economic, demographic and social variables. Clinicians, primary care organizations, system managers, policymakers and researchers can use the performance measures to meet their varied needs (e.g., identifying opportunities for improvement, outcome measures selection, assessing policy, program and system innovations).

Data Availability for Measuring Primary Care Performance

The PCPM Framework includes 112 practice-level and 179 system-level measures. Ninety-two measures are common to both levels. The measures are categorized based on their province-wide availability as: currently reported; currently reported, but modified wording is recommended, and not currently available. Data is currently available for 15(13%) of the recommended practice-level measures and 73(41%) of the system-level measures. The low percentage of recommended measures that are currently available on a province-wide basis speaks clearly to the need to develop additional infrastructure to support data collection, analysis and reporting.

Some of the recommended measures that are included in existing surveys do not fully reflect current realities and trends in primary care, such as the role of nurse practitioners as the main primary care provider for some Ontarians, primary care teams, patients and families as partners in primary care, and engagement of patients, caregivers and the public in service planning. Continuing work is needed to adapt existing survey-based measures to changes in public expectations and in the organization and delivery of primary care. Other recommended measures are not currently included in existing surveys. New surveys and future revisions of existing surveys should consider including the measures recommended in this report.

How Could the Recommended Measures Be Used?

The recommended constitute a rich source of primary care performance measures that have been identified as valuable to measure on a regular basis to inform decision-making. Clinicians, primary care organization and system managers, researchers and organizations representing patients and the public can draw on this bank of recommended measures to help inform their work.

For some measures, data is available from existing reports or data sources. In other cases, users would need to collect data themselves, employing the recommended measures. These measures can help:

- Primary care practices identify opportunities for improvement
- Primary care clinicians evaluate and explore an aspect of their practice as part of a reflective learning activity
- Researchers select outcome measures for use in clinical, health services and policy research in primary care
- Health system managers and policy makers monitor system performance and assess the impact of policy initiatives and system innovations
- Evaluators assess the implementation and impact of innovative programs in primary care practices
- Organizations such as the Ministry of Health and Long-Term Care, eHealth Ontario and OntarioMD select EMR/EHR investments and develop EMR data standards and vendor specifications
- Health Quality Ontario expand and improve its reporting on the performance of primary care
- Planners and decision-makers conduct population needs-based planning
- Patient-advocacy and civil-society gauge the responsiveness of primary care to the needs and expectations of patients, family caregivers and the public

All of these uses would help to drive primary care in Ontario toward achieving the triple aim of better health, better care and better value.

Implementation: Toward Better Primary Care Performance Measurement and Better Primary Care

Recommendations

To support improved primary care performance measurement, the PCPM Steering Committee will guide the implementation of the PCPM Framework over the next one to two years. Implementation will be a shared responsibility of all primary care stakeholders. The Steering Committee recommends:

1. Accelerating efforts to strengthen vendor requirements to incorporate standardized high-value data elements, facilitate standardized data capture, data transfer and exchange and simplify processes for extracting and analyzing data. The Canadian Institute for Health Information, eHealth Ontario, OntarioMD and Health Quality Ontario, together with primary care providers who are actively involved in using their own data, are key players in advancing this agenda.
2. Developing the necessary infrastructure to make the measures available throughout the province at both the practice and system levels, including: mechanisms for pooling EMR data in order to provide practices with regular performance feedback over time and in comparison with peers; a practice-level patient experience survey to provide regular feedback to practices over time and allow for comparison with peers; a mechanism for collecting data from individual providers; a mechanism for collecting data from organizations; and a mechanism for combining primary care performance measures from multiple sources
3. Developing aggregate measures of primary care performance to provide overall measures of performance at the domain (e.g., Effectiveness) or sub-domain (e.g., management of chronic conditions) levels
4. Identifying organizational responsibility for producing coherent, user-friendly reports using performance measurement data to. Health Quality Ontario already provides this at the system level and is beginning to provide this type of reporting at the practice level (Primary Care Practice Reports).
5. Including the PCPM Framework measures in new survey tools or updates of existing ones recognizing that the measures have been identified and endorsed through an extensive engagement process.

6. The Ministry of Health and Long-Term Care, Health Quality Ontario and the associations representing primary care providers, in partnership with health scientists and educators, patients and primary care providers, working collaboratively to equip primary care providers, organizations, health system managers and policymakers with an understanding of performance measurement, quality improvement methods and leading practices
7. Updating and revising the PCPM Framework, as required, to align with emerging evidence, changing policy priorities, new data sources and evolving information needs, using structures and processes that are inclusive of stakeholders, including patients, caregivers and the public.
8. Commissioning an arm's-length formative evaluation of the implementation of the PCPM Framework to detect and address implementation challenges, and to identify and build on implementation successes.

Next Steps

To support the transition to better primary care performance measurement:

1. In the near term, the PCPM Steering Committee will select two priority subsets of measures and recommended approaches for data collection to support immediate measurement at both system and practice-levels, to be available by early 2015.
2. In the near term, HQO will continue to work in partnership with key stakeholders to develop and test a practice-level patient experience survey that will be made available in 2015 for administration and use by primary care practices..
3. Over the next year, in partnership with multiple stakeholder organizations, HQO will develop a plan to identify performance measurement gaps and barriers, and the means to address them.
4. HQO will communicate the Steering Committee's recommendations for modified wording of measures in existing surveys (e.g., the Health Care Experience Survey) to the responsible organizations and participate in pan-Canadian discussions with the Commonwealth Fund about modifying the questions in the Commonwealth Fund International Health Policy Surveys.
5. The Ministry of Health and Long-Term Care's Health Analytics Branch will review the PCPM Framework's recommended measures to explore the potential for adding recommended measures to the HCES.
6. Drawing on the PCPM Framework measures, HQO will examine the feasibility of working in partnership with researchers to develop aggregate measures that will facilitate the measurement of overall performance across various domains of primary care.

Our work to date has strengthened collaborations, increased information sharing and deepened our knowledge of important primary care performance measurement initiatives currently under way. Equally important, we have identified gaps in data availability and reporting. Our recommendations focus on taking action to address the gaps and strengthen the usefulness of what is already available — supporting better primary care performance measurement and, ultimately, better primary care.

Health Quality Ontario and the PCPM Steering Committee look forward to the next phase of our work together to support this important work.

Introduction

A strong primary care sector forms the foundation of a high-performing health system. For over a decade, Ontario has focused on strengthening primary care delivery. However, the province does not have a coordinated and comprehensive approach to collect, analyze and report on the performance of primary care at either the practice or system level. At the primary care practice and organization levels, the lack of regular feedback on key aspects of performance hinders efforts to identify opportunities for improvement and track the impact of improvement initiatives. At the system level, the lack of information makes it difficult to identify and implement improvements and evaluate the effectiveness of policy changes and investments.

In recent years, clinicians, managers and policymakers have increasingly recognized the need for systematic, ongoing feedback on primary care performance. The limited data available on primary care performance at the provincial level — mainly from the Commonwealth Fund International Health Policy Surveys of primary care physicians and the public — indicate that Ontario's primary care performance compares favourably with other provinces, but lags behind international peers, particularly in timely access to care and primary care infrastructure (e.g., primary care teams, EMR systems, and processes for performance measurement and improvement).^{11,12,13,14} (Schoen et al 2012, Schoen et al. 2013, Hutchison 2013 and 2014). Individual primary care practices and organizations have had access to almost no information on their performance, other than data they collect and analyze themselves, and many, if not most, lack the capacity to generate their own performance data. In the absence of such information, including time trends and peer comparisons, primary care providers face challenges in recognizing aspects of their practice where improvement is both needed and possible.

Since 2012, a wide range of organizations representing patients, primary care providers, data holders, researchers, managers and policymakers from across Ontario have been working collaboratively to develop a formal and structured approach to measuring primary care performance that is workable at the practice and system levels. These efforts became the Primary Care Performance Measurement (PCPM) initiative.

In this report, you will find:

- An overview of the PCPM goal, objectives and background
- The process that HQO, working in collaboration with the Steering Committee, followed to develop the PCPM framework
- A description of the framework and its domains, and the recommended measurement priorities and specific measures for each domain — at both the practice and system levels
- Recommendations for implementing primary care performance measurement in Ontario

The appendices for this report are in a separate document.

The Goal of the Primary Care Performance Measurement (PCPM) Initiative

Health Quality Ontario is collaborating with others through the Ontario Primary Care Performance Measurement Steering Committee to support health system improvement by developing a coordinated and sustainable approach to measure and report on primary care performance at the practice and system (community, regional and provincial) levels.

Objectives of the PCPM Initiative

The objectives of this initiative are to determine what aspects of primary care performance are most valuable to measure on a regular basis and to identify the data sources and infrastructure required to do so. In our work to date, we have emphasized the value of information to support decision-making over current data availability or ease of measurement. The process has been structured to accommodate differences in information needs at the practice and system levels. Agreement on useful performance measures and support for their collection, analysis and reporting will drive system improvements; track the impact of policy changes and investments; and inform service planning, performance monitoring and quality improvement at the practice level. The ultimate objective of this initiative is to support the achievement of the Triple Aim of better health, better care and better value for Ontarians.

How the PCPM Initiative Relates to Other Ontario Primary Care Initiatives

Many organizations and individuals in Ontario are undertaking quality-improvement and performance-measurement initiatives. Those engaged in the PCPM initiative have worked to ensure alignment with these other initiatives. This includes aligning PCPM with HQO's [Common Quality Agenda](#) (a cross-sectoral initiative designed to help the system focus on a key set of performance measures)¹⁵ and the [Quality Improvement Plans](#)¹⁶ priorities for primary care organizations.

Why Measure Performance?

“Performance measurement is the process whereby an organization establishes the parameters by which programs and services are measured and determines whether desired outcomes are being achieved. Performance measurement is important to quality improvement since it allows for: the identification of opportunities for improvement; tracking progress against organizational goals; and comparing of performance against both internal and external standards.”

— Report of the Quality Working Group of the Primary Healthcare Planning Group, August 2011.

Background

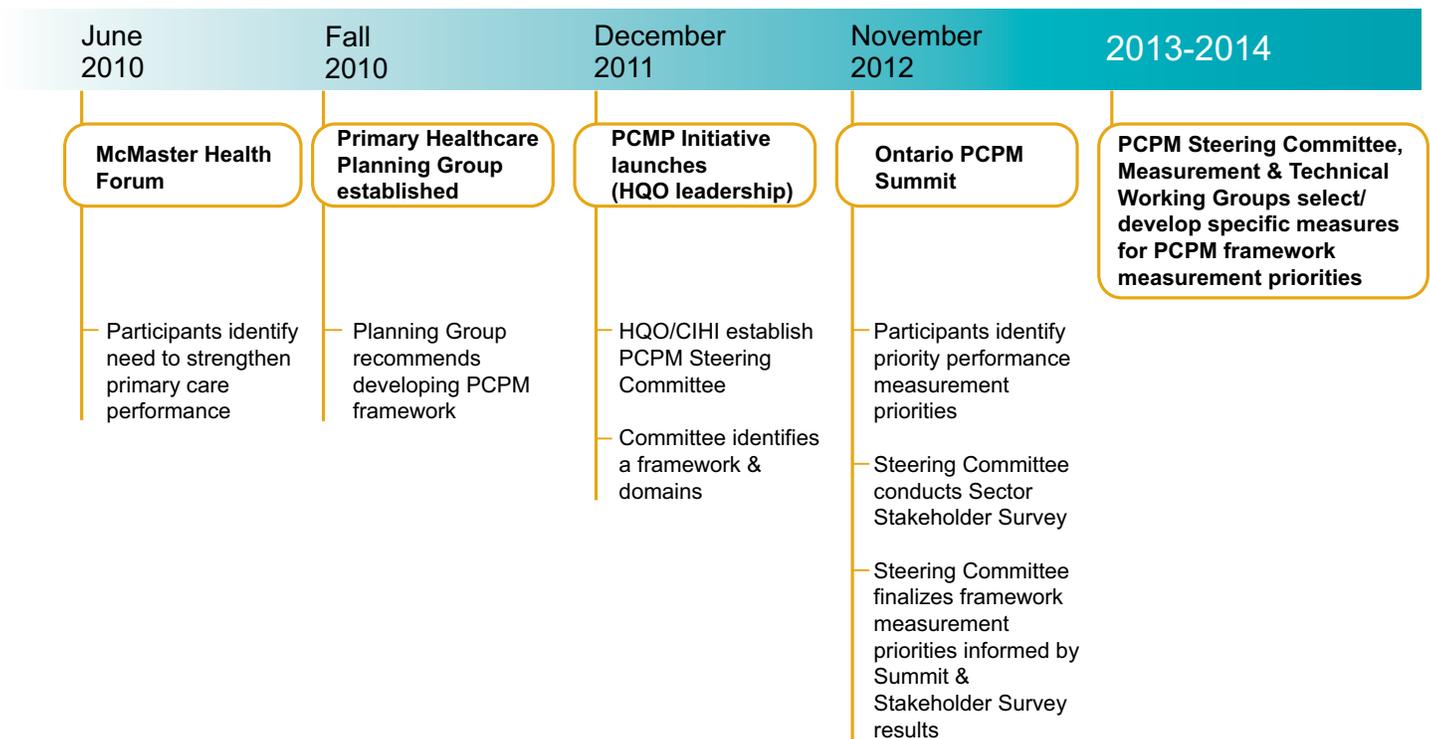


Figure 1: Process to develop PCPM framework

McMaster Health Forum

The identification of the need for an overarching framework for strengthening primary care in Ontario goes back to the June 2010 McMaster Health Forum, “Supporting Quality Improvement in Primary Health Care in Ontario.” The forum, sponsored by the Quality Improvement and Innovation Partnership (now part of HQO),¹⁷ took place in Hamilton, Ontario.¹⁸

Forum participants recommended that a small planning group, including representatives of the Ministry of Health and Long-Term Care, the Ontario Medical Association, the Registered Nurses’ Association of Ontario, the Association of Ontario Health Centres and the Ontario College of Family Physicians, draft and build consensus on a strategy for strengthening primary health care in Ontario.

Primary Healthcare Planning Group

After the McMaster Health Forum, in the fall of 2010, the Ministry of Health and Long-Term Care established and chaired the Primary Healthcare Planning Group. The group had a mandate to:

- Draft and build consensus on a strategy for strengthening primary care in Ontario
- Plan a meeting where a broad-based group of stakeholders would discuss and finalize the strategy¹⁹

In the spring of 2011, the Primary Healthcare Planning Group established five working groups: quality, access, efficiency, accountability and governance, along with guiding principles for each group. Each of the five groups was given a mandate to investigate challenges and opportunities for its topic area, and provide recommendations for improvement.

The Quality Working Group recommended that HQO establish a Working Group, with broad stakeholder representation (including the public), to design a performance measurement framework.⁶ In its final report, the Primary Healthcare Planning Group recommended that “a Working Group be established under the auspices of Health Quality Ontario to design a performance measurement framework including indicators to examine how the primary care system is performing against its goals and objectives at the practice, local, regional and provincial levels.”

In response, HQO and the Canadian Institute for Health Information (CIHI), in collaboration with Cancer Care Ontario (CCO), the C-CHANGE initiative, eHealth Ontario, the Institute for Clinical Evaluative Sciences (ICES), Local Health Integration Networks (LHINs) and the Ministry of Health and Long-Term Care (the ministry) established a Steering Committee.

Creating the PCPM Framework

Establishing the Domains and Measurement Priorities

On November 21, 2012, HQO and CIHI, in collaboration with their partners, held the Primary Care Performance Measurement Summit in Toronto. The Summit was an invitational meeting of senior leaders from key primary care data partners and information users in Ontario. Its purpose was to start laying the foundation for primary care performance measurement in Ontario. A detailed report on the Summit and the preceding background work is available at HQO's [website](#).

Environmental Scan

To support the Summit, HQO conducted an environmental scan,²¹ which examined the current state of primary care performance measurement in Ontario, across Canada and internationally. The scan provided a snapshot of existing and recently completed projects that addressed the measurement of performance in primary care settings. It included:

- A comprehensive literature review, with an electronic search of the MEDLINE®, CINAHL, EBSCO Information Services and Google Scholar databases, using the keywords: “performance measurement,” “performance standards,” “conceptual framework,” “outcome and process assessment,” “quality indicators,” “evaluation of primary care” and “design and performance measurement”
- A review of grey literature
- Contacts with organizations throughout Ontario and Canada that the HQO team knew were doing relevant research or developing performance measurement frameworks for primary care

The environmental scan identified 19 performance measurement frameworks, initiatives and data sources, and summarized them in a matrix.²² HQO used these findings to:

- Identify primary care domains that could be the basis for an overarching framework
- Select potential measurement priorities for each domain to assess primary care performance at the practice and system levels

The environmental scan identified HQO's Nine Attributes of a High Performing Health Care System Framework²³ as the most appropriate framework for examining primary care performance in Ontario. The Nine Attributes align with the Triple Aim Framework of the Institute for Health Care Improvement (IHI)²⁴ and six of the attributes correspond to the Six Aims for Improvement of a Health Care System proposed by the Institute of Medicine (IOM) in its groundbreaking report, *Crossing the Quality Chasm: A New Health System for the 21st Century*²⁵ (Table 1, below). In its 2011 report, the Primary Healthcare Planning Group recommended basing primary care performance measurement on the IHI Triple Aim Framework and HQO's Nine Attributes of a High Performing Health Care System.

Nine Attributes (HQO)/Six Aims for Improvement (IOM)	Triple Aim (IHI)		
	Population Health (Better Health)	Patient Experience (Better Care)	Per Capita Health Cost (Better Value)
Access*/Timeliness**	X	X	X
Integration*		X	X
Efficiency*,**			X
Effectiveness*,**	X	X	X
Focus on Population Health*	X	X	
Safety*,**		X	X
Patient-Centredness*/Person-Centredness**		X	
Appropriate Resources*			X
Equity*,**	X	X	

* HQO

** IOM

Table 1: HQO's Nine Attributes, IOM's Six Aims for Improvement and IHI's Triple Aim (adapted from Kates et al. 2012)

Guided by HQO's Framework, the Summit Steering Committee identified eight domains (Figure 2) of primary care performance as an organizing framework for the Primary Care Performance Measurement Summit deliberations: Accessible, Integrated, Efficient, Effective, Focused on Population Health, Safe, Patient-Centred and Equitable. At this stage, the ninth domain, "Appropriately Resourced," was not included because the availability of resources primarily addresses inputs rather than performance.

The Steering Committee established the following three criteria (weighted equally) to shortlist a set of measurement priorities for the Summit participants to consider:

1. The information is valuable to have on a regular basis for one or more purposes (e.g., service planning, management or quality improvement) at the practice and/or the system (community, regional or provincial) levels.
2. There are opportunities for comparisons of performance across practices, organizations, communities, regions, provinces/territories and/or countries.
3. The aspect of primary care performance is linked in evidence to one or more components of the IHI's Triple Aim:
 - Improving the patient experience of care (better care)
 - Improving population health (better health)
 - Reducing/controlling the per-capita cost of health care (better value)

To facilitate the Summit participants' discussions and priority setting, the Steering Committee prepared and distributed a worksheet of sixty potential measurement priorities and other background materials to the participants, prior to the meeting. The committee encouraged the participants to share the information and consult widely within their organizations and with their stakeholders.

Sixty-one senior leaders attended the Summit.²⁶ They discussed the eight domains and, for each domain, voted on their organization's highest performance measurement priorities, keeping in mind the following question:

What aspects of primary care performance would be most valuable to measure on a regular basis to inform decision-making at the practice and system (community, regional, provincial) levels?²⁷

The Summit participants applied both a practice lens and a system lens to their discussion of potential measurement priorities, ranking the potential measurement priorities separately for each lens.²⁸

Additional Learnings from the Summit

The Summit Steering Committee's post-summit debriefings and an analysis of 1,200 comments on the participants' worksheets identified three high-level themes:

1. Include "Appropriately Resourced" as a ninth domain, since resources (including infrastructure) affect outcomes (see Figure 2)
2. Apply an "Equity" lens across all domains
3. Consider the "Patient Perspective" in each domain

The summit findings also identified additional measurement priorities for both the practice and system levels.

Eight* Priority Domains that the Summit Steering Committee Identified for the November 2012 Summit

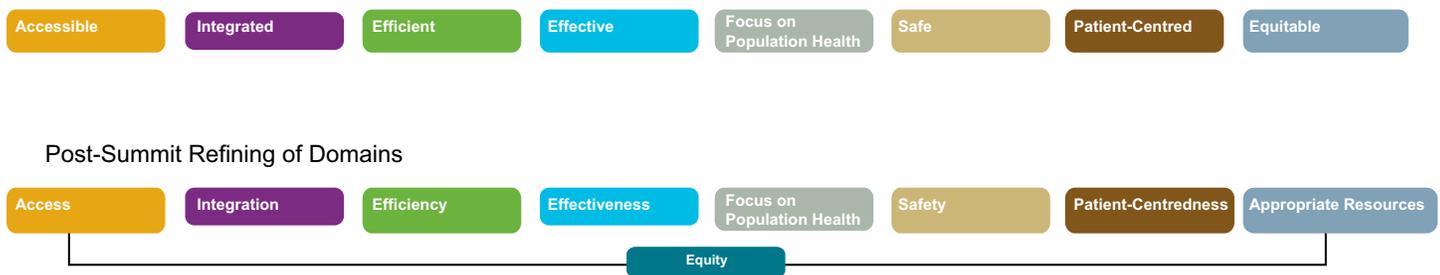


Figure 2: Evolution of the PCPM domains

In spring 2013, the organizations represented on the Steering Committee circulated the Post-Primary Care Performance Measurement Summit Stakeholder Survey to engage their members and solicit their views on the aspects of primary care performance that would be most valuable to measure. Over 850 people responded.

Finalizing the Framework and Selecting Specific Measures for Each Domain and Measurement Priority

Health Quality Ontario, the Steering Committee, the Measures Working Group and the Technical Working Group collaborated to develop specific measures for the framework (see Figure 4). Their responsibilities were:

- Steering Committee: identify a set of measurement priorities for the PCPM framework based on the Summit and survey feedback
- Measures Working Group: select preferred measures for each measurement priority
- Technical Working Group: advise on technical specifications and infrastructure requirements for data extraction, analysis and reporting

More than 850 people responded to the 2013 Post-Primary Care Performance Measurement Summit Stakeholder Survey.

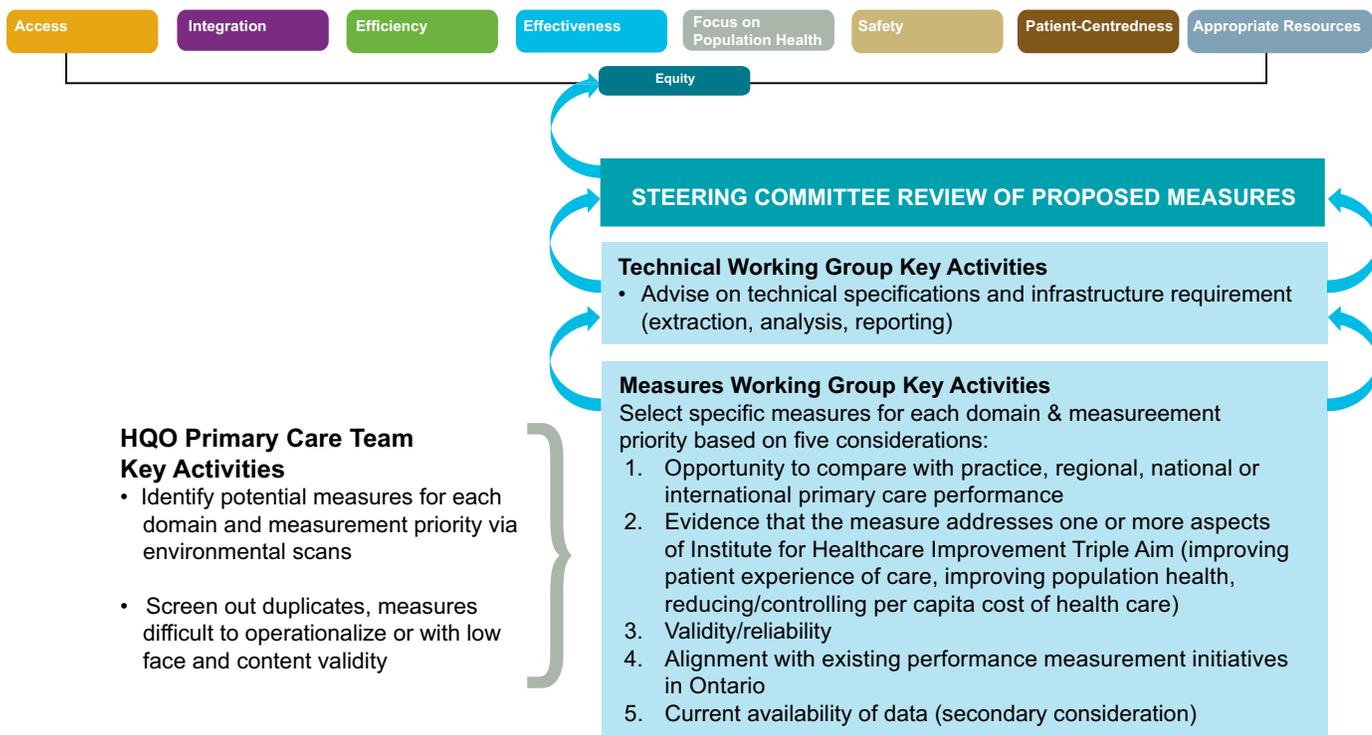


Figure 3: Process to develop specific measures for PCPM framework

The members of the Working Groups represented an appropriate mix of technical expertise and front-line experience. For example, the Measures Working Group included a majority of primary care clinicians and patients. The Technical Working Group members had greater expertise in research, data collection, analysis and reporting.

Existing Data Sources

This section briefly describes existing sources of data on primary care performance in Ontario, noting their strengths and limitations.

Population Surveys

Three population surveys provide data about Ontario primary care performance: the Ministry of Health and Long-Term Care Health Care Experience Survey (HCES), the Canadian Community Health Survey (CCHS) and the Commonwealth Fund International Health Policy Survey (CMWF Health Policy Survey).

Health and Long-Term Care Experience Survey (HCES)

The HCES is a quarterly survey of a random sample of the Ontario population, 16 years and older, conducted on behalf of the Ministry of Health and Long-Term Care by the Institute for Social Research at York University. The survey focuses on Ontarians' primary care experience, including access to care, and generates LHIN- and province-level data. The most recent HCES had a response rate of 54%, with 95% of the patients consenting to linkage of their survey responses to provincial health administrative data. The HCES allows patients to identify either a family physician/general practitioner or a nurse practitioner as their main primary care provider — a significant strength of this survey.

Canadian Community Health Survey (CCHS)

The CCHS is a Statistics Canada survey of Canadians aged 12 and over covering health status, health care utilization and health determinants. The sampling strategy is weighted to produce reliable data at the LHIN level for Ontario. Data are collected on an ongoing basis with annual releases. The Ontario response rate in 2012 was 66%, with 83% of patients consenting to linkage of their responses to health administrative data.

Commonwealth Fund International (CMWF) Health Policy Survey

Every three years, the Commonwealth Fund surveys the adult population of participating countries (11 in recent years) about their health care experience, most recently in 2013. Ontario-specific data are available from the 2010 and 2013 surveys. The Canadian response rate in 2013 was 24%.

Provider Surveys

The National Physician Survey (NPS) and the CMWF International Health Policy Survey of Primary Care Physicians (CMWF Survey of PCPs) provide data about primary care in Ontario and Canada.

National Physician Survey (NPS)

The NPS is a joint venture of the College of Family Physicians of Canada, the Royal College of Physicians and Surgeons of Canada and the Canadian Medical Association. Between 2004 and 2010, there was a comprehensive survey every three years. Since then, there have been more-frequent and more-focused surveys. The response rate among Ontario family physicians was 17.4% in 2013. Results are reported separately for family physicians and specialists at the Canadian and provincial levels. Confining the survey to physicians reduces its value for assessing primary care performance in the Ontario context — given the expanding role of interprofessional primary care providers in the province.

Commonwealth Fund Survey of Primary Care Physicians

The Commonwealth Fund surveys primary care physicians in participating countries at three-year intervals — most recently in 2012, covering 11 countries. The survey randomly samples primary care physicians. Other primary care providers are not sampled — again, a limitation, considering the expanding role of interprofessional primary care providers in Ontario. There was a 34% response rate of Ontario primary care physicians to the 2012 survey. Ontario-specific results have been reported since 2009.

Administrative Data

The Institute for Clinical Evaluative Sciences (ICES) and Cancer Care Ontario (CCO) generate practice-level data on primary care performance, using health administrative data. Both provide performance data to primary care physicians through a password-protected portal. CCO provides feedback on breast, colorectal and cervical cancer screening to physicians practising in patient-enrolment models. In collaboration with ICES, HCO provides data on health care utilization, cancer screening and diabetes care through the *Primary Care Practice Report*, which is currently available on a limited basis, but will become accessible to all primary care physicians in fall 2014. The report provides a comparison of practice performance to LHIN and provincial averages, therefore the measures included in the practice report could also be reported at the system level. Through a separate initiative, ICES also produces performance data for Community Health Centres (CHCs), Aboriginal Health Access Centres (AHACs) and Nurse Practitioner-Led Clinics (NPLCs).

The Ministry of Health and Long-Term Care provides organization-level administrative data to physicians practising in patient-enrolment models for selected Primary Care Quality Improvement Plan (QIP) indicators, such as “seven day follow-up after discharge from hospital for selected conditions,” which is available through the password-protected Health Data Branch portal. These data are also available through ICES for CHCs, AHACs and NPLCs.

Electronic Medical Record Data

Three initiatives provide performance feedback to participating primary care providers based on pooled Electronic Medical Record (EMR) data: the Canadian Primary Care Sentinel Surveillance Network (CPCSSN), the Electronic Medical Record Administrative Data-Linked Database (EMRALD) and CHCs’ Business Intelligence Reporting Tools (BIRT) database. A fourth system, the CIHI Voluntary Reporting System prototype, operated from 2009 to 2013. The College of Family Physicians of Canada sponsors CPCSSN and the Public Health Agency of Canada funds it. About 204 primary care practitioners within 19 sites in Ontario provide EMR data that have been rendered anonymous to CPCSSN and receive regular performance feedback focused on chronic conditions, which includes peer comparisons. EMRALD is housed at ICES. It currently receives EMR data from over 300 Ontario primary care practices. EMRALD data can be linked to health administrative data held at ICES. Participating family physicians receive feedback on quality measures for diabetes and ischemic heart disease, and wait times for referrals from primary care physicians to specialists. Some practices participate in both CPCSSN and EMRALD. BIRT receives data from and provides feedback to CHCs. The main limitations of these initiatives are the small proportion of Ontario primary care practices participating, the challenge of analyzing largely unstructured data and limited capacity for expansion without additional resources. These were the key reasons for the suspension of the CIHI VRS prototype (see http://www.cihi.ca/cihi-ext-portal/pdf/internet/lessons_phc_vrs_proto_en)

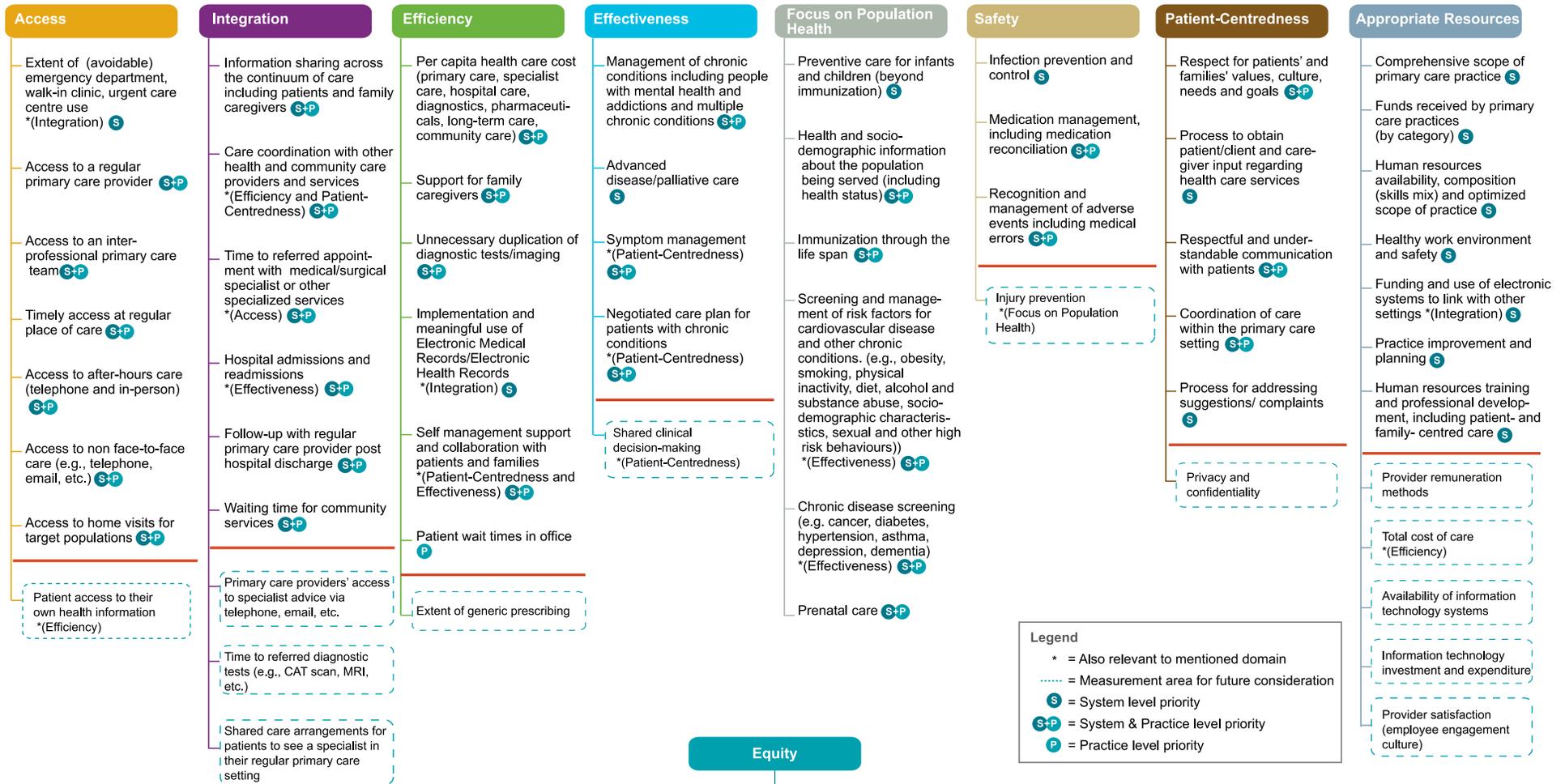
The next section of this report discusses the nine domains and their measurement priorities and the recommended specific measures for each priority.

Measurement Priorities and Recommended Measures

Figure 4 sets out the Primary Care Performance Management (PCPM) Framework, its nine domains and measurement priorities.

Primary Care Performance Measurement Framework

(Ontario Primary Care Performance Measurement Steering Committee, May 2014)



Equity is a cross-cutting domain and will be assessed in relation to a variety of economic and social variables such as income, education, gender, disability, social support, mental health status, urban/rural location, age, sexual orientation/identity, language, immigration, ethno-cultural identity and Aboriginal status.

Figure 4: The Primary Care Performance Management Framework

This section of our report discusses measurement priorities and recommended specific measures for the nine domains, in the following order:

- Access
- Patient-Centredness
- Integration
- Effectiveness
- Focus on Population Health
- Efficiency
- Safety
- Appropriate Resources
- Equity (Equity was identified as a cross-cutting domain that will be assessed based on a variety of economic, demographic and social variables.)

There is also a discussion of:

- Risk Adjustment
- Stratified Analysis

The Domains

Working collaboratively with the Steering Committee, the Measures Working Group and the Technical Working Group, HQO has developed graphic illustrations (“placemats”) for each of the nine PCPM Framework domains — for practice-level measurement and for system-level measurement. The practice- and system-level placemats for each domain have:

- A set of measurement priorities
- Recommended specific measures for each measurement priority
- A colour-coded legend (see Figure 5) on the current availability of measures on a province-wide basis

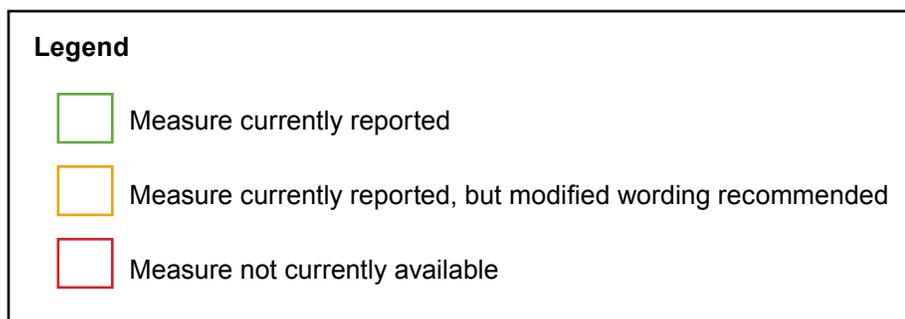


Figure 5: Legend

Some measurement priorities and the corresponding recommended measures apply to more than one domain and are cross-referenced on the placemats.

The standardized measure descriptions (SMD) for each recommended measure for each domain's measurement priorities are in the appendix to this report. The appendix has:

- The measure name
- A description of the measure
- A definition of the measure
- The existing or potential data source for the measure
- Any other relevant information

For each domain and at both the practice and system levels, there is an overview of the recommended specific measures, grouped according to the availability of data.

Appendix 4 has a summary of the availability of the data and Appendix 5 has existing or potential sources of data for all domains. In reviewing sources of data for primary care performance measurement, please also see the above discussion on [Existing Data Sources](#).

Access

The Access domain has eight practice-level and 16 system-level measures (see [Access Practice Level](#), [Access System Level Part 1](#) and [Access System Level Part 2](#)).

Table 2: Access domain measures availability summary

Availability* Summary: Access Measures		
	Number of Measures	
	Practice	System
Measures currently reported in recommended form*	1	7
Measures currently reported, but modified wording recommended	0	3
Measures not currently available, but could be reported using existing infrastructure†	0	1
Measures not currently available, but included in survey tool under development‡; infrastructure required for data collection, analysis and reporting	0	0
Measures not currently available; new infrastructure required for data collection, analysis and reporting§	7	5
Total	8	16

* Refers to province-wide (vs. local) availability

† For example, Ministry of Health and Long-Term Health Care Experience Survey, HQO-ICES Primary Care Practice Reports

‡ HQO Primary Care Patient Experience Survey

§ For example, EMR-based measures and provider- or organization-reported measures

As shown in Table 2, data is currently available for one of eight recommended practice-level measures and seven of 16 system-level measures.

Appendix 6 has the SMDs for this domain. Refer to *A Primary Care Performance Measurement Framework for Ontario Appendices*

DOMAIN: Access (Practice Level)

Measurement Priority	Access to a regular primary care provider	Timely access at regular place of care	Access to after-hours care (telephone and in-person)	Access to non-face-to-face care (e.g., telephone, email, etc.)	Access to home visits for target populations	Access to an interprofessional primary care team
Recommended Specific Measures	<p>Percentage of total primary care visits that are made to the physician with whom the patient is rostered or virtually rostered</p> <p>Percentage of patients who report that they have a family physician or nurse practitioner</p>	<p>Percentage of patients who report that they were able to see their family physician/nurse practitioner on the same or next day</p>	<p>Percentage of patients who report that getting medical care in the evening, or on a weekend, or public holiday was difficult</p>	<p>Percentage of patients who report that, when they call to their regular family physician's/nurse-practitioner's office with a medical question or concern during regular office hours, they get an answer on the same day</p> <p>Percentage of patients who report that they have emailed their family physician/nurse practitioner with a medical question in the last 12 months</p>	<p>Percentage of patients who report that it would have been better for their health if their regular family physician or nurse practitioner had come to see them at home rather than going to their office</p>	<p>Percentage of patients who report accessing interprofessional health care providers at the place they usually receive care, by type of provider</p>

LEGEND	
 	Measure currently reported
 	Measure currently reported, but modified wording recommended
 	Measure not currently available

Overview of Practice-Level Access Measures

For the practice level, there are six Access domain measurement priorities and eight recommended specific measures (see [Access Practice Level](#)).

A. Measures Currently Reported

Measurement priority: *Access to a regular primary care provider*

- Percentage of total primary care visits that are made to the physician with whom the patient is rostered or virtually rostered

B. Measures Currently Reported but Modified Wording Recommended or Measures Not Currently Available

Measurement priority: *Access to a regular primary care provider*

- Percentage of patients who report that they have a family physician or nurse practitioner

Measurement priority: *Timely access at regular place of care*

- Percentage of patients who report that they were able to see their family physician or nurse practitioner on the same or next day

Measurement priority: *Access to after-hours care (telephone and in-person)*

- Percentage of patients who report that getting medical care in the evening or on a weekend or public holiday was difficult

Measurement priority: *Access to non-face-to-face care (e.g., telephone, email, etc.)*

- Percentage of patients who report that, when they call their regular family physician's/nurse practitioner's office with a medical question or concern during regular office hours, they get an answer on the same day
- Percentage of patients who report that they have emailed their family physician or nurse practitioner with a medical question in the last 12 months

Measurement priority: *Access to home visits for target populations*

- Percentage of patients who stated that it would have been better for their health if their regular family physician or nurse practitioner had come to see them at home rather than going to their office

Measurement priority: *Access to an interprofessional primary care team*

- Percentage of patients who report accessing interprofessional health care providers at the place they usually receive care, by type of provider

DOMAIN: Access (System Level) Part 1

Measurement Priority	Extent of (potentially) avoidable emergency department, walk-in clinic, urgent care centre use (also relevant to Integration domain)	Access to a regular primary care provider	Timely access at regular place of care	Access to after-hours care (telephone and in-person)
Recommended Specific Measures	<p>Percentage of people who report going to the emergency department for reasons that were potentially avoidable</p> <p>Percentage of people who report going to a walk-in clinic for reasons that were potentially avoidable</p>	<p>Proportion of total primary care visits that are made to the physician with whom the patient is rostered or virtually rostered</p> <p>Percentage of patients who report that they experienced difficulties obtaining required routine or ongoing primary care services from their provider over the past 12 months, for themselves, their children, elderly family members or disabled family members</p> <p>Percentage of people who report that they have a family physician or nurse practitioner</p> <p>Percentage of practices/ organizations that report having arrangements for wheelchair access</p>	<p>Percentage of patients who report that they were able to see their family physician or nurse practitioner on the same or next day</p>	<p>Percentage of people who report that getting medical care in the evening or on a weekend or public holiday was difficult</p> <p>Percentage of primary care providers who report providing after-hours access for their patients during evenings and nights on weekdays and on weekends</p>

LEGEND

- Measure currently reported
- Measure currently reported, but modified wording recommended
- Measure not currently available

DOMAIN: Access (System Level) Part 2

Measurement Priority	Access to non-face-to-face care (e.g., telephone, email, etc.)	Access to home visits for target populations	Access to an interprofessional primary care team
Recommended Specific Measures	<p>Percentage of patients who report that they have emailed their family physician/ nurse practitioner with a medical question in the last 12 months</p> <p>Percentage of patients who report that, when they call their regular family physician's or nurse practitioner's office with a medical question or concern during regular office hours, they get an answer on the same day</p>	<p>Percentage of patients who report that it would have been better for their health if their regular family physician or nurse practitioner had come to see them at home rather than going to their office</p> <p>Percentage of primary care practices/organizations that offer physician home visits to:</p> <ul style="list-style-type: none"> • Housebound patients • Adults with acute illnesses • Infants and young children with acute illnesses • Palliative-care patients • Patients recently discharged from hospital • Medically complex patients who are not housebound <p>Percentage of primary care practices/organizations that offer home visits by other health professionals to:</p> <ul style="list-style-type: none"> • Housebound patients • Adults with acute illnesses • Infants and young children with acute illnesses • Palliative-care patients • Patients recently discharged from hospital • Medically complex patients who are not housebound 	<p>Percentage of patients who report accessing interprofessional health care providers at the place they usually receive care, by type of provider</p> <p>Percentage of primary care practices/organizations that report having various types of health care providers, by type of provider</p>

LEGEND

- Measure currently reported
- Measure currently reported, but modified wording recommended
- Measure not currently available

Overview of System-Level Access Measures

For the system level, there are seven Access domain measurement priorities and 16 recommended specific measures (see [Access System Level Part 1](#) and [Access System Level Part 2](#)).

A. Measures Currently Reported

Measurement priority: *Extent of (potentially) avoidable emergency department, walk-in clinic, urgent care centre use (also relates to Integration)*

- Percentage of people who report going to the emergency department for reasons that were potentially avoidable
- Percentage of people who report going to a walk-in clinic for reasons that were potentially avoidable

Measurement priority: *Access to a regular primary care provider*

- Percentage of total primary care visits that are made to the physician with whom the patient is rostered or virtually rostered
- Percentage of patients who report that they experienced difficulties obtaining required routine or ongoing primary care services from their provider over the past 12 months, for themselves, their children, elderly family members or disabled family members

Measurement priority: *Timely access at regular place of care*

- Percentage of patients who report that were able to see their family physician or nurse practitioner on the same or next day

Measurement priority: *Access to non-face-to-face care (e.g., telephone, email, etc.)*

- Percentage of patients who report that they have emailed their family physician/nurse practitioner with a medical question in the last 12 months

Measurement priority: *Access to home visits for target populations*

- Percentage of patients who report that it would have been better for their health if their regular family physician or nurse practitioner had come to see them at home rather than them going to their office

B. Measures Currently Reported but Modified Wording Recommended or Measures Not Currently Available

Measurement priority: *Access to a regular primary care provider*

- Percentage of people who report they have a family physician or nurse practitioner
- Percentage of practices/organizations that report having arrangements for wheelchair access

Measurement priority: *Access to after-hours care (telephone and in-person)*

- Percentage of people who report that getting medical care in the evening or on a weekend or public holiday was difficult
- Percentage of primary care providers who report providing after-hours access for their patients during evenings and nights on weekdays and weekends

Measurement priority: *Access to non-face-to-face care (e.g., telephone, email, etc.)*

- Percentage of patients who report that, when they call their regular family physician's or nurse practitioner's office with a medical question or concern during regular office hours, they get an answer on the same day

Measurement priority: *Access to home visits for target populations*

- Percentage of primary care practices/organizations that offer physician home visits to: housebound patients; adults with acute illnesses; infants and young children with acute illnesses; palliative-care patients; patients recently discharged from hospital; medically complex patients who are not housebound
- Percentage of primary care practices/organizations that offer home visits by other health professionals to: housebound patients; adults with acute illnesses; infants and young children with acute illnesses; palliative-care patients; patients recently discharged from hospital; medically complex patients who are not housebound

Measurement priority: *Access to an interprofessional primary care team*

- Percentage of patients who report accessing interprofessional health care providers at the place they usually receive care, by type of provider
- Percentage of primary care practices/organizations that report having various types of health care providers, by type of provider

Patient-Centredness

The Patient-Centredness domain has 18 practice-level measures and 19 system-level measures (see [Patient-Centredness Practice Level Part 1](#), [Practice Level Part 2](#), [Patient-Centredness System Level Part 1](#), [System Level Part 2](#), and [System Level Part 3](#)).

Table 3: Patient-Centredness domain measures availability summary

Availability* Summary: Patient-Centredness Measures		
	Number of Measures	
	Practice	System
Measures currently reported in recommended form*	0	2
Measures currently reported, but modified wording recommended	0	2
Measures not currently available, but could be reported using existing infrastructure†	0	12
Measures not currently available, but included in survey tool under development‡; infrastructure required for data collection, analysis and reporting	9	0
Measures not currently available; new infrastructure required for data collection, analysis and reporting§	9	3
Total	18	19

* Refers to province-wide (vs. local) availability

† For example, Ministry of Long-Term Care Health Care Experience Survey, HQO-ICES Primary Care Practice Reports

‡ HQO Primary Care Patient Experience Survey

§ For example, EMR-based measures and provider- or organization-reported measures

As shown in Table 3, data is currently available for none of the 18 recommended practice-level measures and for only two of the 19 system-level measures.

Appendix 7 has the SMDs for this domain. Refer to *A Primary Care Performance Measurement Framework for Ontario Appendices*

DOMAIN: Patient-Centredness (Practice Level) Part 1

Measurement Priority

Respect for patients' and families' values, culture, needs and goals

Recommended Specific Measures

Percentage of patients who report being able to share their concerns with their family physician/nurse practitioner

Percentage of patients with chronic conditions who rate their discussion with their primary care provider as very good or excellent

Percentage of patients who report that their family physician/nurse practitioner is sensitive to their cultural, ethnic and spiritual background and values

Percentage of patients who report being treated with respect by their primary care providers

Percentage of patients who report that their family physician/nurse practitioner or someone else in their office spends enough time with them

Percentage of patients who report that their family physician/nurse practitioner is able to communicate with them in a language they can understand

Percentage of patients who report that their family physician/nurse practitioner or someone else in the office involves them as much as they want in decisions about their care or treatment

LEGEND

- Measure currently reported
- Measure currently reported, but modified wording recommended
- Measure not currently available

DOMAIN: Patient-Centredness (Practice Level) Part 2

Measurement Priority	Respectful and understandable communication with patients		Coordination of care within the primary care setting	
	Recommended Specific Measures	<p>Percentage of patients prescribed new medicines who feel they were given enough information about their purpose, benefits and risks</p>	<p>Percentage of patients who rate the courtesy of reception staff at the practice they attend as very good or excellent</p>	<p>Percentage of patients who report that their family physician/nurse practitioner or someone else in their office gives them an opportunity to ask questions about recommended treatment</p>
	<p>Percentage of patients who feel they were given enough information about the purpose, benefits and risks of procedures and treatments</p>	<p>Percentage of patients who worked out a treatment plan together with their family physician/nurse practitioner over the past 12 months who report that their family physician/nurse practitioner asked what treatment choices they would prefer</p>	<p>Percentage of patients who report that they were kept informed about how long they would need to wait for their appointment to start</p>	
	<p>Percentage of patients who rate the main provider they saw as very good or excellent at explaining things in a way that is easy to understand</p>	<p>Percentage of patients who worked out a treatment plan together with their family physician/nurse practitioner over the past 12 months who report that their family physician/nurse practitioner asked whether they could do the recommended treatment plan</p>	<p>Percentage of patients who report getting clear instructions from their family physician/nurse practitioner or other person in their office about symptoms to watch for and when to seek further care or treatment</p>	
	<p>Percentage of patients who report that they feel comfortable talking with their family physician/nurse practitioner about personal problems related to their health condition</p>			

LEGEND

- Measure currently reported
- Measure currently reported, but modified wording recommended
- Measure not currently available

Overview of Practice-Level Patient-Centredness Measures

For the practice-level, there are three Patient-Centredness domain measurement priorities and 18 recommended specific measures (see [Patient-Centredness Practice Level Part 1](#) and [Patient-Centredness Practice Level Part 2](#)).

A. Measures Currently Reported in the Recommended Form

- None at the practice level.

B. Measures Currently Reported but Modified Wording Recommended or Measures Not Currently Available

Measurement priority: *Respect for patients' and families' values, culture, needs and goals*

- Percentage of patients who report being able to share their concerns with their family physician/nurse practitioner
- Percentage of patients who report being treated with respect by their primary care providers
- Percentage of patients who report that their family physician/nurse practitioner or someone else in the office involves them as much as they want in decisions about their care or treatment
- Percentage of patients with chronic conditions who rate their discussion with their primary care provider as very good or excellent
- Percentage of patients who report that their family physician/nurse practitioner or someone else in their office spends enough time with them
- Percentage of patients who report that their family physician/nurse practitioner is sensitive to their cultural, ethnic and spiritual background and values
- Percentage of patients who report that their family physician/nurse practitioner is able to communicate with them in a language they can understand

Measurement priority: *Respectful and understandable communication with patients*

- Percentage of patients prescribed new medicines who feel they were given enough information about their purpose, benefits and risks
- Percentage of patients who feel they were given enough information about the purpose, benefits and risks of procedures and treatments
- Percentage of patients who rate the main provider they saw as very good or excellent at explaining things in a way that is easy to understand
- Percentage of patients who worked out a treatment plan together with their family physician/nurse practitioner over the past 12 months who report that their family physician/nurse practitioner asked what treatment choices they would prefer
- Percentage of patients who worked out a treatment plan together with their family physician/nurse practitioner over the past 12 months who report that their family physician/nurse practitioner asked whether they could do the recommended treatment plan
- Percentage of patients who report getting clear instructions from their family physician/nurse practitioner or other person in their office about symptoms to watch for and when to seek further care or treatment
- Percentage of patients who report that they feel comfortable talking with their family physician/nurse practitioner about personal problems related to their health condition
- Percentage of patients who rate the courtesy of reception staff at the practice they attend as very good or excellent
- Percentage of patients who report that their family physician/nurse practitioner or someone else in their office

- gives them an opportunity to ask questions about recommended treatment
- Percentage of patients who report that they were kept informed about how long they would need to wait for their appointment to start

Measurement priorities: *Coordination of care within the primary care setting*

- Percentage of patients who rate their primary care providers as very good/excellent at working together as a team to coordinate the patient's care

DOMAIN: Patient-Centredness (System Level) Part 1

Measurement Priority

Respect for patients' and families' values, culture, needs and goals

Recommended Specific Measures

Percentage of patients who report that their family physician, nurse practitioner or someone else in their office spends enough time with them

Percentage of patients who report their family physician, nurse practitioner or someone else in their office involves them as much as they want in decisions about their care or treatment

Percentage of patients who report being able to share their concerns with their family physician/nurse practitioner

Percentage of patients who report being treated with respect by their primary care providers

Percentage of patients with chronic conditions who rate their discussion with their primary care provider as very good or excellent

Percentage of patients who report that their family physician/nurse practitioner is sensitive to their cultural, ethnic and spiritual background and values

Percentage of patients who report that their family physician/nurse practitioner is able to communicate with them in a language they can understand

LEGEND

- Measure currently reported
- Measure currently reported, but modified wording recommended
- Measure not currently available

DOMAIN: Patient-Centredness (System Level) Part 2

Measurement Priority

Respectful and understandable communication with patients

Recommended Specific Measures

Percentage of patients who report that their family physician, nurse practitioner or someone else in their office explains things in a way that is easy to understand

Percentage of patients who report that their family physician, nurse practitioner or someone else in their office gives them an opportunity to ask questions about recommended treatment

Percentage of patients who report getting clear instructions from their family physician/nurse practitioner or other person in their office about symptoms to watch for and when to seek further care or treatment

Percentage of patients prescribed new medicines who feel they were given enough information about their purpose, benefits and risks

Percentage of patients who feel they were given enough information about the purpose, benefits and risks of procedures and treatments

Percentage of patients who worked out a treatment plan together with their family physician/nurse practitioner over the past 12 months who report that their family physician/nurse practitioner asked what treatment choices they would prefer

Percentage of patients who worked out a treatment plan together with their family physician/nurse practitioner over the past 12 months who report that their family physician/nurse practitioner asked whether they could do the recommended treatment plan

Percentage of patients who report that they feel comfortable talking with their family physician/nurse practitioner about personal problems related to their health condition

Percentage of patients who rate the courtesy of reception staff at the practice they attend as very good or excellent

LEGEND

- Measure currently reported
- Measure currently reported, but modified wording recommended
- Measure not currently available

DOMAIN: Patient-Centredness (System Level) Part 3

Measurement Priority	Process to obtain patient/client and caregiver input regarding health care services	Coordination of care within the primary care setting	Process for addressing suggestions/complaints
Recommended Specific Measures	<p>Percentage of practices/organizations that report having processes in place to obtain input from patients and caregivers on the planning and organization of services</p>	<p>Percentage of primary care practices/organizations that report having mechanisms in place to support collaboration</p>	<p>Percentage of primary care practices/organizations that report having processes in place to obtain suggestions and address complaints from patients and families/caregivers</p>

LEGEND	
<input type="checkbox"/>	Measure currently reported
<input type="checkbox"/>	Measure currently reported, but modified wording recommended
<input type="checkbox"/>	Measure not currently available

Overview of System-Level Patient-Centredness Measures

For the system level, there are five Patient-Centredness domain measurement priorities and 19 recommended specific measures (see [Patient-Centredness System Level Part 1](#), [System Level Part 2](#), [System Level Part 3](#)).

A. Measures Currently Reported

Measurement priority: *Respect for patients' and families' values, culture, needs and goals*

- Percentage of patients who report that their family physician, or nurse practitioner or someone else in their office spends enough time with them

Measurement priority: *Respectful and understandable communication with patients*

- Percentage of patients who report that their family physician, nurse practitioner or someone else in their office explains things in a way that is easy to understand

B. Measures Currently Reported but Modified Wording Recommended or Measures Not Currently Available

Measurement priority: *Respect for patients' and families' values, culture, needs and goals*

- Percentage of patients who report that their family physician, nurse practitioner or someone else in their office involves them as much as they want in decisions about their care or treatment
- Percentage of patients who report being able to share their concerns with their family physician/nurse practitioner
- Percentage of patients who report being treated with respect by their primary care providers
- Percentage of patients with chronic conditions who rate their discussion with their primary care provider as very good or excellent
- Percentage of patients who report that their family physician/nurse practitioner is sensitive to their cultural, ethnic and spiritual background and values
- Percentage of patients who report that their family physician/nurse practitioner is able to communicate with them in a language they can understand

Measurement priority: *Respectful and understandable communication with patients*

- Percentage of patients who report that their family physician, nurse practitioner or someone else in their office gives them an opportunity to ask questions about recommended treatment
- Percentage of patients prescribed new medicines who feel they were given enough information about their purpose, benefits and risks
- Percentage of patients who feel they were given enough information about the purpose, benefits and risks of procedures and treatments
- Percentage of patients who report getting clear instructions from their family physician, nurse practitioner or other person in their office about symptoms to watch for and when to seek further care or treatment
- Percentage of patients who worked out a treatment plan together with their family physician/nurse practitioner over the past 12 months who report that their family physician/nurse practitioner asked what treatment choices they would prefer
- Percentage of patients who worked out a treatment plan together with their family physician/nurse practitioner over the past 12 months who report that their family physician/nurse practitioner asked whether they could do the recommended treatment plan

- Percentage of patients who report that they feel comfortable talking with their family physician/nurse practitioner about personal problems related to their health condition
- Percentage of patients who rate the courtesy of reception staff at the practice they attend as very good or excellent

Measurement priority: *Process to obtain patient/client and caregiver input regarding health care services*

- Percentage of practices/organizations that report having processes in place to obtain input from patients and caregivers on the planning and organization of services

Measurement priority: *Coordination of care within the primary care setting*

- Percentage of primary care practices/organizations that report having mechanisms in place to support collaboration

Measurement priority: *Process for addressing suggestions/complaints*

- Percentage of primary care practices/organizations that report having processes in place to obtain suggestions and address complaints from patients and families/caregivers

Integration

The Integration domain has 13 practice level measures and 19 system-level measures ([Integration Practice Level Part 1](#), [Practice Level Part 2](#), [System Level Part 1](#) and [System Level Part 2](#))

Table 4: Integration domain measures availability summary

Availability* Summary: Integration Measures		
	Number of Measures	
	Practice	System
Measures currently reported in recommended form*	3	12
Measures currently reported, but modified wording recommended	0	2
Measures not currently available, but could be reported using existing infrastructure†	0	3
Measures not currently available, but included in survey tool under development‡; infrastructure required for data collection, analysis and reporting	1	0
Measures not currently available; new infrastructure required for data collection, analysis and reporting§	9	2
Total	13	19

* Refers to province-wide (vs. local) availability

† For example, Ministry of Health and Long-Term Care Health Care Experience Survey, HQO-ICES Primary Care Practice Reports

‡ HQO Primary Care Patient Experience Survey

§ For example, EMR-based measures and provider- or organization-reported measures

As Table 4 shows, there is currently available data for three of the 13 practice-level measures and for 12 of the 19 system-level measures.

Appendix 8 has the SMDs for this domain. Refer to *A Primary Care Performance Measurement Framework for Ontario Appendices*

DOMAIN: Integration (Practice Level) Part 1

Measurement Priority	Hospital admissions and readmissions (also relevant to Effectiveness domain)	Information sharing across the continuum of care, including patients and family caregivers	Care coordination with other health and community care providers and services (also relevant to Efficiency and Patient-Centredness domains)
Recommended Specific Measures	<div style="border: 1px solid green; padding: 5px; margin-bottom: 10px;"> Percentage of patients who were readmitted to a hospital following their initial hospitalization within: <ul style="list-style-type: none"> • 30 days of discharge • One year of discharge </div> <div style="border: 1px solid green; padding: 5px;"> Rate of hospital admissions for specific chronic conditions per 1,000 population, by condition (asthma, chronic obstructive pulmonary disease, congestive heart failure, diabetes) and combined </div>	<div style="border: 1px solid orange; padding: 5px; margin-bottom: 10px;"> Percentage of patients who report that, in the last 12 months, when receiving care for a medical problem, there was a time when test results were not available at the time of a scheduled appointment with their family physician </div> <div style="border: 1px solid orange; padding: 5px; margin-bottom: 10px;"> Percentage of patients who report that their family physician/nurse practitioner was informed and up-to-date about the care they received from specialists </div> <div style="border: 1px solid orange; padding: 5px; margin-bottom: 10px;"> Percentage of patients who report that their family physician /nurse practitioner was informed and up-to-date about the care they received in the hospital </div> <div style="border: 1px solid orange; padding: 5px;"> Percentage of patients who report delays in being notified about abnormal test results in the past two years </div>	<div style="border: 1px solid orange; padding: 5px; margin-bottom: 10px;"> Percentage of patients who report that their family physician or someone in their office helped them book appointments or coordinate the care they received from specialists over the past 12 months </div> <div style="border: 1px solid orange; padding: 5px; margin-bottom: 10px;"> Percentage of patients who report that their family physician, nurse practitioner or someone in their office helped them arrange or coordinate the care they received from community-based health or social services over the past 12 months </div> <div style="border: 1px solid orange; padding: 5px;"> Percentage of patients with chronic conditions who rate their family physician/nurse practitioner as very good or excellent in helping to coordinate their care and treatment across other parts of the health care system and with other health care providers </div>

LEGEND

- Measure currently reported
- Measure currently reported, but modified wording recommended
- Measure not currently available

DOMAIN: Integration (Practice Level) Part 2

Measurement Priority	Time to referred appointment with medical/surgical specialists or other specialized services (also relevant to Access domain)	Follow-up with regular primary care provider post-hospital discharge	Waiting time for community services
Recommended Specific Measures	<p>Self-reported wait times for patients who were advised to see a specialist</p>	<p>Percentage of patients who see their primary care provider within seven days after discharge from hospital, for selected conditions</p> <p>Percentage of patients who report that the hospital made arrangements for their follow-up care with a physician or other health care professional</p>	<p>Self-reported wait times for patients who were referred to community-based health or social services</p>

LEGEND

- Measure currently reported
- Measure currently reported, but modified wording recommended
- Measure not currently available

Overview of Practice-Level Integration Measures

For the practice level, there are six integration domain measurement priorities and 13 measures (see [Integration Practice Level Part 1](#), [Integration Practice Level Part 2](#)).

A. Measures Currently Reported

Measurement priority: *Hospital admissions and readmissions (also relevant to Effectiveness domain)*

- Percentage of patients who were readmitted to a hospital following their initial hospitalization within: 30 days of discharge; one year of discharge
- Rate of hospital admissions for specific chronic conditions per 1,000 population, by condition (asthma, chronic obstructive pulmonary disease, congestive heart failure, diabetes) and combined

Measurement priority: *Follow-up with regular primary care provider post-hospital discharge*

- Percentage of patients who see their primary care provider within seven days after discharge from hospital, for selected conditions

B. Measures Currently Reported but Modified Wording Recommended or Measures Not Currently Available

Measurement priority: *Information sharing across the continuum of care, including patients and family caregivers*

- Percentage of patients who report that, in the last 12 months, when receiving care for a medical problem, there was a time when test results were not available at the time of a scheduled appointment with their family physician
- Percentage of patients who report that their family physician/nurse practitioner was informed and up-to-date about the care they received from specialists
- Percentage of patients who report that their family physician/nurse practitioner was informed and up-to-date about the care they received in the hospital
- Percentage of patients who report delays in being notified about abnormal test results in the past two years

Measurement priority: *Care coordination with other health and community care providers and services (also relevant to Efficiency and Patient-Centredness domains)*

- Percentage of patients who report that their family physician or someone in their office helped them book appointments or coordinate the care they received from specialists over the past 12 months
- Percentage of patients who report that their family physician/nurse practitioner or someone in their office helped them arrange or coordinate the care they received from community-based health or social services over the past 12 months
- Percentage of patients with chronic conditions who rate their family physician/nurse practitioner as very good or excellent in helping to coordinate their care and treatment across other parts of the health care system and with other health care providers

Measurement priority: *Time to referred appointment with medical/surgical specialists or other specialized services (also relevant to Access domain)*

- Self-reported wait times for patients who were advised to see a specialist

Measurement priority: *Follow-up with regular primary care provider post-hospital discharge*

- Percentage of patients who report that the hospital made arrangements for their follow-up care with a physician or other health care professional

Measurement priority: *Waiting time for community services*

- Self-reported wait times for patients who were referred to community-based health or social services

DOMAIN: Integration (System Level) Part 1

Measurement Priority	Hospital admissions and readmissions (also relevant to Effectiveness)	Follow-up with regular primary care provider post-hospital discharge	Information sharing across the continuum of care, including patients and family caregivers	
Recommended Specific Measures	<p>Percentage of patients who were readmitted to a hospital following their initial hospitalization within:</p> <ul style="list-style-type: none"> • 30 days of discharge • One year of discharge 	<p>Percentage of patients who see their primary care provider within seven days after discharge from hospital, for selected conditions</p>	<p>Percentage of patients who report that, in the last 12 months, when receiving care for a medical problem, there was a time when test results were not available at the time of a scheduled appointment with their family physician</p>	<p>Percentage of primary care physicians who report that they receive notification that their patient:</p> <ul style="list-style-type: none"> • Has been seen in the emergency department • Is being discharged from the hospital
<p>Rate of hospital admissions for specific chronic conditions per 1,000 population, by condition (asthma, chronic obstructive pulmonary disease, congestive heart failure, diabetes) and combined</p>	<p>Percentage of patients who report that the hospital made arrangements for their follow-up care with a physician or other health care professional</p>	<p>Percentage of patients who report that their family physician/nurse practitioner was informed and up-to-date about the care they received from specialists</p>	<p>Percentage of primary care physicians who report that on average they receive the needed information after their patients' discharge from hospital within:</p> <ul style="list-style-type: none"> • < 24 hours • 24 to 48 hours • Two to four days • Five to 14 days • 15 to 30 days • >30 days • Rarely or never 	
<p>LEGEND</p> <ul style="list-style-type: none"> □ Measure currently reported □ Measure currently reported, but modified wording recommended □ Measure not currently available 		<p>Percentage of patients who report that their family physician/nurse practitioner was informed and up-to-date about the care they received in the hospital</p>	<p>Percentage of patients who report delays in being notified about abnormal test results in the past two years</p>	<p>Percentage of primary care physicians who report that they receive the following information after their patients' visits to specialists:</p> <ul style="list-style-type: none"> • A report back from the specialist with all relevant health information • Information about changes the specialist has made to the patient's medication or care plan • Information that is timely and available when needed
				<p>Percentage of practices that have two-way electronic communication linkages (beyond fax and telephone) with other health care organizations</p>

DOMAIN: Integration (System Level) Part 2

Measurement Priority	Care coordination with other health and community care providers and services (also relevant to Efficiency and Patient-Centredness domains)	Time to referred appointment with medical/surgical specialist or other specialized services (also relevant to Access domain)	Waiting time for community services	
Recommended Specific Measures	<p>Percentage of patients who report that their family physician or someone in their office helped them book appointments or coordinate the care they received from specialists over the past 12 months</p>	<p>Percentage of primary care providers who report being able to coordinate care with service organizations in the community in planning and providing care for their most complex patients</p>	<ul style="list-style-type: none"> Self-reported wait times for patients who were advised to see a specialist 	<p>Self-reported wait times for patients who were referred to community-based health or social services</p>
	<p>Percentage of primary care physicians who report that they or someone else in the practice provides care in the following ways:</p> <ul style="list-style-type: none"> Managing and coordinating care for their patients after hospital discharge Coordinating care with social services or other community providers 	<p>Percentage of patients who report that their family physician, nurse practitioner or someone in their office helped them arrange or coordinate the care they received from community-based health or social services over the past 12 months</p>		
		<p>Percentage of patients with chronic conditions who rate their family physician/nurse practitioner as very good or excellent in helping to coordinate their care and treatment across other parts of the health care system and with other health care providers</p>		

LEGEND

- Measure currently reported
- Measure currently reported, but modified wording recommended
- Measure not currently available

Overview of System-Level Integration Domain Measures

For the system level, there are six Integration domain measurement priorities and 19 measures (see [Integration System Level Part 1](#) and [System Level Part 2](#)).

A. Measures Currently Reported

Measurement priority: *Hospital admissions and readmissions (also relevant to Effectiveness domain)*

- Percentage of patients who were re-admitted to a hospital following their initial hospitalization within: 30 days of discharge; one year of discharge
- Rate of hospital admissions for specific chronic conditions per 1,000 population, by condition (asthma, chronic obstructive pulmonary disease, congestive heart failure, diabetes) and combined

Measurement priority: *Follow-up care with regular primary care provider post-hospital discharge*

- Percentage of patients who see their primary care provider within seven days after discharge from hospital, for selected conditions
- Percentage of patients who report that the hospital made arrangements for their follow-up care with a physician or other health care professional

Measurement priority: *Information sharing across the continuum of care, including patients and family caregivers*

- Percentage of patients who report that, in the last 12 months, when receiving care for a medical problem, there was a time when test results were not available at the time of a scheduled appointment with their family physician
- Percentage of patients who report that their family physician/nurse practitioner was informed and up-to-date about the care they received from specialists
- Percentage of patients who report that their family physician/nurse practitioner was informed and up-to-date about the care they received in the hospital
- Percentage of primary care physicians who report that they receive the following information after their patients' visits to specialists: a report back from the specialist with all relevant health information; information about changes the specialist has made to the patient's medication or care plan; information that is timely and available when needed
- Percentage of primary care physicians who report that they receive notification that their patient: has been seen in the emergency department; is being discharged from the hospital
- Percentage of primary care physicians who report that on average they receive the needed information after their patients' discharge from hospital within: < 24 hours; 24 to 48 hours; two to four days; five to 14 days; 15 to 30 days; >30 days; rarely or never.
- Percentage of patients who report delays in being notified about abnormal test results in the past two year

Measurement priority: *Care coordination with other health and community care providers and services (also relevant to the Efficiency and Patient-Centredness domains)*

- Percentage of patients who report that their family physician or someone in their office helped them book appointments or coordinate the care they received from specialists over the past 12 months

B. Measures Currently Reported but Modified Wording Recommended or Measures Not Currently Available

Measurement priority: *Information sharing across the continuum of care, including patients and caregivers*

- Percentage of practices that have two-way electronic communication linkages (beyond fax and telephone) with other health care organizations

Measurement priority: *Care coordination with other health and community care providers and services (also relevant to the Efficiency and Patient-Centredness domains)*

- Percentage of primary care physicians who report that they or someone else in the practice provides care in the following ways: managing and coordinating care for their patients after hospital discharge; coordinating care with social services or other community providers
- Percentage of primary care providers who report being able to coordinate care with service organizations in the community in planning and providing care for their most complex patients.
- Percentage of patients who report that their family physician, nurse practitioner or someone in their office helped them arrange or coordinate the care they received from community-based health or social services over the past 12 months
- Percentage of patients with chronic conditions who rate their family physician/nurse practitioner as very good or excellent in helping to coordinate their care and treatment across other parts of the health care system and with other health care providers

Measurement priority: *Time to referred appointment with medical/surgical specialist or other specialized services (also relevant to Access domain)*

- Self-reported wait times for patients who were advised to see a specialist

Measurement priority: *Waiting time for community services*

- Self-reported wait times for patients who were referred to community-based health or social services

Effectiveness

The Effectiveness domain has 40 practice-level and 36 system-level measures.

(See [Effectiveness Practice Level Part 1](#), [Practice Level Part 2](#), [Practice Level Part 3](#), [Effectiveness System Level Part 1](#), [System Level Part 2](#), [System Level Part 3](#), [System Level Part 4](#))

Table 5: Effectiveness domain measures availability summary

Availability Summary: Effectiveness Measures		
	Number of Measures	
	Practice	System
Measures currently reported in recommended form*	6	9
Measures currently reported but modified wording recommended	0	1
Measures not currently available but could be reported using existing infrastructure†	7	9
Measures not currently available but included in survey tool under development‡; infrastructure required for data collection, analysis and reporting	1	0
Measures not currently available; new infrastructure required for data collection, analysis and reporting§	26	17
Total	40	36

* Refers to province-wide (vs. local) availability

† For example, Ministry of Health and Long-Term Health Care Experience Survey, HQO-ICES Primary Care Practice Reports

‡ HQO Primary Care Patient Experience Survey

§ For example, EMR-based measures and provider- or organization-reported measures

As Table 5 shows, there is currently available data for only six of the 40 practice-level measures and 9 of the 36 system-level measures.

Appendix 9 has the SMDs for this domain. Refer to *A Primary Care Performance Measurement Framework for Ontario Appendices*

DOMAIN: Effectiveness (Practice Level) Part 1

Measurement Priority

Management of chronic conditions, including people with mental health and addictions and multiple chronic conditions

Recommended Specific Measures

Percentage of patients aged 65+ with diabetes who were prescribed a statin within the past 12 months

Percentage of patients with diabetes with at least one retinal examination within the past 24 months

Percentage of patients who had a mental- health follow-up visit to a physician (primary care provider or psychiatrist) within seven and 30 days of discharge following hospitalization for a psychiatric condition

Percentage of patients with the following conditions whose blood-pressure reading in the last 12 months was below the recommended level:

- Coronary artery disease
- Hypertension
- Transient ischemic attack (TIA)/Stroke
- Chronic renal failure
- Diabetes

Percentage of patients aged 65+ with diabetes who were prescribed an angiotensin-converting enzyme inhibitor or angiotensin receptor blocker within the past 12 months

Percentage of patients with diabetes for whom a physician billed the diabetes management assessment code (K030) at least once during the past 12 months

Percentage of patients with new congestive heart failure who have a left ventricular function test

Percentage of patients with diabetes with at least one low-density lipoprotein (LDL) cholesterol test within the past 12 months

Percentage of patients aged 65+ on the recommended drugs (beta-blocker, angiotensin-converting enzyme inhibitor or angiotensin receptor blocker and statin) after hospitalization for acute myocardial infarction

Percentage of patients with chronic obstructive pulmonary disease (COPD) who have their diagnosis confirmed with pulmonary function testing

Percentage of patients aged six years and over whose diagnosis of asthma was confirmed by spirometry or a methacholine challenge test

Percentage of patients with diabetes with two or more glycated hemoglobin (HbA1c) tests within the past 12 months

Percentage of patients aged 65+ newly diagnosed with hypertension who were prescribed a thiazide as an anti-hypertensive

Percentage of patients, ages six to 55 years, with asthma who were dispensed high amounts (greater than four canisters) of short-acting beta2-agonist within the past 12 months and who received a prescription for preventer/controller medication (e.g., inhaled corticosteroid)

Percentage of patients with asthma whose asthma symptoms have been under control during the past four weeks

Percentage of patients aged 65+ on the recommended drugs (beta-blocker and angiotensin-converting enzyme inhibitor or angiotensin receptor blocker) after hospitalization for congestive heart failure

LEGEND

- Measure currently reported
- Measure currently reported, but modified wording recommended
- Measure not currently available

Percentage of patients with chronic conditions (asthma, chronic obstructive pulmonary disease [COPD], coronary artery disease, congestive heart failure, hypertension, diabetes) who had a review in the last 12 months

DOMAIN: Effectiveness (Practice Level) Part 2

Measurement Priority

Management of chronic conditions, including people with mental health and addictions and multiple chronic conditions

Recommended Specific Measures

Percentage of patients with coronary artery disease who received the following tests within the last 12 months:

- HbA1c or fasting blood sugar
- Lipid profile
- Blood pressure measurement
- Obesity screening
- All of the above

Percentage of patients with a history of acute myocardial infarction who are being treated with the following drugs:

- Angiotensin-converting enzyme inhibitor or angiotensin receptor blocker
- Beta-blocker
- Statin

Percentage of patients with coronary artery disease who are being treated with anti-platelet agents and statins

Percentage of patients with the following conditions whose last measured LDL cholesterol in the previous 15 months was 2 mmol/l or less:

- Coronary artery disease
- History of transient ischemic attack (TIA)/stroke

Percentage of patients with diabetes whose most recent LDL cholesterol test in the last 12 months was in the following ranges:

- ≤ 2.0 mmol/l
- > 2.0 mmol/l

Percentage of patients, 18 years and over, with hypertension who received testing within the past 12 months for all of the following:

- Fasting blood sugar or HbA1c
- Full fasting lipid profile screening
- Test to detect renal dysfunction (e.g., serum creatinine)
- Blood-pressure measurement
- Obesity/overweight screening

Percentage of patients with a non-hemorrhagic stroke, or a history of transient ischemic attack (TIA), who are being treated with an anti-platelet agent or an anti-coagulant

Percentage of patients with diabetes whose glycemic control in the last 12 months was in the following ranges:

- HbA1c ≤ 7%
- HbA1c between 7.1% and 9%
- HbA1c > 9%

Percentage of patients with hypertension with blood pressure recorded in the previous nine months

Percentage of patients with diabetes with a body mass index (BMI) recorded in the previous 15 months

Percentage of patients with diabetes who report having a foot examination in the past 12 months

Percentage of patients with diabetes who have a record of micro-albuminuria testing in the previous 15 months

LEGEND

- Measure currently reported
- Measure currently reported, but modified wording recommended
- Measure not currently available

DOMAIN: Effectiveness (Practice Level) Part 3

Measurement Priority

Management of chronic conditions, including people with mental health and addictions and multiple chronic conditions

Negotiated care plan for patients with chronic conditions (also relevant to Patient-Centredness)

Symptom Management (also relates to Patient-Centredness)

Recommended Specific Measures

Percentage of patients with diabetes who have a record of estimated glomerular filtration rate or serum creatinine testing in the previous 15 months

Percentage of patients with depression, newly prescribed an antidepressant drug by a primary care provider, who have follow-up contact with a provider in the same practice for review within two weeks

Percentage of patients with depression who report being asked by a provider if they had thoughts about committing suicide or taking their own life

Percentage of patients who report being able to get help from a professional when dealing with emotional distress, such as anxiety or depression, in the past two years

Percentage of patients with the following conditions who had a review in the past 12 months:

- Bipolar disorder
- Schizophrenia
- Depression
- Dementia

Percentage of patients with chronic conditions who report that they received help to plan ahead, so they could care for their condition even in hard times

Percentage of patients with chronic conditions who report getting choices about their treatment

Percentage of patients who report working out a care plan together with their family physician/nurse practitioner about how to deal with their chronic condition(s)

Percentage of patients with chronic conditions who report that they were asked for their ideas when making a care plan

Percentage of patients with chronic conditions who report that they were asked about their needs when making a care plan

Percentage of patients with chronic conditions who report getting a copy of their care plan

LEGEND

- Measure currently reported
- Measure currently reported, but modified wording recommended
- Measure not currently available

Overview of Practice-Level Effectiveness Measures

For the practice level, there are three domain measurement priorities and 40 recommended specific measures (see [Effectiveness Practice Level Part 1](#), [Practice Level Part 2](#), [Practice Level Part 3](#)). No measures are recommended for the measurement priority Symptom Management, as the environmental scan failed to identify suitable specific measures.

A. Measures Currently Reported

Measurement priority: *Management of chronic conditions, including people with mental health and addictions and multiple chronic conditions*

- Percentage of patients aged 65+ with diabetes who were prescribed a statin within the past 12 months
- Percentage of patients aged 65+ with diabetes who were prescribed an angiotensin-converting enzyme inhibitor or angiotensin receptor blocker within the past 12 months
- Percentage of patients with diabetes with at least one low-density lipoprotein (LDL) cholesterol test within the past 12 months
- Percentage of patients with diabetes with two or more glycated hemoglobin (HbA1c) tests within the past 12 months
- Percentage of patients with diabetes with at least one retinal examination within the past 24 months
- Percentage of people with diabetes for whom a physician billed the diabetes management assessment code (K030) at least once during the past 12 months

B. Measures Currently Reported but Modified Wording Recommended or Measures Not Currently Available

Measurement priority: *Management of chronic conditions, including people with mental health and addictions and multiple chronic conditions*

- Percentage of patients aged 65+ on the recommended drugs (beta-blocker, angiotensin-converting enzyme inhibitor or angiotensin receptor blocker and statin) after hospitalization for acute myocardial infarction
- Percentage of patients aged 65+ on the recommended drugs (beta-blocker and angiotensin-converting enzyme inhibitor or angiotensin receptor blocker) after hospitalization for congestive heart failure
- Percentage of patients aged 65+ newly diagnosed with hypertension who were prescribed a thiazide as an anti-hypertensive
- Percentage of patients who have a mental-health follow-up visit to a physician (primary care provider or psychiatrist) within seven and 30 days of discharge following hospitalization for a psychiatric condition
- Percentage of patients with new congestive heart failure who have a left ventricular function test
- Percentage of patients with chronic obstructive pulmonary disease (COPD) who have their diagnosis confirmed with pulmonary function testing
- Percentage of patients with the following conditions whose blood pressure reading in the last 12 months was below the recommended level: coronary artery disease; hypertension; transient ischemic attack (TIA)/stroke; chronic renal failure; diabetes
- Percentage of patients aged six years and over whose diagnosis of asthma was confirmed by spirometry or a methacholine challenge test
- Percentage of patients with asthma whose asthma symptoms have been under control during the past four weeks
- Percentage of patients, ages six to 55 years, with asthma who were dispensed high amounts (greater than four canisters) of short-acting beta2-agonist within the past 12 months and who received a prescription for preventer/controller medication (e.g., inhaled corticosteroid)
- Percentage of patients with chronic conditions (asthma, chronic obstructive pulmonary disease [COPD], coronary

- artery disease, congestive heart failure, hypertension, diabetes) who had a review in the last 12 months
- Percentage of patients with coronary artery disease who received the following tests within the last 12 months: HbA1c or fasting blood sugar; lipid profile; blood-pressure measurement; obesity screening; all of the above
- Percentage of patients with a history of acute myocardial infarction who are being treated with the following drugs: ACE inhibitor or angiotensin receptor blocker; beta-blocker; statin
- Percentage of patients with coronary artery disease who are being treated with anti-platelet agents and statins
- Percentage of patients with the following conditions whose last measured LDL cholesterol in the previous 15 months was 2 mmol/l or less: coronary artery disease, history of transient ischemic attack (TIA)/stroke
- Percentage of patients with a non-hemorrhagic stroke, or a history of transient ischemic attack (TIA), who are being treated with an anti-platelet agent or an anti-coagulant
- Percentage of patients with diabetes whose glycemic control in the last 12 months was in the following ranges: HbA1c \leq 7%; HbA1c between 7.1% and 9%; HbA1c $>$ 9%
- Percentage of patients with diabetes whose most recent LDL cholesterol test in the last 12 months was in the following ranges: \leq 2.0 mmol/l; $>$ 2.0 mmol/l
- Percentage of patients, 18 years and over, with hypertension, who received testing within the past 12 months for all of the following: fasting blood sugar or HbA1c; full fasting lipid profile screening; test to detect renal dysfunction (e.g., serum creatinine); blood pressure measurement; and obesity/overweight screening
- Percentage of patients with hypertension with blood pressure recorded in the previous nine months
- Percentage of patients with diabetes with a body mass index (BMI) recorded in the previous 15 months
- Percentage of patients with diabetes who report having a foot examination in the past 12 months
- Percentage of patients with diabetes who have a record of micro-albuminuria testing in the previous 15 months
- Percentage of patients with diabetes who have a record of estimated glomerular filtration rate or serum creatinine testing in the previous 15 months
- Percentage of patients with the following conditions who had a review in the past 12 months: bipolar disorder; schizophrenia; depression; dementia
- Percentage of patients with depression newly prescribed an antidepressant drug by a primary care provider who have follow-up contact with a provider in the same practice for review within two weeks
- Percentage of patients with depression who report being asked by a provider if they had thoughts about committing suicide or taking their own life
- Percentage of patients who report being able to get help from a professional when dealing with emotional distress, such as anxiety or depression, in the past two years

Measurement priority: *Negotiated care plan for patients with chronic conditions*
(also relevant to *Patient-Centredness*)

- Percentage of patients with chronic conditions who report that they received help to plan ahead, so they could care for their condition even in hard times
- Percentage of patients with chronic conditions who report getting choices about their treatment
- Percentage of patients who report working out a care plan together with their family physician/nurse practitioner about how to deal with their chronic condition(s)
- Percentage of patients with chronic conditions who report that they were asked for their ideas when making a care plan
- Percentage of patients with chronic conditions who report that they were asked about their needs when making a care plan
- Percentage of patients with chronic conditions who report getting a copy of their care plan

DOMAIN: Effectiveness (System Level) Part 1

Measurement Priority

Management of chronic conditions, including people with mental health and addictions and multiple chronic conditions

Recommended Specific Measures

Percentage of patients aged 65+ on the recommended drugs (beta-blocker, angiotensin-converting enzyme inhibitor or angiotensin receptor blocker and statin) after hospitalization for acute myocardial infarction

Percentage of patients with new congestive heart failure who have a left ventricular function test

Percentage of patients aged 65+ on the recommended drugs (beta-blocker and angiotensin -converting enzyme inhibitor or angiotensin receptor blocker) after hospitalization for congestive heart failure

Percentage of patients with diabetes for more than a year who had a serious diabetes complication (death, heart attack, stroke, amputation or kidney failure) in the past 12 months

Percentage of patients with diabetes for whom a physician billed the diabetes management assessment code (K030) at least once during the past 12 months

Percentage of people with hypertension, heart disease or diabetes who report that they had their blood pressure checked in the past 12 months

Percentage of patients aged 65+ newly diagnosed with hypertension who are prescribed a thiazide as an anti-hypertensive

Percentage of patients who have a mental-health follow-up visit to a physician (primary care physician or psychiatrist), within seven and 30 days of discharge following hospitalization for a psychiatric condition

Percentage of people who report being able to get help from a professional when dealing with emotional distress, such as anxiety or depression, in the past two years

Percentage of primary care physicians who report using a flow sheet or checklist for chronic diseases

Percentage of patients with chronic obstructive pulmonary disease (COPD) who have their diagnosis confirmed with pulmonary function testing

LEGEND

- Measure currently reported
- Measure currently reported, but modified wording recommended
- Measure not currently available

DOMAIN: Effectiveness (System Level) Part 2

Measurement Priority

Management of chronic conditions, including people with mental health and addictions and multiple chronic conditions

Recommended Specific Measures

Percentage of patients with chronic conditions (asthma, chronic obstructive pulmonary disease [COPD], coronary artery disease, congestive heart failure, hypertension, diabetes) who had a review in the last 12 months

Percentage of people with asthma whose asthma symptoms have been under control during the past four weeks

Percentage of patients with a non-hemorrhagic stroke or a history of transient ischemic attack (TIA) who are being treated with an anti-platelet agent or an anti-coagulant

Percentage of patients with the following conditions whose last measured LDL cholesterol in the previous 15 months was 2 mmol/l or less:

- Coronary artery disease
- History of transient ischemic attack (TIA)/stroke

Percentage of patients with coronary artery disease who received the following tests within the last 12 months:

- HbA1c or fasting blood sugar
- Lipid profile
- Blood pressure measurement
- Obesity screening
- All of the above

Percentage of patients with diabetes whose glycemic control in the last 12 months was in the following ranges:

- HbA1c ≤ 7%
- HbA1c between 7.1% and 9%
- HbA1c > 9%

Percentage of patients, aged six years and over whose diagnosis of asthma was confirmed by spirometry or a methacholine challenge test

Percentage of patients with coronary artery disease who are being treated with anti-platelet agents and statins

Percentage of patients, ages six to 55 years, with asthma, who were dispensed high amounts (greater than four canisters) of short-acting beta2-agonist within the past 12 months and ho received a prescription for preventer/ controller medication (e.g., inhaled corticosteroid)

Percentage of patients with a history of acute myocardial infarction who are being treated with the following drugs:

- Angiotensin-converting enzyme inhibitor or angiotensin receptor blocker
- Beta-blocker
- Statin

LEGEND

- Measure currently reported
- Measure currently reported, but modified wording recommended
- Measure not currently available

DOMAIN: Effectiveness (System Level) Part 3

Measurement Priority

Management of chronic conditions, including people with mental health and addictions and multiple chronic conditions

Advanced disease/palliative care

Recommended Specific Measures

Percentage of patients with diabetes whose most recent LDL cholesterol test in the last 12 months was in the following ranges:

- ≤ 2.0 mmol/l
- > 2.0 mmol/l

Percentage of primary care providers who report collaborating with other providers within the practice to establish goals for the treatment and management of complex patients

Percentage of practices/organizations that report providing 24/7 end-of-life/palliative care.

Percentage of patients with diabetes whose albumin/creatinine ratio in the last 12 months was within the following limits:

- Female ≤ 2.8, Male ≤ 2.0
- Female > 2.8, Male > 2.0

Percentage of primary care providers who report that, in the past 12 months, they were involved in disease management program(s) for patients with the following chronic conditions:

- Chronic heart failure
- Asthma
- Chronic obstructive pulmonary disease (COPD)
- Diabetes

Percentage of primary care providers who report being able to coordinate care with service organizations in the community in planning and providing care for their most complex patients

Percentage of patients with the following conditions who had a review in the past 12 months:

- Bipolar disorder
- Schizophrenia
- Depression
- Dementia

Percentage of primary care practices/ organizations reporting that all providers caring for complex patients have the same information available to them

Percentage of patients with the following conditions whose blood pressure reading in the last 12 months was below the recommended level:

- Coronary artery disease
- Hypertension
- Transient ischemic attack (TIA)/stroke
- Chronic renal failure
- Diabetes

LEGEND

- Measure currently reported
- Measure currently reported, but modified wording recommended
- Measure not currently available

DOMAIN: Effectiveness (System Level) Part 4

Measurement
Priority

Negotiated care plan for patients with chronic conditions
(also relates to Patient-Centredness)

Symptom Management
(also relates to Patient-Centredness)

Recommended Specific Measures

Percentage of patients with chronic conditions who report that they received help to plan ahead, so they could care for their condition even in hard times

Percentage of patients with chronic conditions who report getting choices about their treatment

Percentage of patients who report working out a care plan together with their family physician/nurse practitioner about how to deal with their chronic condition(s)

Percentage of patients with chronic conditions who report that they were asked for their ideas when making a care plan

Percentage of patients with chronic conditions who report that they were asked about their needs when making a care plan

Percentage of patients with chronic conditions who report getting a copy of their care plan

LEGEND

- Measure currently reported
- Measure currently reported, but modified wording recommended
- Measure not currently available

Overview of System-Level Effectiveness Measures

For the system level, there are four Effectiveness domain measurement priorities and 36 recommended specific measures (see [Effectiveness System Level Part 1](#), [System Level Part 2](#), [System Level Part 3](#) and [System Level Part 4](#)). No measures are recommended for the measurement priority Symptom Management, as the environmental scan failed to identify suitable specific measures.

A. Measures Currently Reported

Measurement priority: *Management of chronic conditions, including people with mental health and addictions and multiple chronic conditions*

- Percentage of seniors patients aged 65+ on the recommended drugs (beta-blocker, angiotensin-converting enzyme inhibitor or angiotensin receptor blocker and statin) after hospitalization for acute myocardial infarction
- Percentage of patients with new congestive heart failure who have a left ventricular function test
- Percentage of patients aged 65+ on the recommended drugs (beta-blocker and angiotensin-converting enzyme inhibitor or angiotensin receptor blocker) after hospitalization for congestive heart failure
- Percentage of patients with diabetes for more than a year who had a serious diabetes complication (death, heart attack, stroke, amputation or kidney failure) in the past 12 months
- Percentage of people with hypertension, heart disease, or diabetes who report that they had their blood pressure checked in the past 12 months
- Percentage of patients aged 65+ newly diagnosed with hypertension who are prescribed a thiazide as an anti-hypertensive
- Percentage of patients with diabetes for whom a physician billed the diabetes management assessment code (K030) at least once during the past 12 months
- Percentage of people who report being able to get help from a professional when dealing with emotional distress, such as anxiety or depression, in the past two years
- Percentage of patients who have a mental-health follow-up visit to a physician (primary care physician or psychiatrist), within seven and 30 days of discharge following hospitalization for a psychiatric condition

B. Measures Currently Reported but Modified Wording Recommended or Measures not Currently Available

Measurement priority: *Management of chronic conditions, including people with mental health and addictions and multiple chronic conditions*

- Percentage of patients with chronic obstructive pulmonary disease (COPD) who have their diagnosis confirmed with pulmonary function testing
- Percentage of primary care physicians who report using a flow sheet or checklist for chronic diseases
- Percentage of patients with chronic conditions (asthma, chronic obstructive pulmonary disease [COPD], coronary artery disease, congestive heart failure, hypertension, diabetes) who had a review in the last 12 months
- Percentage of patients with the following conditions whose last measured LDL cholesterol in the previous 15 months was 2 mmol/l or less: coronary artery disease, history of transient ischemic attack (TIA)/stroke
- Percentage of patients aged, six years and over, whose diagnosis of asthma was confirmed by spirometry or a methacholine challenge test
- Percentage of patients, ages six to 55 years, with asthma, who were dispensed high amounts (greater than four canisters) of short-acting beta2-agonist within the past 12 months and who received a prescription for preventer/controller medication (e.g., inhaled corticosteroid)

- Percentage of people with asthma whose asthma symptoms have been under control during the past four weeks
- Percentage of patients with coronary artery disease who received the following tests within the last 12 months: HbA1c or fasting blood sugar; lipid profile; blood pressure measurement; obesity screening; all of the above
- Percentage of patients with coronary artery disease who are being treated with anti-platelet agents and statins
- Percentage of patients with a history of acute myocardial infarction who are being treated with the following drugs: angiotensin-converting enzyme inhibitor or angiotensin receptor blocker, beta-blocker, statin
- Percentage of patients with a non-hemorrhagic stroke or a history of transient ischemic attack (TIA) who are being treated with an anti-platelet agent or an anti-coagulant
- Percentage of people with diabetes whose glycemic control in the last 12 months was in the following ranges: HbA1c \leq 7%; HbA1c between 7.1% and 9%; HbA1c $>$ 9%
- Percentage of patients with diabetes whose most recent LDL cholesterol test in the last 12 months was in the following ranges: \leq 2.0 mmol/l; $>$ 2.0 mmol/l
- Percentage of patients with diabetes whose albumin/creatinine ratio in the last 12 months was within the following limits: female \leq 2.8, male \leq 2.0; female $>$ 2.8, male $>$ 2.0
- Percentage of primary care providers who report being able to coordinate care with service organizations in the community in planning and providing care for their most complex patients
- Percentage of primary care practices/organizations reporting that all providers caring for complex patients have the same information available to them
- Percentage of primary care providers who report collaborating with other providers within the practice to establish goals for the treatment and management of complex patients
- Percentage of primary care providers who report that, in the past 12 months, they were involved in disease management program(s) for patients with the following chronic conditions: chronic heart failure; asthma; chronic obstructive pulmonary disease (COPD); diabetes
- Percentage of patients with the following conditions who had a review in the past 12 months: bipolar disorder; schizophrenia; depression; dementia
- Percentage of patients with the following conditions whose blood pressure reading in the last 12 months was below the recommended level: coronary artery disease; hypertension; transient ischemic attack (TIA)/stroke; chronic renal failure; diabetes

Measurement priority: *Advanced disease/palliative care*

- Percentage of practices/organizations that report providing 24/7 end-of-life/palliative care

Measurement priority: *Negotiated care plan for patients with chronic conditions (also relates to Patient-Centredness)*

- Percentage of patients with chronic conditions who report that they received help to plan ahead, so they could care for their condition even in hard times
- Percentage of patients with chronic conditions who report getting choices about their treatment
- Percentage of patients who report working out a care plan together with their family physician/nurse practitioner about how to deal with their chronic condition(s)
- Percentage of patients with chronic conditions who report that they were asked for their ideas when making a care plan
- Percentage of patients with chronic conditions who report that they were asked about their needs when making a care plan
- Percentage of patients with chronic conditions who report getting a copy of their care plan

Focus on Population Health

The focus on population health domain has 19 practice-level and 28 system-level measures (see [Population Health Practice Level Part 1](#), [Practice Level Part 2](#), [Population Health System Level Part 1](#), [System Level Part 2](#), [System Level Part 3](#)).

Table 6: Focus on population health domain measures based on availability

Availability* Summary: Focus on Population Health Measures		
	Number of Measures	
	Practice	System
Measures currently reported in recommended form*	4	20
Measures currently reported but modified wording recommended	0	4
Measures not currently available but could be reported using existing infrastructure†	2	2
Measures not currently available but included in survey tool under development‡; infrastructure required for data collection, analysis and reporting	1	0
Measures not currently available; new infrastructure required for data collection, analysis and reporting§	12	2
Total	19	28

* Refers to province-wide (vs. local) availability

† For example, Ministry of Health and Long-Term Health Care Experience Survey, HQO-ICES Primary Care Practice Reports

‡ HQO Primary Care Patient Experience Survey

§ For example, EMR-based measures and provider- or organization-reported measures

As Table 6 shows, data is currently available for four of the 19 practice-level measures and 20 of the 28 system-level measures.

Appendix 10 has the SMDs for this domain. Refer to *A Primary Care Performance Measurement Framework for Ontario Appendices*

DOMAIN: Focus on Population Health (Practice Level) Part 1

Measurement Priority	Health and socio-demographic information about the population being served (including health status)	Immunization through the lifespan	
Recommended Specific Measures	<p>Patient population demographic information:</p> <ul style="list-style-type: none"> • Age (in years) • Income • Location of residence • Disability • Immigration • Aboriginal status • Mental-health status • Gender • Education • Sexual orientation • Language • Ethno-cultural identity • Social support • Employment status 	<p>Percentage of patients who report having a seasonal flu shot in the past year</p>	<p>Percentage of children with the following age-appropriate vaccinations:</p> <ul style="list-style-type: none"> • Within two months: DTaP-IPV-Hib*, Pneumococcal Conjugate 13-valent Vaccine†, Rotavirus ORAL Vaccine‡ • Within four months: DTaP-IPV-Hib*, Pneumococcal Conjugate 13-valent Vaccine†, Rotavirus ORAL Vaccine‡ • Within six months: DTaP-IPV-Hib* • Within 12 months: Pneumococcal Conjugate 13-valent Vaccine†, Meningococcal Conjugate C Vaccine§, MMR~ • Within 15 months: Varicella Vaccine • Within 18 months: DTaP-IPV-Hib* • Within four to six years: DTaP-IPV#, MMR~ and Varicella <p>Trade names: * Pediacel, Prevnar-13,‡ Rotarix, §Menjugate, # Quadracel</p>
	<p>Percentage of patients who report being told that they have the following conditions:</p> <ul style="list-style-type: none"> • Asthma • Cancer • Diabetes • High blood pressure or hypertension • Any other long-term disease or health problem (specified) • Chronic lung disease, such as chronic bronchitis, emphysema or COPD • Depression, anxiety or other mental-health problems • Heart disease or a heart attack • High cholesterol 	<p>Percentage of school children aged seven years who are fully vaccinated against diphtheria, tetanus and polio and measles, mumps and rubella</p>	
	<p>Percentage of patients who are obese, overweight, underweight or normal weight, based on self-reported weight and height:</p> <ul style="list-style-type: none"> • Adults aged 18 and over • Children aged 12 to 17 (obese, overweight or neither) 	<p>Percentage of female grade-eight students who have completed vaccination against human papillomavirus</p>	
	<p>Percentage of patients aged 12 and over who report being physically inactive</p>	<p>Percentage of patients aged 65+ years who received pneumococcal vaccine in the past 12 months</p>	
	<p>Percentage of patients aged 12 and over who report smoking daily or occasionally</p>	<p>Percentage of 13-year-olds who received one dose of the quadrivalent meningococcal conjugate vaccine on or before their 13th birthday</p>	
		<p>Percentage of grade-seven students who have completed vaccination against hepatitis B by the end of grade seven</p>	

LEGEND

- Measure currently reported
- Measure currently reported, but modified wording recommended
- Measure not currently available

DOMAIN: Focus on Population Health (Practice Level) Part 2

Measurement Priority	Chronic-disease screening (e.g., cancer, diabetes, hypertension, asthma, depression, dementia) <i>(also relates to Effectiveness)</i>	Screening and management of risk factors for cardiovascular disease (CVD) and other chronic conditions (e.g., obesity, smoking, physical inactivity, diet, alcohol and substance abuse, socio-demographic characteristics, sexual and other high-risk behaviours)	Prenatal care
Recommended Specific Measures	<p>Percentage of women aged 50 to 74 who had a mammogram within the past two years</p> <p>Percentage of patients aged 50 to 74 who had a fecal occult blood test (FOBT) within the past two years, sigmoidoscopy or barium enema within five years or a colonoscopy within the past 10 years</p> <p>Percentage of patients aged 50 to 74 who completed a fecal occult blood test (FOBT) in the past two years</p> <p>Percentage of women aged 21 to 69 who had a Papanicolaou (Pap) smear within the past three years</p> <p>Percentage of patients who report having their blood pressure measured within the following time frames:</p> <ul style="list-style-type: none"> • Less than six months ago • Six months to less than one year ago • One year to less than two years ago • Two years to less than five years ago • Five or more years ago 	<p>Percentage of patients who report having a discussion within the past two years with their health care provider regarding the following health behaviours/risk factors:</p> <ul style="list-style-type: none"> • A healthy diet and healthy eating • Exercise or physical activity • The health risks of smoking and ways to quit • Alcohol use • Unintentional injuries (home risk factors) • Unsafe sexual practices • Unmanaged psychosocial stress 	<p>Percentage of women who gave birth and had a prenatal care visit in the first trimester</p>

LEGEND

- Measure currently reported
- Measure currently reported, but modified wording recommended
- Measure not currently available

Overview of Practice-Level Focus on Population Health Measures

For the practice level, there are five Focus on Population Health domain measurement priorities and 19 recommended specific measures (see Table 6).

A. Measures Currently Reported

Measurement priority: *Chronic-disease screening (e.g., cancer, diabetes, hypertension, asthma, depression, dementia) (also relates to Effectiveness)*

- Percentage of women aged 50 to 74 who had a mammogram within the past two years
- Percentage of patients aged 50 to 74 who had a fecal occult blood test (FOBT) within the past two years, sigmoidoscopy or barium enema within five years or a colonoscopy within the past 10 years
- Percentage of patients aged 50 to 74 who completed a fecal occult blood test (FOBT) in the past two years
- Percentage of women aged 21 to 69 who had a Papanicolaou (Pap) smear within the past three years

B. Measures Currently Reported but Modified Wording Recommended or Measure Not Currently Available

Measurement priority: *Health and socio-demographic information about the population being served (including health status)*

- Patient population demographic information: age (in years); gender; income; education; location of residence; sexual orientation; disability; language; immigration; ethno-cultural identity; aboriginal status; social support; mental-health status
- Percentage of patients aged 12 and over who report smoking daily or occasionally
- Percentage of patients aged 12 and over who report being physically inactive
- Percentage of patients who report being told that they have the following conditions: asthma, chronic lung disease, such as chronic bronchitis; emphysema or COPD; cancer; depression; anxiety or other mental-health problems; diabetes; heart disease or a heart attack; high blood pressure or hypertension; high cholesterol; any other long-term disease or health problem (specified)
- Percentage of patients who are obese, overweight, underweight or normal weight based on self-reported weight and height: adults aged 18 and over; children aged 12 to 17 (obese, overweight or neither)

Measurement priority: *Immunization through the lifespan*

- Percentage of patients who report having a seasonal flu shot in the past year
- Percentage of school children aged seven years who are fully vaccinated against diphtheria; tetanus and polio and measles; mumps and rubella
- Percentage of grade-seven students who have completed vaccination against hepatitis B by the end of grade seven
- Percentage of female grade-eight students who have completed vaccination against human papillomavirus
- Percentage of patients aged 65+ who received pneumococcal vaccine in the past 12 months
- Percentage of 13-year-olds who received one dose of the quadrivalent meningococcal conjugate vaccine on or before their 13th birthday

- Percentage of children with the following age-appropriate vaccinations: within two months: DTaP-IPV-Hib*, Pneumococcal Conjugate 13-valent Vaccine†, Rotavirus ORAL Vaccine‡; within four months: DTaP-IPV-Hib*, Pneumococcal Conjugate 13-valent Vaccine†, Rotavirus ORAL Vaccine‡; within six months: DTaP-IPV-Hib*; within 12 months: Pneumococcal Conjugate 13-valent Vaccine†, Meningococcal Conjugate C Vaccine§, MMR~; within 15 months: Varicella Vaccine; within 18 months: DTaP-IPV-Hib*; within four to six years: DTaP-IPV#, MMR~ and Varicella; **Trade names:** *Pediaceal, †Prevnar-13, ‡Rotarix, §Menjugate, #Quadriacel

Measurement priority: *Screening and management of risk factors for cardiovascular disease (CVD) and other chronic conditions (e.g., obesity, smoking, physical inactivity, diet, alcohol and substance abuse, socio-demographic characteristics, sexual and other high-risk behaviours)*

- Percentage of patients who report having a discussion within the past two years with their health care provider regarding the following health behaviours/risk factors: a healthy diet and healthy eating; exercise or physical activity; the health risks of smoking and ways to quit; alcohol use; unintentional injuries (home risk factors); unsafe sexual practices; unmanaged psychosocial stress

Measurement priority: *Chronic-disease screening (e.g., cancer, diabetes, hypertension, asthma, depression, dementia) (also relates to Effectiveness)*

- Percentage of patients who report having their blood pressure measured within the following time frames: less than six months ago; six months to less than one year ago; one year to less than two years ago; two years to less than five years ago; five or more years ago

Measurement priority: *Prenatal care*

- Percentage of women who gave birth and had a prenatal-care visit in the first trimester

DOMAIN: Focus on Population Health (System Level) Part 1

Measurement Priority

Health and socio-demographic information about the population being served (including health status)

Screening and management of risk factors for cardiovascular disease (CVD) and other chronic conditions (e.g., obesity, smoking, physical inactivity, diet, alcohol and substance abuse, socio-demographic characteristics, sexual and other high-risk behaviours)

Recommended Specific Measures

Population demographic information:

- Age (in years)
- Gender
- Income
- Education
- Location of residence
- Sexual orientation
- Disability
- Language
- Immigration
- Ethno-cultural identity
- Aboriginal status
- Social support
- Mental-health status
- Employment status

Annual rate of new cases (incidence) of the following cancers:

- | | |
|------------------------|------------------------|
| Male: | |
| • Prostate | • Lung and bronchus |
| • Colon and rectum | • Bladder |
| • Non-Hodgkin lymphoma | • Melanoma |
| • Leukemia | • Kidney |
| • Stomach | • Pancreas |
| • All other cancers | |
| Female: | |
| • Breast | • Lung and bronchus |
| • Colon and rectum | • Thyroid |
| • Body of uterus | • Non-Hodgkin lymphoma |
| • Ovary | • Cervix |
| • Melanoma | • Leukemia |
| • Pancreas | • All other cancers |

Percentage of people who report having a discussion within the past two years with their health care provider regarding the following health behaviours/risk factors:

- A healthy diet and healthy eating
- Exercise or physical activity
- The health risks of smoking and ways to quit
- Alcohol use
- Unintentional injuries (home risk factors)
- Unsafe sexual practices
- Unmanaged psychosocial stress

Percentage of people aged 12 and over who report smoking daily or occasionally

Percentage of people who are obese, overweight, underweight and normal weight, based on self-reported weight and height data:

- Adults aged 18 and over
- Children aged 12 to 17 (obese, overweight or neither)

Percentage of primary care physicians who report that they maintain or have access to a registry of patients with the following chronic conditions:

- Asthma
- Chronic obstructive pulmonary disease (COPD)
- Coronary artery disease
- Stroke
- Chronic kidney disease
- Multiple chronic conditions
- Congestive heart failure
- Diabetes
- Mental-health conditions

Percentage of people aged 12 and over who report being physically inactive

Prevalence rate for the four most common cancers: prostate, female breast, colon and rectum, lung

Percentage of people who report being told that they have the following conditions:

- Asthma
- Chronic lung disease, such as chronic bronchitis, emphysema or COPD
- Cancer
- Depression, anxiety or other mental-health problems
- Diabetes
- Heart disease or a heart attack
- High blood pressure
- High cholesterol or hypertension
- Any other long-term disease or health problem (specified)

LEGEND

- Measure currently reported
- Measure currently reported, but modified wording recommended
- Measure not currently available

DOMAIN: Focus on Population Health (System Level) Part 2

Measurement Priority	Preventive care for infants and children (beyond immunization)	Prenatal care	Immunization through the lifespan	
Recommended Specific Measures	<p>Percentage of healthy neonates who had a follow-up appointment with a primary care provider within one week after birth</p> <p>Percentage of recent mothers who report breastfeeding or trying to breastfeed</p> <p>Percentage of women who had live term births (≥37 weeks) who exclusively breastfed at the time of discharge from hospital</p> <p>Percentage of children aged 17 to 24 months with an enhanced well-baby visit</p> <p>Percentage of parents with children under two years of age who report being given information on child-injury prevention in the home</p>	<p>Percentage of women who gave birth and had a prenatal-care visit in the first trimester</p> <p>Percentage of primary care physicians who report that they offer the following services in their practice:</p> <ul style="list-style-type: none"> • Prenatal care • Intrapartum care • Postpartum care 	<p>Percentage of people who report having a seasonal flu shot in the past year</p> <p>Percentage of 13-year-olds who received one dose of the quadrivalent meningococcal conjugate vaccine on or before their 13th birthday</p> <p>Percentage of children with the following age-appropriate vaccinations:</p> <ul style="list-style-type: none"> • Within two months: DTaP-IPV-Hib*, Pneumococcal Conjugate 13-valent Vaccine†, Rotavirus ORAL Vaccine‡ • Within four months: DTaP-IPV-Hib*, Pneumococcal Conjugate 13-valent Vaccine†, Rotavirus ORAL Vaccine‡; • Within six months: DTaP-IPV-Hib*; • Within 12 months: Pneumococcal Conjugate 13-valent Vaccine†, Meningococcal Conjugate C Vaccine§, MMR~; • Within 15 months: Varicella Vaccine; within 18 months: DTaP-IPV-Hib*; • Within four to six years: DTaP-IPV#, MMR~ and Varicella <p>Trade names: *Pediacef, †Prenvar-13, ‡Rotarix, §Menjugate</p>	<p>Percentage of school children aged seven years who are fully vaccinated against diphtheria, tetanus and polio and measles, mumps and rubella</p> <p>Percentage of grade-seven students who have completed vaccination against hepatitis B by the end of grade seven</p> <p>Percentage of female grade-eight students who have completed vaccination against human papillomavirus</p> <p>Percentage of people aged 65 + who received pneumococcal vaccine in the past 12 months</p>

LEGEND

- Measure currently reported
- Measure currently reported, but modified wording recommended
- Measure not currently available

DOMAIN: Focus on Population Health (System Level) Part 3

Measurement Priority

Chronic-disease screening (e.g., cancer, diabetes, hypertension, asthma, depression, dementia) (also relates to Effectiveness)

Recommended Specific Measures

Percentage of women aged 50 to 74 who had a mammogram within the past two years

Percentage of patients aged 50 to 74 who had a fecal occult blood test (FOBT) within the past two years, sigmoidoscopy or barium enema within five years or a colonoscopy within the past 10 years

Percentage of patients aged 50 to 74 who completed a fecal occult blood test (FOBT) in the past two years

Percentage of women aged 21 to 69 who had a Papanicolaou (Pap) smear within the past three years

Percentage of patients who report having their blood pressure measured within the following time frames:

- Less than six months ago
- Six months to less than one year ago
- One year to less than two years ago
- Two years to less than five years ago
- Five or more years ago

LEGEND

- Measure currently reported
- Measure currently reported, but modified wording recommended
- Measure not currently available

Overview of System-Level Focus on Population Health Measures

For the system level, there are six Focus on Population Health domain measurement priorities and 28 recommended specific measures. (See [Population Health System Level Part 1](#), [System Level Part 2](#) and [System Level Part 3](#)).

A. Measures Currently Reported

Measurement priority: *Health and socio-demographic information about the population being served (including health status)*

- Population demographic information: age (in years); gender; income; education; location of residence; sexual orientation; disability; language; immigration; ethno-cultural identity; aboriginal status; social support; mental-health status; employment status
- Percentage of people aged 12 and over who report smoking daily or occasionally
- Percentage of people who are obese, overweight, underweight and normal weight, based on self-reported weight and height data: adults aged 18 and over; children aged 12 to 17 (obese, overweight or neither)
- Percentage of people aged 12 and over who report being physically inactive
- Annual rate of new cases (incidence) of the following cancers: Male: prostate; lung and bronchus; colon and rectum; bladder; non-Hodgkin lymphoma; melanoma; leukemia; kidney; stomach; pancreas; all other cancers; Female: breast; lung and bronchus; colon and rectum; thyroid; body of uterus; non-Hodgkin lymphoma; ovary; cervix; melanoma; leukemia; pancreas; all other cancers
- Prevalence rate for the four most common cancers: prostate, female breast, colon and rectum, lung

Measurement priority: *Preventive care for infants and children (beyond immunization)*

- Percentage of healthy neonates who had a follow-up appointment with a primary care provider within one week after birth
- Percentage of recent mothers who report breastfeeding or trying to breastfeed
- Percentage of women who had live term births (≥ 37 weeks) who exclusively breastfed at the time of discharge from hospital

Measurement priority: *Prenatal care*

- Percentage of women who gave birth and had a prenatal care visit in the first trimester

Measurement priority: *Immunization through the lifespan*

- Percentage of people who report having a seasonal flu shot in the past year
- Percentage of 13-year-olds who received one dose of the quadrivalent meningococcal conjugate vaccine on or before their 13th birthday
- Percentage of school children aged seven years who are fully vaccinated against diphtheria; tetanus and polio and measles; mumps and rubella
- Percentage of grade-seven students who have completed vaccination against hepatitis B by the end of grade seven
- Percentage of female grade-eight students who have completed vaccination against human papillomavirus

Measurement priority: *Chronic-disease screening (e.g., cancer, diabetes, hypertension, asthma, depression, dementia) (also related to Effectiveness)*

- Percentage of people who report having their blood pressure measured within the following time frames: less than six months ago; six months to less than one year ago; one year to less than two years ago; two years to less than five years ago; five or more years ago
- Percentage of women aged 50 to 74 who had a mammogram within the past two years
- Percentage of people aged 50 to 74 who had a fecal occult blood test (FOBT) within the past two years; sigmoidoscopy or barium enema within five years or a colonoscopy within the past 10 years
- Percentage of people aged 50 to 74 who completed a fecal occult blood test (FOBT) in the past two years
- Percentage of women aged 21 to 69 who had a Papanicolaou (Pap) smear within the past three years

A. Measures Currently Reported but Modified Wording Recommended or Measures Not Currently Available

Measurement priority: *Health and socio-demographic information about the population being served (including health status)*

- Percentage of primary care physicians who report that they maintain or have access to a registry of patients with the following chronic conditions: asthma; chronic obstructive pulmonary disease (COPD); coronary artery disease; congestive heart failure; stroke; hypertension; diabetes; chronic kidney disease; mental-health conditions; multiple chronic conditions
- Percentage of people who report being told that they have the following conditions: asthma; chronic lung disease such as chronic bronchitis, emphysema or COPD; cancer; depression; anxiety or other mental-health problems; diabetes; heart disease or a heart attack; high blood pressure or hypertension; high cholesterol; any other long-term disease or health problem (specified)

Measurement priority: *Screening and management of risk factors for cardiovascular disease (CVD) and other chronic conditions (e.g., obesity, smoking, physical inactivity, diet, alcohol and substance abuse, socio-demographic characteristics, sexual and other high-risk behaviours)*

- Percentage of people who report having a discussion within the past two years with their health care provider regarding the following health behaviours/risk factors: a healthy diet and healthy eating; exercise or physical activity; the health risks of smoking and ways to quit; alcohol use; unintentional injuries (home risk factors); unsafe sexual practices; unmanaged psychosocial stress

Measurement priority: *Preventive care for infants and children (beyond immunization)*

- Percentage of parents with children under two years of age who report being given information on child-injury prevention in the home

Measurement priority: *Prenatal care*

- Percentage of primary care physicians who report that they offer the following services in their practice: prenatal care; intrapartum care; postpartum care

Measurement priority: *Immunization through the lifespan*

- Proportion of children aged 17 to 24 months with an enhanced well-baby visit
- Percentage of children with the following age-appropriate vaccinations: within two months: DTaP-IPV-Hib*, Pneumococcal Conjugate 13-valent Vaccine†, Rotavirus ORAL Vaccine‡; within four months: DTaP-IPV-Hib*, Pneumococcal Conjugate 13-valent Vaccine†, Rotavirus ORAL Vaccine‡; within six months: DTaP-IPV-Hib*; within 12 months: Pneumococcal Conjugate 13-valent Vaccine†, Meningococcal Conjugate C Vaccine§, MMR~; within 15 months: Varicella Vaccine; within 18 months: DTaP-IPV-Hib*; within four to six years: DTaP-IPV#, MMR~ and Varicella: **Trade names:** *Pediaxel, †Prevnar-13, ‡Rotarix, §Menjugate)
- Percentage of people aged 65+ who received pneumococcal vaccine in the past 12 months

Efficiency

The Efficiency domain has 10 practice-level and 13 system-level measures (see [Efficiency Practice Level Part 1](#), [Practice Level Part 2](#), [Efficiency System Level Part 1](#), [System Level Part 2](#)).

Table 7: Efficiency domain measures availability summary

Availability* Summary: Efficiency Measures		
	Number of Measures	
	Practice	System
Measures currently reported in recommended form*	1	6
Measures currently reported but modified wording recommended	0	1
Measures not currently available but could be reported using existing infrastructure†	5	3
Measures not currently available but included in survey tool under development‡; infrastructure required for data collection, analysis and reporting	0	0
Measures not currently available; new infrastructure required for data collection, analysis and reporting§	4	3
Total	10	13

* Refers to province-wide (vs. local) availability

† For example, Ministry of Health and Long-Term Health Care Experience Survey, HQO-ICES Primary Care Practice Reports

‡ HQO Primary Care Patient Experience Survey

§ For example, EMR-based measures and provider- or organization-reported measures

As Table 7 shows, there is currently available data for only one of the 10 practice-level measures and for six of the 13 system-level measures.

Appendix 11 has the SMDs for this domain. Refer to *A Primary Care Performance Measurement Framework for Ontario Appendices*

DOMAIN: Efficiency (Practice Level) Part 1

Measurement Priority

Per-capita health care cost (primary care, specialist care, hospital care, diagnostics, pharmaceuticals, long-term care and community care)

Patient wait times in office

Recommended Specific Measures

Per-capita health care expenditures by category:

- In-patient hospitalization
- Same-day surgery
- ED visits
- Visits to dialysis clinics
- Visits to cancer clinics
- Ontario Drug Benefit (ODB)
- Rehabilitation
- Complex and continuing care
- Home care services
- OHIP physician billings, including most of the shadow-billings
- OHIP lab claims
- OHIP non-physician billings
- FHO/FHN capitation
- Long-term care
- Admissions to designated mental-health beds
- Assisted Devices Program (ADP)

Patient-reported wait times from when their consultation was scheduled to start to when they met with a health care provider

Percentage of patients who report that, during the last 12 months, they saw the primary health care provider within 20 minutes of their appointment time:

- Always
- Usually

Patient-reported wait times from when they were taken into the examination room to when they saw the health care provider

Percentage of patients who rated the length of time they had to wait, from when they were taken into the examination room to when the health care provider showed up as:

- Very good
- Excellent

Percentage of patients who rate the length of time they had to wait for their consultation to start, from its scheduled time to when they saw the health care provider as:

- Very good
- Excellent

LEGEND

- Measure currently reported
- Measure currently reported, but modified wording recommended
- Measure not currently available

DOMAIN: Efficiency (Practice Level) Part 2

Measurement Priority	Self-management support and collaboration with patients and families (also relates to Patient-Centeredness and Effectiveness)	Unnecessary duplication of diagnostic tests/imaging	Support for family caregivers
Recommended Specific Measures	<p>Percentage of patients who report that they received relevant and useful advice/information at their primary care visits on staying healthy and avoiding illnesses</p> <p>Percentage of patients who report that their main primary care provider supported them in the following ways:</p> <ul style="list-style-type: none"> • Helped them feel that their everyday activities, such as diet and lifestyle, make a difference in their health • Helped them feel that they could prevent some health problems • Gave them a sense of control over their health • Helped them feel that sticking with their treatment would make a difference • Helped them feel confident about their ability to take care of their health <p>Percentage of patients with chronic conditions who report that they were provided with information about whether there were programs in the community that could help them deal with their chronic conditions</p>	<p>Percentage of patients who report that there was a time in the past two years when physicians ordered a medical test that they felt was unnecessary, because the test had already been done</p>	

LEGEND

- Measure currently reported
- Measure currently reported, but modified wording recommended
- Measure not currently available

Overview of Practice-Level Efficiency Measures

For the practice level, there are five Efficiency domain measurement priorities and 10 recommended specific measures (see [Practice Level Part 1](#) and [Practice Level Part 2](#)). No measures are recommended for the measurement priority, support for family caregivers, as the environmental scan failed to identify suitable specific measures.

A. Measures Currently Reported in the Recommended Form:

Measurement priority: *Per-capita health care cost (primary care, specialist care, hospital care, diagnostics, pharmaceuticals, long-term care and community care)*

- Per-capita health care expenditures by category: in-patient hospitalization; same-day surgery; ED visits; visits to dialysis clinics; visits to cancer clinics; Ontario Drug Benefit (ODB); rehabilitation; complex and continuing care; home care services; OHIP physician billings, including most of the shadow-billings; OHIP lab claims; OHIP non-physician billings; FHO/FHN capitation; long-term care; admissions to designated mental-health beds; Assisted Devices Program (ADP)

B. Measures Currently Reported but Modified Wording Recommended or Measures Not Currently Available

Measurement priority: *Patient wait times in office*

- Patient-reported wait times from when their consultation was scheduled to start to when they met with a health care provider
- Percentage of patients who report that, during the last 12 months, they saw the primary health care provider within 20 minutes of their appointment time: always; usually
- Patient-reported wait times from when they were taken into the examination room to when they saw the health care provider
- Percentage of patients who rate the length of time they had to wait for their consultation to start, from its scheduled time to when they saw the health care provider as: very good; excellent
- Percentage of patients who rate the length of time they had to wait, from when they were taken into the examination room to when the health care provider showed up, as: very good; excellent

Measurement priority: *Self-management support and collaboration with patients and families (also relates to Patient-Centeredness and Effectiveness)*

- Percentage of patients who report that they received relevant and useful advice or information at their primary care visits on staying healthy and avoiding illnesses
- Percentage of patients who report that their main primary care provider supported them in the following ways: helped them feel that their everyday activities, such as diet and lifestyle, make a difference in their health; helped them feel that they could prevent some health problems; gave them a sense of control over their health; helped them feel that sticking with their treatment would make a difference; helped them feel confident about their ability to take care of their health
- Percentage of patients with chronic conditions who report that they were provided with information about whether there were programs in the community that could help them deal with their chronic conditions

Measurement priority: *Unnecessary duplication of diagnostic tests/imaging*

- Percentage of patients who report that there was a time in the past two years when physicians ordered a medical test that they felt was unnecessary, because the test had already been done

DOMAIN: Efficiency (System Level) Part 1

Measurement Priority

Per-capita health care cost (primary care, specialist care, hospital care, diagnostics, pharmaceuticals, long-term care and community care)

Patient wait times in office

Recommended Specific Measures

Percentage of primary care physicians who report being able to generate the following patient information with their current medical records system:

- List of patients by diagnosis (e.g., diabetes or cancer)
- List of patients by laboratory result (e.g., HbA1c >9.0)
- List of patients who are due or overdue for tests or preventive care (e.g., flu vaccine due)
- List of all medications taken by an individual patient (including those that may be prescribed by other physicians)
- List of all patients taking a particular medication
- List of all laboratory results for an individual patient (including those ordered by other physicians)
- Clinical visit summaries for patients

Percentage of primary care physicians who report being able to electronically exchange the following with other physicians outside their practice:

- Patient clinical summaries
- Laboratory and diagnostic tests

Percentage of primary care physicians who report using electronic records instead of paper charts to enter and retrieve patient clinical notes

Percentage of primary care physicians who report using the following technologies in their practice:

- Electronic ordering of laboratory tests
- Electronic alerts or prompts about a potential problem with drug dose or drug interaction
- Electronic referring to specialists
- Electronic prescribing of medication

Per-capita health care expenditures by category:

- | | |
|---|--|
| • Inpatient hospitalization | • Same-day surgery |
| • ED visits | • Visits to dialysis clinics |
| • Visits to cancer clinics | • Ontario Drug Benefit (ODB) |
| • Rehabilitation | • Complex and continuing care |
| • Home care services | • OHIP physician billings, including most of the shadow-billings |
| • OHIP lab claims | • OHIP non-physician billings |
| • FHO/FHN capitation | • Long-term care |
| • Admissions to designated mental-health beds | • Assisted Devices Program (ADP) |

Expenditures for the following sectors, expressed per capita and as a percentage of total provincial health care expenditures:

- | | |
|--|------------------------|
| • Physicians and practitioners (i.e., payments under OHIP) | • Long-term care homes |
| • Operations of hospitals | • All others |
| • Prescription drugs | |
| • Community care | |

Average annual per-capita primary care operational expenditures for:

- | | |
|---|---------------------------|
| • Health human resources | • Supplies |
| ◦ General practitioners/family physicians | • Equipment |
| ◦ Nurse practitioners | • Administration/overhead |
| ◦ Other primary care providers | • Other |

LEGEND

- Measure currently reported
- Measure currently reported, but modified wording recommended
- Measure not currently available

DOMAIN: Efficiency (System Level) Part 2

Measurement Priority	Unnecessary duplication of diagnostic tests/imaging	Self-management support and collaboration with patients and families (also relates to Patient-Centeredness and Effectiveness)	Support for family caregivers
Recommended Specific Measures	<p>Percentage of patients who report that there was a time in the past two years when physicians ordered a medical test that they felt was unnecessary, because the test had already been done</p> <p>Percentage of primary care providers who report that the following occurred with their patients during the past month:</p> <ul style="list-style-type: none"> • Medical records or other relevant clinical information were not available at the time of a patient's scheduled visit • Tests or procedures had to be repeated, because findings were unavailable • A patient experienced problems, because care was not well-coordinated across multiple sites or providers 	<p>Percentage of primary care physicians who report that they routinely give patients with chronic conditions written instructions on how to manage their own care at home</p> <p>Percentage of patients who report that they received relevant and useful advice or information at their primary care visits on staying healthy and avoiding illnesses</p> <p>Percentage of patients who report that their main primary care provider supported them in the following ways:</p> <ul style="list-style-type: none"> • Helped them feel that their everyday activities, such as diet and lifestyle, make a difference in their health • Helped them feel that they could prevent some health problems • Gave them a sense of control over their health • Helped them feel that sticking with their treatment would make a difference • Helped them feel confident about their ability to take care of their health 	<p>Percentage of patients with chronic conditions who report that they were provided with information about whether there were programs in the community that could help them deal with their chronic conditions</p>

LEGEND

- Measure currently reported
- Measure currently reported, but modified wording recommended
- Measure not currently available

Overview of System-Level Efficiency Measures

For the system level, there are five Efficiency domain measurement priorities and 13 recommended specific measures (see [Efficiency System Level Part 1](#) and [System Level Part 2](#)). No measures are recommended for the measurement priority, support for family caregivers, as the environmental scan failed to identify suitable specific measures.

A. Measures Currently Reported in the Recommended Form

Measurement priority: *Implementation and meaningful use of Electronic Medical Records/Electronic Health Records (also relates to Integration)*

- Percentage of primary care physicians who report being able to generate the following patient information with their current computerized medical records system: list of patients by diagnosis (e.g., diabetes or cancer); list of patients by laboratory result (e.g., HbA1c>9.0); list of patients who are due or overdue for tests or preventive care (e.g., flu vaccine due); list of all medications taken by an individual patient (including those that may be prescribed by other physicians); list of all patients taking a particular medication; list of all laboratory results for an individual patient (including those ordered by other physicians); clinical visit summaries for patients
- Percentage of primary care physicians who report being able to electronically exchange the following with other physicians outside their practice: patient clinical summaries; laboratory and diagnostic tests
- Percentage of primary care physicians who report using electronic records instead of paper charts to enter and retrieve patient clinical notes
- Percentage of primary care physicians who report using the following technologies in their practice: electronic ordering of laboratory tests; electronic alerts or prompts about a potential problem with drug dose or drug interaction; electronic referring to specialists; electronic prescribing of medication

Measurement priority: *Per-capita health care cost (primary care, specialist care, hospital care, diagnostics, pharmaceuticals, long-term care and community care)*

- Per-capita health care expenditures by category: in-patient hospitalization; same-day surgery; ED visits; visits to dialysis clinics; visits to cancer clinics; Ontario Drug Benefit (ODB); rehabilitation; complex and continuing care; home care services; OHIP physician billings, including most of the shadow-billings; OHIP lab claims; OHIP non-physician billings; FHO/FHN capitation; long-term care; admissions to designated mental-health beds; Assisted Devices Program (ADP)

Measurement priority: *Self-management support and collaboration with patients and families (also relates to Patient-Centeredness and Effectiveness)*

- Percentage of primary care physicians who report that they give patients with chronic conditions written instructions on how to manage their own care at home

B. Measures Currently Reported but Modified Wording Recommended or Measures Not Currently Available

Measurement priority: *Per-capita health care cost (primary care, specialist care, hospital care, diagnostics, pharmaceuticals, long-term care and community care)*

- Expenditures for the following sectors, expressed per capita and as a percentage of total provincial health care expenditures: physicians and practitioners (i.e., payments under OHIP); operations of hospitals; prescription drugs; long-term care homes; community care; all others
- Average annual per-capita primary care operational expenditures for: health human resources (general practitioners/family physicians, nurse practitioners, other primary care providers); supplies; equipment; administration/overhead; other

Measurement priority: *Unnecessary duplication of diagnostic tests/imaging*

- Percentage of patients who report that they there was a time in the past two years when physicians ordered a medical test that they felt was unnecessary, because the test had already been done
- Percentage of primary care providers who report that the following occurred with their patients in the past month: medical records or other relevant clinical information were not available at the time of a patient's scheduled visit; tests or procedures had to be repeated, because findings were unavailable; a patient experienced problems, because care was not well-coordinated across multiple sites or providers

Measurement priority: *Self-management support and collaboration with patients and families (also relates to Patient-Centeredness and Effectiveness)*

- Percentage of patients who report that they received relevant and useful advice or information at their primary care visits on staying healthy and avoiding illnesses
- Percentage of patients who report that their main primary care provider supported them in the following ways: helped them feel that their everyday activities, such as diet and lifestyle, make a difference in their health; helped them feel that they could prevent some health problems; gave them a sense of control over their health; helped them feel that sticking with their treatment would make a difference; helped them feel confident about their ability to take care of their health
- Percentage of patients with chronic conditions who report that they were provided with information about whether there were programs in the community that could help them deal with their chronic conditions

Safety

The Safety domain has four practice-level and 19 system-level measures (see [Safety Practice Level, System Level Part 1](#), [System Level Part 2](#)).

Table 8: Safety domain measures availability summary

Availability* Summary: Safety Measures		
	Number of Measures	
	Practice	System
Measures currently reported in recommended form*	0	3
Measures currently reported but modified wording recommended	0	3
Measures not currently available but could be reported using existing infrastructure†	0	3
Measures not currently available but included in survey tool under development‡; infrastructure required for data collection, analysis and reporting	0	0
Measures not currently available; new infrastructure required for data collection, analysis and reporting§	4	10
Total	4	19

* Refers to province-wide (vs. local) availability

† For example, Ministry of Health and Long-Term Health Care Experience Survey, HQO-ICES Primary Care Practice Reports

‡ HQO Primary Care Patient Experience Survey

§ For example, EMR-based measures and provider- or organization-reported measures

As Table 8 shows, there is no currently available data for any of the four practice-level measures and for only three of the 19 system-level measures.

Appendix 12 has the SMDs for this domain. Refer to *A Primary Care Performance Measurement Framework for Ontario Appendices*

DOMAIN: Safety (Practice Level)

Measurement Priority	Medication management, including medication reconciliation	Recognition and management of adverse events, including medical errors
Recommended Specific Measures	<div style="border: 1px solid #e67e22; border-radius: 10px; padding: 5px; margin-bottom: 10px;"> Percentage of patients who report that, in the past 12 months, they had a review and discussion with their primary care provider of prescription medications they are using </div> <div style="border: 1px solid #e67e22; border-radius: 10px; padding: 5px; margin-bottom: 10px;"> Percentage of patients who report that, in the past 12 months, a health care provider explained the potential side effects of any medication that was prescribed </div> <div style="border: 1px solid #e67e22; border-radius: 10px; padding: 5px;"> Percentage of patients who, in the past two years, were not sure what a new prescription medication was for or when or how to take it </div>	<div style="border: 1px solid #e67e22; border-radius: 10px; padding: 5px;"> Percentage of patients with chronic conditions who report having been asked in the past six months about medication-related problems </div>

LEGEND

- Measure currently reported
- Measure currently reported, but modified wording recommended
- Measure not currently available

Overview of Practice-Level Safety Measures

For the practice level, there are two Safety domain measurement priorities and four recommended specific measures (see [Safety Practice Level](#)).

A. Measures Currently Reported

- No measures for Safety are currently reported.

B. Measures Currently Reported but Modified Wording Recommended or Measures Not Currently Available

Measurement priority: *Medication management, including medication reconciliation*

- Percentage of patients who report that, in the past 12 months, they had a review and discussion with their primary care provider of prescription medications they are using
- Percentage of patients who report that, in the past 12 months, a physician or pharmacist explained the potential side effects of any medication that was prescribed
- Percentage of patients who, in the past two years, were not sure what a new prescription medication was for or when or how to take it

Measurement priority: *Recognition and management of adverse events, including medical errors*

- Percentage of patients with chronic conditions who report having been asked in the past six months about medication-related problems

DOMAIN: Safety (System Level) Part 1

Measurement
Priority

Medication management, including medication reconciliation

Recommended Specific Measures

Percentage of patients who report that, in the past 12 months, they had a review and discussion with their primary care provider of prescription medications they are using

Percentage of patients who report that, in the past 12 months, a health care provider explained the potential side effects of any medication that was prescribed

Percentage of patients who are using two or more prescription medications who report that, in the past 12 months, a health care provider gave them a written list of all their prescription medications

Percentage of patients who, in the past two years, were not sure what a new prescription medication was for or when or how to take it

Percentage of primary care providers/organizations that report using the medication-alert function in their EMR

LEGEND

- Measure currently reported
- Measure currently reported, but modified wording recommended
- Measure not currently available

DOMAIN: Safety (System Level) Part 2

Measurement Priority	Recognition and management of adverse events, including medical errors		Infection prevention and control	
	Recommended Specific Measures	<p style="border: 1px solid #00728f; border-radius: 10px; padding: 5px; margin-bottom: 10px;">Percentage of patients who believe a medical mistake was made in their care during the past two years</p> <p style="border: 1px solid #00728f; border-radius: 10px; padding: 5px; margin-bottom: 10px;">Percentage of patients who report that the health professional involved told them a medical error had been made in their treatment</p> <p style="border: 1px solid #ffc107; border-radius: 10px; padding: 5px; margin-bottom: 10px;">Percentage of patients who report having a negative reaction to a medication prescribed by their primary care provider that resulted in a visit to the hospital in the past two years</p> <p style="border: 1px solid #ffc107; border-radius: 10px; padding: 5px; margin-bottom: 10px;">Percentage of patients who report having experienced a serious problem as a result of a medical mistake during the past two years</p>	<p style="border: 1px solid #ffc107; border-radius: 10px; padding: 5px; margin-bottom: 10px;">Percentage of primary care organizations that report having a process for reporting medical errors that is non-prejudicial and confidential</p> <p style="border: 1px solid #ffc107; border-radius: 10px; padding: 5px; margin-bottom: 10px;">Percentage of primary care organizations that report having a process for addressing medical errors that is non-prejudicial and confidential for staff members who may have made a medical error</p> <p style="border: 1px solid #ffc107; border-radius: 10px; padding: 5px; margin-bottom: 10px;">Percentage of primary care organizations that report having an incident reporting system to identify and address potentially serious adverse events</p> <p style="border: 1px solid #ffc107; border-radius: 10px; padding: 5px; margin-bottom: 10px;">Percentage of patients with chronic conditions who report having been asked in the past six months about medication-related problems</p>	<p style="border: 1px solid #ffc107; border-radius: 10px; padding: 5px; margin-bottom: 10px;">Percentage of primary care practices/organizations that report having the equipment and in-date emergency drugs to treat anaphylaxis</p> <p style="border: 1px solid #ffc107; border-radius: 10px; padding: 5px; margin-bottom: 10px;">Percentage of primary care practices/organizations that report having a system to check the expiry dates of emergency drugs on at least an annual basis</p>

LEGEND

- Measure currently reported
- Measure currently reported, but modified wording recommended
- Measure not currently available

Overview of System-Level Safety Measures

For the system level, there are three Safety domain measurement priorities and 19 recommended specific measures (see [Safety System Level Part 1](#) and [System Level Part 2](#)).

A. Measures Currently Reported in the Recommended Form

Measurement priority: *Medication management, including medication reconciliation*

- Percentage of patients who report that, in the past 12 months, they had a review and discussion with their primary care provider of prescription medications they are using

Measurement priority: *Recognition and management of adverse events including medical errors*

- Percentage of patients who believe a medical mistake was made in their care during the past two years
- Percentage of patients who report that the health professional involved told them a medical error had been made in their treatment

B. Measures Currently Reported but Modified Wording Recommended or Measures Not Currently Available

Measurement priority: *Medication management, including medication reconciliation*

- Percentage of patients who report that, in the past 12 months, a health care provider explained the potential side effects of any medication that was prescribed
- Percentage of patients who are using two or more prescription medications who report that, in the past 12 months, a health care provider gave them a written list of all their prescription medications
- Percentage of patients who, in the past two years, were not sure what a new prescription medication was for or when or how to take it
- Percentage of primary care providers/organizations that report using the medication-alert function in their EMR

Measurement priority: *Recognition and management of adverse events, including medical errors*

- Percentage of patients who report having experienced a serious problem as a result of a medical mistake during the past two years
- Percentage of patients who report having a negative reaction to a medication prescribed by their primary care provider that resulted in a visit to the hospital in the past two years
- Percentage of primary care practices/organizations that report having a system to check the expiry dates of emergency drugs on at least an annual basis

- Percentage of primary care organizations that report having a process for reporting medical errors that is non-prejudicial and confidential
- Percentage of primary care organizations that report having a process for addressing medical errors that is non-prejudicial and confidential for staff members who may have made a medical error
- Percentage of primary care organizations that report having an incident reporting system to identify and address potentially serious adverse events
- Percentage of patients with chronic conditions who report having been asked in the past six months about medication-related problems
- Percentage of primary care practices/organizations that report having the equipment and in-date emergency drugs to treat anaphylaxis

Measurement priority: *Infection prevention and control*

- Percentage of primary care organizations reporting that they monitor compliance with their infection prevention and control policies and procedures
- Percentage of primary care organizations reporting that they provide hand-hygiene education and training for staff, service providers and volunteers
- Percentage of primary care organizations reporting that they evaluate their compliance with accepted hand-hygiene practices
- Percentage of primary care organizations reporting that they provide patients and families with information and education about preventing infections

Appropriate Resources

The Appropriate Resources domain has six measurement priorities and 29 measures for the system level. (See [Appropriate Resources System Level Part 1](#), [System Level Part 2](#), [System Level Part 3](#), [System Level Part 4](#), [System Level Part 5](#)). There are no measures at the practice level for this domain.

Table 9: Appropriate Resources domain measures availability summary

Availability* Summary: Appropriate Resources Measures		
	Number of Measures	
	Practice	System
Measures currently reported in recommended form*	NA	14
Measures currently reported but modified wording recommended	NA	1
Measures not currently available but could be reported using existing infrastructure†	NA	0
Measures not currently available but included in survey tool under development‡; infrastructure required for data collection, analysis and reporting	NA	0
Measures not currently available; new infrastructure required for data collection, analysis and reporting§	NA	14
Total	NA	29

* Refers to province-wide (vs. local) availability

† For example, Ministry of Health and Long-Term Health Care Experience Survey, HQO-ICES Primary Care Practice Reports

‡ HQO Primary Care Patient Experience Survey

§ For example, EMR-based measures and provider- or organization-reported measures

As Table 9 shows, data is currently available for 14 of the 29 measures.

Appendix 13 has the SMDs for this domain. Refer to *A Primary Care Performance Measurement Framework for Ontario Appendices*

DOMAIN: Appropriate Resources (System Level) Part 1

Measurement
Priority

Funding and use of electronic systems to link with other settings
(see also Efficiency - Implementation and meaningful use of Electronic
Medical Records/Electronic Health Records)

Recommended Specific Measures

Percentage of primary care physicians who report being able to
electronically transfer prescriptions to a pharmacy

LEGEND

- Measure currently reported
- Measure currently reported,
but modified wording recommended
- Measure not currently available

DOMAIN: Appropriate Resources (System Level) Part 2

Measurement
Priority

Human resources availability composition (skills mix) and optimized scope of practice

Recommended Specific Measures

Average weekly hours that primary care physicians report spending on the following activities:

- a) Direct patient care without a teaching component
- b) Direct patient care with a teaching component
- c) Teaching/education without direct patient care
- d) Indirect patient care
- e) Health facility committees
- f) Administration
- g) Research
- h) Managing their practice
- i) Continuing medical education/professional development
- j) Other

Average frequency of use and impact of continuing professional education activities on primary care physicians' practice

Percentage of primary care physicians who report that the following factors are increasing the demand for their time at work:

- Aging patient population
- Increasing complexity of patient caseload
- Management of patients with chronic diseases/conditions
- Increasing patient expectations
- Increasing administrative workload/paperwork
- Lack of availability of local/regional physician services in my specialty
- Lack of availability of local-regional physician services in other specialties
- Lack of availability of other local/regional health care professional services
- Medical liability concerns
- Other
- None of the above

Percentage of primary care providers who report practising with a team

Percentage of primary care organizations reporting that their primary care physician team is complete

Average number of full-time-equivalent administrative staff working in primary care practices

Average number and full-time equivalents of clinical staff working in primary care practices, by clinical discipline

Percentage of primary care providers who report that their organization provides them with support (financial, time, other) to participate in continuing professional development, by type of provider

LEGEND

- Measure currently reported
- Measure currently reported, but modified wording recommended
- Measure not currently available

DOMAIN: Appropriate Resources (System Level) Part 3

Measurement
Priority

Human resources availability composition (skills mix) and optimized scope of practice

Recommended Specific Measures

Average number of full-time-equivalent physicians working in primary care practices

Average number of full-time-equivalent non-physician providers working in primary care practices

Percentage of primary care physicians who, during the last year:

- Used any locum tenens
- Personally provided locum tenens services for another physician

Primary care physicians' average hours of medical practice per week

Percentage of time that primary care physicians report spending in face-to-face contact with patients in a typical week

Average number of patients that primary care physicians report taking care of in their practice

Percentage of primary care providers who report that, over the course of a year they use:

- Little of their full scope of practice
- About half of their full scope of practice
- Most of their scope of practice
- Their full scope of practice

LEGEND

- Measure currently reported
- Measure currently reported, but modified wording recommended
- Measure not currently available

DOMAIN: Appropriate Resources (System Level) Part 4

Measurement Priority

Funds received by primary care practice (by category)
(see also Efficiency – Per-capita health care cost)

Healthy work environments and safety

Recommended Specific Measures

Percentage of income that primary care physicians report spending on overhead

Percentage of primary care providers who report that there are adequate provisions to ensure their safety in their workplace, by type of provider

Percentage of primary care organizations' funding of their operating costs that comes from:

Percentage of primary care providers who report missing two weeks or more of work due to burnout during the past 12 months, by type of provider

- a) Overhead charges to physicians
- b) Private enterprises (companies, pharmacies, donations, foundations)
- c) Fees charged to patients (e.g., fees to open or manage files)
- d) Health system budget (hospital)
- e) Infrastructure operating grant or government program

Percentage of primary care providers who report having a workplace-related injury during the past 12 months, by type of provider

Percentage of primary care providers who were satisfied with the overall quality of their work-life balance over the past 12 months, by type of provider

LEGEND

- Measure currently reported
- Measure currently reported, but modified wording recommended
- Measure not currently available

DOMAIN: Appropriate Resources (System Level) Part 5

Measurement Priority	Practice improvement and planning	Comprehensive scope of practice	
Recommended Specific Measures	<div style="border: 1px solid #008080; padding: 5px; margin-bottom: 10px;"> <p>Percentage of primary care physicians who report that they receive information on how the clinical performance of their practice compares to other practices:</p> <ul style="list-style-type: none"> • Routinely • Occasionally </div> <div style="border: 1px solid #008080; padding: 5px; margin-bottom: 10px;"> <p>Percentage of primary care physicians who report that they review some areas of clinical performance against targets, at least annually</p> </div> <div style="border: 1px solid #FFA500; padding: 5px;"> <p>Percentage of primary care physicians who report that their practice routinely receives and reviews data on the following aspects of their patients' care:</p> <ul style="list-style-type: none"> • Clinical outcomes • Surveys of patient satisfaction and experiences with care • Patients' hospital admissions or emergency department use • The frequency of ordering diagnostic tests • The frequency of various conditions • The frequency of referrals to specialists/specialized services </div>	<div style="border: 1px solid #FFA500; padding: 5px; margin-bottom: 10px;"> <p>Percentage of primary care organizations reporting that they have processes to obtain community input for planning the organization's services</p> </div> <div style="border: 1px solid #FFA500; padding: 5px; margin-bottom: 10px;"> <p>Percentage of primary care providers who report that they are involved in quality improvement initiatives in their practice:</p> <ul style="list-style-type: none"> • Regularly • Infrequently </div> <div style="border: 1px solid #FFA500; padding: 5px;"> <p>Percentage of primary care organizations reporting that they implemented one or more changes in clinical practice as a result of quality-improvement initiatives during the past 12 months</p> </div>	<div style="border: 1px solid #008080; padding: 5px;"> <p>Percentage of primary care physicians who provide a broad scope of primary care physician services</p> </div>

LEGEND

- Measure currently reported
- Measure currently reported, but modified wording recommended
- Measure not currently available

Overview of System-Level Appropriate Resources Measures

For the system level, there are six Appropriate Resources domain measurement priorities and 29 recommended specific measures (see [Appropriate Resources System Level 1](#), [System Level 2](#), [System Level 3](#), [System Level 4](#) and [System Level 5](#)).

A. Measures Currently Reported

Measurement priority: *Funding and use of electronic systems to link with other settings*

Percentage of primary care physicians who report being able to electronically transfer prescriptions to a pharmacy

Measurement priority: *Human resources availability composition (skills mix) and optimized scope of practice*

Average weekly hours that primary care physicians report spending on the following activities: a) direct patient care without a teaching component; b) direct patient care with a teaching component; c) teaching/education without direct patient care; d) indirect patient care; e) health facility committees; f) administration; g) research; h) managing their practice; i) continuing medical education/professional development; j) other Average frequency of use and impact of continuing professional education activities on primary care physicians' practice

- Percentage of primary care physicians who report that the following factors are increasing the demand for their time at work: aging patient population; increasing complexity of patient caseload; management of patients with chronic diseases/conditions; increasing patient expectations; increasing administrative workload/paperwork; lack of availability of local/regional physician services in my specialty; lack of availability of local-regional physician services in other specialties; lack of availability of other local/regional health care professional services; medical liability concerns; other; none of the above
- Average number of full-time-equivalent physicians working in primary care practices
- Average number of full-time-equivalent non-physician providers working in primary care practices
- Primary care physicians' average hours of medical practice per week
- Percentage of time that primary care physicians report spending in face-to-face contact with patients in a typical week
- Average number of patients that primary care physicians report taking care of in their practice
- Percentage of primary care physicians who, during the last year: used any locum tenens; personally provided locum tenens services for another physician

Measurement priority: *Funds received by primary care practice (by category)*

- Percentage of income that primary care physicians report spending on overhead

Measurement priority: *Practice improvement and planning*

- Percentage of primary care physicians who report that they receive information on how the clinical performance of their practice compares to other practices: routinely; occasionally
- Percentage of primary care physicians who report that they review some areas of clinical performance against targets, at least annually

Measurement priority: *Comprehensive scope of practice*

- Percentage of primary care physicians who provide a broad scope of primary care physician services

B. Measures Currently Reported but Modified Wording Recommended or Measures Not Currently Available

Measurement priority: *Human resources availability composition (skills mix) and optimized scope of practice*

- Percentage of primary care providers who report that their organization provides them with support (financial, time, other) to participate in continuing professional development, by type of provider
- Percentage of primary care providers who report practising with a team
- Percentage of primary care organizations reporting that their primary care physician team is complete
- Average number of full-time-equivalent administrative staff working in primary care practices
- Average number and full-time equivalents of clinical staff working in primary care practices, by clinical discipline
- Percentage of primary care providers who report that, over the course of a year, they use: little of their full scope of practice; about half of their full scope of practice; most of their scope of practice; their full scope of practice

Measurement priority: *Funds received by primary care practice (by category)*

- Percentage of primary care organizations' funding of their operating costs that comes from the following: a) overhead charges to physicians; b) private enterprises (companies, pharmacies, donations, foundations); c) fees charged to patients (e.g., fees to open or manage files); d) health system budget (hospital); e) infrastructure operating grant or government program

Measurement priority: *Healthy work environments and safety*

- Percentage of primary care providers who report that there are adequate provisions to ensure their safety in their workplace, by type of provider
- Percentage of primary care providers who report missing two weeks or more of work due to burnout during the past 12 months, by type of provider
- Percentage of primary care providers who report having a workplace-related injury during the past 12 months, by type of provider
- Percentage of primary care providers who were satisfied with the overall quality of their work-life balance over the past 12 months, by type of provider

Measurement priority: *Practice improvement and planning*

- Percentage of primary care providers who report that they are involved in quality improvement initiatives in their practice: regularly; infrequently
- Percentage of primary care organizations reporting that they have processes to obtain community input for planning the organization's services
- Percentage of primary care organizations reporting that they implemented one or more changes in clinical practice as a result of quality-improvement initiatives during the past 12 months
- Percentage of primary care physicians who report that their practice routinely receives and reviews data on the following aspects of their patients' care: clinical outcomes; surveys of patient satisfaction and experiences with care; patients' hospital admissions or emergency department use; the frequency of ordering diagnostic tests; the frequency of various conditions; the frequency of referrals to specialists/specialized services

Equity

Attention to equity in primary care is critically important given the well-recognized and persistent inequities in access to and receipt of high quality primary care services among vulnerable populations. Such inequities are more likely to be effectively addressed if equity is regularly measured and reported. Primary care equity is achieved when access, quality and outcomes of primary care are equal across population subgroups with different socio-economic and demographic characteristics. Equity cuts across the other domains of primary care performance. Measurement of equity requires examining performance measures relating to aspects of primary care (such as access, patient-centredness, effectiveness and safety) in relation to population characteristics that may be associated with health care inequity.

The PCPM Steering Committee recommended 14 population characteristics for use in assessing primary care equity: age, gender/sex, urban/rural location, ethno-cultural identity, disability, social support, income, education, sexual orientation/identity, language, immigration, mental health status, aboriginal status and employment status.

The Technical Working Group identified operational definitions for these characteristics in existing data sources and selected a recommended measure for each of the 14 characteristics for inclusion in patient and population surveys and, whenever possible, in health administrative data sets (see Appendix 14). As the appendix indicates, we recommend using gender rather than sex when assessing equity.

Thirteen of the 14 characteristics are in the Canadian Community Health Survey (CCHS) and six are included in the Ministry of Health and Long-Term Care's Health Care Experience Survey (HCES). Information on individuals' socio-economic characteristics in health administrative data sets is typically limited to age, sex, urban/rural location (via postal code) and neighbourhood income level. It is possible, however, to link the administrative data held by the ministry and the Institute for Clinical Evaluative Sciences (ICES) at the individual level to CCHS and HCES data for survey patients who consent to linkage with administrative data when they complete the survey. For this sample of the population, equity can be assessed in relation to any of the socio-economic characteristics the survey measures.

Risk Adjustment

For valid comparisons of performance across settings (e.g., different primary care practices or different geographic areas), differences in the health and social characteristics of the population and access to health care resources often need to be taken into account through "risk adjustment," a statistical process designed to minimize the effect of such differences. The Technical Working Group has proposed a set of potential risk adjusters, shown in [Table 10](#). More work will be needed to recommend a priority set of risk adjusters, operationally define and identify data sources for the recommended adjusters, and determine how to incorporate the variables into risk adjustment models.

Table 10: Potential Risk Adjustment Variables

Potential Risk Adjustment Variables			
Patient/Population	Community	Local Health System	Organization/Provider
Characteristics	Characteristics	Characteristics	Characteristics
Age	Population size	- Primary care physician FTEs per capita	Panel size
Sex	Economic well-being	- Non-physician primary	
Rurality	Income inequality	- care provider FTEs per capita	
Health status	Dependency ratio	- Specialist physicians per capita	
	Social Deprivation Index	- Hospital beds per capita	
	Ontario Marginalization Index	- Long-term care beds per capita	
	Percentage of population that is:		
	- Immigrant		
	- Aboriginal		
	- Francophone		
	- Transient		

Stratified Analysis

To explore the relationship between specific health characteristics or health system features and primary care performance, it may be desirable to carry out additional stratified analyses beyond those conducted for purposes of equity assessment. Such analyses could address policy-informing questions such as:

- Does primary care performance vary across primary care models?
- Does primary care performance vary with the presence and number of chronic health conditions?

As the PCPM Framework is implemented and refined, it will be important to consider and build the capacity to conduct this kind of analysis.

Implementation

How Could the Recommended Measures Be Used?

The recommended measures constitute a rich source of primary care performance measures. They have been identified through a rigorous process of engagement with organizations and individuals representing a broad range of stakeholders as valuable to measure on a regular basis to inform decision-making. Clinicians, primary care organization and system managers, researchers and organizations representing patients and the public can draw on this bank of recommended measures to meet their needs. For some measures, data will be available from existing reports or data sources. In other cases, users would need to collect data themselves, employing the recommended measures. These measures can help:

- Primary care practices identify opportunities for improvement
- Primary care clinicians evaluate and explore an aspect of their practice as part of a reflective learning activity
- Researchers select outcome measures for use in clinical, health services and policy research in primary care
- Health system managers and policy makers monitor system performance and assess the impact of policy initiatives and system innovations
- Evaluators assess the implementation and impact of innovative programs in primary care practices
- Organizations such as the Ministry of Health and Long-Term Care, eHealth Ontario and OntarioMD select Electronic Medical Records (EMRs) and Electronic Health Records (EHRs) investments and develop EMR data standards and vendor specifications
- Health Quality Ontario expand and improve its work on reporting on the performance of primary care
- Planners and decision-makers conduct population needs-based planning
- Patient-advocacy and civil-society organizations gauge the responsiveness of primary care to the needs and expectations of patients, family caregivers and the public

All of these uses would help to drive primary care in Ontario toward the Triple Aim of better health, better care and better value.

What Can We Measure and Report On Now?

At the system level, 48 (27%) of the 179 recommended measures are currently available at the Local Health Integration Network level and 90 measures (50%) are available at the provincial level. Please see Appendix 4 (refer to *A Primary Care Performance Measurement Framework for Ontario Appendices*) for an overview of the availability of measures. The PCPM Framework measures are derived from multiple sources, including the ministry's Health Care Experience Survey (HCES), the Canadian Community Health Survey, the Commonwealth Fund International Health Policy Surveys and administrative data sets held by ICES and Cancer Care Ontario. The currency and frequency of reporting varies among the sources. These existing measures could be brought together to form integrated reports on Local Health Integration Network (LHIN) and provincial primary care performance. We could increase the number of recommended measures that are available in the short term by adding new questions to the HCES and expanding the number of measures derived from administrative data held by ICES.

Only 15 (13%) of the 112 practice-level measures in the PCPM framework will be widely available in the near future to primary care clinicians, mainly through the ICES-HQO Primary Care Practice Reports and Cancer Care Ontario (CCO). However, a growing number of primary care practices (especially Family Health Teams and Community Health Centres) and representative organizations (e.g., the Association of Ontario Health Centres and the Association of Family Health Teams of Ontario) are generating their own performance data from their EMRs and through patient surveys. HQO, in partnership with key stakeholders, is developing and testing a practice-level patient-experience survey that will be made available in 2015 for practices to use.

Several hundred primary care practices in Ontario submit EMR data to the Canadian Primary Care Sentinel Surveillance Network (CPCSSN), the Electronic Medical Record Administrative Data Linked Database (EMRALD) and the CHCs' Business and Intelligence Reporting Tools (BIRT), and receive regular reports on EMR-based performance measures, including peer comparisons.

Prioritizing a Subset of Measures for Short-Term Implementation

Recognizing the large number of recommended measures and the limited availability of data related to those measures, particularly at the practice level, the Steering Committee has identified the need to undertake a prioritization process. Using a systematic approach, and building on similar processes that have been completed or are currently underway, the prioritization process will include major stakeholders. It will identify two subsets of 10 to 20 high-value performance measures — one for the system level and one for the practice level. The prioritization process will favour measures for which there is available data and will focus on validity and usefulness to key audiences: patients, caregivers, primary care providers and decision-makers. The prioritization process will occur during the fall of 2014, and the subsets of prioritized measures will be available in late 2014 or early 2015.

Development of Aggregate Measures

For quality-improvement purposes it is useful to have a large number of specific measures to allow for precise identification of areas for attention. However, for other purposes (e.g., providing an overview of primary care organization or system performance), it is desirable to have a smaller set of measures. One approach is to identify a subset of priority measures, as described above. Another approach is to combine measures within a domain of primary care practice to produce an overall performance score. This aggregation could be done at the domain level (e.g., Effectiveness) or the sub-domain level (e.g., management of chronic conditions in the Effectiveness domain) or in some other manner (e.g., the components of the Triple Aim: health, patient experience and cost). Methods for developing composite measures are well-developed.¹²

A key issue in developing aggregate measures of performance is deciding whether and how to weight the individual measures that contribute to the aggregate score. Options include equal weighting of items or weighting based on one or more of: evidence linking individual measures to health outcomes, clinician preferences or patient/public preferences. The work of developing aggregate measures of primary care performance could be advanced in partnership with researchers.

Infrastructure Development/Improvement

Most measures included in the framework (87.5% of practice-level measures and 57% of system-level measures) require data that is not currently available. Monitoring performance on these measures will require the development of new infrastructure. The principal infrastructure needs are:

- A common repository for EMR data that would provide practices with regular performance feedback over time and in comparison with peers. Such feedback could provide information for taking action at the individual patient level through a practice-based patient re-identification process. Three repositories (CPCSSN, EMRALD and the CHCs' BIRT) already exist, but they currently include only a small proportion of primary care providers in Ontario. Ultimately, an EMR data repository with the capacity to accommodate all primary care patients, practices and providers is required. The Ontario Medical Association is currently developing a business plan for a service called insights4Care, which would have the capacity to serve this function (and others) for all physician practices in the province. Pilots for this program are projected to start in mid-2015. HQO is a logical partner in this initiative.

- A practice-level patient-experience survey that would provide regular feedback to practices over time and in comparison with peers (65 practice-level measures). As noted above, HQO, along with several primary care partners, will release a patient-experience survey that primary care practices can use if they choose. Given that access to the financial and technical resources required to administer a patient-experience survey varies among primary care practices, implementation is also likely to be variable. The capacity for peer comparison will therefore be limited. Ultimately, it may be desirable to have a standardized practice-level survey covering all primary care practices.

This could be accomplished either through the provision of funding and technical support to practices to conduct the survey and report aggregate results centrally (e.g., to HQO) or, as in England, through a centrally conducted population survey that generates practice-level data that is fed back to the practices (<https://gp-patient.co.uk/>).

- A mechanism for collecting data from individual providers. This could be accomplished either through a regular survey of primary care providers or through a questionnaire associated with renewal of annual membership in the providers' professional association or college. The advantage of the membership-based approach is that it would provide more complete data than would be obtained from a voluntary provider survey. Content of such questionnaires and access to aggregate data would need to be negotiated with the respective organizations. Provider organizations may be reluctant to release data at the individual provider level - particularly if it were used for purposes of public reporting or provider payment.
- The 2010 National Physician Survey (NPS) included a small number (nine) of recommended provider-reported measures. However, changes to the survey design make the future availability of those measures uncertain. The NPS and the Commonwealth Fund International Health Policy Survey of Primary Care Physicians provide data at only the provincial level and only from physicians. Given the growth of interprofessional primary care teams in Ontario, surveys or other data-collection methods that include non-physician primary care providers need to be developed — although the lack of a comprehensive register of primary care providers will make this development challenging.
- A mechanism for collecting data from organizations. As with provider-reported measures, the required data could be obtained through either a new survey or via mechanisms already used to collect data. For example, data collection could be linked to the submission of Quality Improvement Plans.
- A mechanism for combining primary care performance measures from multiple sources. To be most useful to end-users at the practice and system levels, data from multiple sources will need to be brought together in coherent, user-friendly reports. To some extent, HQO already plays this role at the system level through its public reporting activities and is beginning to do so at the practice level (with the *Primary Care Practice Report*) — although only with administrative data.

Organizational Roles and Responsibilities for Data Collection and Analysis

Throughout the PCPM initiative, the multiple stakeholders represented on the Steering Committee endorsed the importance of having an integrated approach for reporting on primary care performance in which data from multiple sources will be available and accessible. Of necessity, multiple organizations (including ICES, the Ministry of Health and Long-Term Care, CCO, HQO, Canadian Institute for Health Information, Statistics Canada and others) will collect, integrate and analyze the data to populate the PCPM Framework. ICES already holds many of the relevant data sets and is well-positioned to take on an expanded role as a data integrator. As noted previously, pooling of EMR data could support primary care performance measurement. An existing or newly formed organization will need to be identified and supported to perform that function. There are several existing organizations or networks in Ontario that could potentially come together to fulfil this role or work in a newly created partnership. Initiatives like EMRALD and the proposed insights4Care may be required to combine multiple data streams (e.g., EMR data and administrative data at the practice level).

Development/Modification of Data-Collection Instruments

Forty-nine of 68 recommended population-survey-based system-level measures are not currently included in the Ministry of Health and Long-Term Care's Health Care Experience Survey (HCES). The ministry's Health Analytics Branch will review these recommended measures to consider which of them might be added to that survey and, to control the length of the questionnaire, whether some non-recommended measures might be deleted. Similarly, 53 of 65 recommended practice-level patient-experience survey-based measures are not currently included in the survey that HQO and its partners are developing and testing. These measures will be considered for inclusion in future iterations of the survey.

For 17 system-level measures, the Measures and Technical Working Groups recommended modified wording of measures that are included in existing surveys (e.g., HCES, Commonwealth Fund International Health Policy Surveys). HQO will communicate these recommendations to the organizations responsible for the design of those surveys.

The multiplicity and lack of standardization of existing EMR products make data extraction and sharing for performance measurement and improvement purposes challenging, even for the most knowledgeable and determined users. There is a desperate need for accelerated efforts to strengthen vendor requirements to incorporate standardized high-value data elements, accommodate non-physician providers and team-based care, facilitate data transfer and exchange (including patients) and simplify processes for extracting and analyzing data. Building on the continuing work of the Canadian Institute for Health Information (CIHI) regarding EMR content standards, eHealth Ontario and OntarioMD are key players in advancing this agenda. CIHI's EMR content standards include a priority subset of data elements to promote the capture of standardized coded data at the point of care.¹³ Provider training, technical support and incentives to encourage structured data entry also need to be considered.

Piloting and Validation

Recommended performance measures based on patient and population surveys have been drawn from several sources. Most are from surveys that have been extensively tested and widely used in Canada and other settings. However, because they have not been used together in the same survey instrument, we strongly recommend pilot testing and appropriate validation of new surveys that are developed using measures from the PCPM Framework.

Principles of Data Stewardship, Privacy and Access

Health information custodians include practices and organizations that have custody or control of personal health information. These include health care providers and practices and organizations that are prescribed as health information custodians. Any transmission of personal health information or disaggregated data is subject to privacy and confidentiality rules outlined in the *Personal Health Information Protection Act*, 2004, and the principles of Ownership, Control, Access and Possession.¹⁴ A consenting process will be required for sharing provider- or practice-level data with any entity. There is a need for collective efforts to educate and engage the public and providers on how their information is being used and for what purposes.

Alignment Across Initiatives

Alignment of the PCPM initiative with existing performance-measurement and quality-improvement initiatives was considered during the framework's development. We will continue to consider this alignment as we implement and refine the framework over time. Whenever multiple measures that met our selection criteria were available to address a particular measurement priority, the Measures Working Group selected measures currently being reported in Ontario, if they were available. Representation on the Steering Committee and Working Groups includes organizations that are leading other performance-measurement and quality-improvement initiatives. This has facilitated alignment and will continue to do so in the future.

Toward Better Primary Care Performance Measurement and Better Primary Care

As the initiative evolved, the Steering Committee emphasized the critical importance of developing a process for the incremental implementation of the PCPM Framework and the need to support patients, providers and decision-makers on the measurement and improvement journey. The PCPM Framework provides the guidance for what is desirable to measure — the first step in the journey. In partnership with multiple stakeholder organizations, HQO will develop a high-level plan to identify performance-measurement gaps and barriers, and a potential path forward over the next year. The professional associations representing primary care providers have a major role to play in the implementation of the framework.

Performance measurement can identify opportunities for — and the impact of — improvement efforts, but performance data alone usually cannot identify what changes are needed or how to accomplish them. To improve performance, primary care providers and organizations, health system managers and policymakers need to be equipped with an understanding of quality-improvement methods, the ability to apply them and access to information about leading practices. Meeting this challenge will require ongoing collaboration among various stakeholders, including the Ministry of Health and Long-Term Care, HQO and the associations representing primary care providers, working in partnership with health scientists and educators, patients and, most importantly, primary care providers themselves.

Evaluation of the PCPM Initiative

Health Quality Ontario and its partners have invested substantial time and resources in the PCPM initiative. Although it may not be possible to attribute changes in health, patient experience and health care costs directly to this initiative, given the many other concurrent influences on those outcomes, assessment of the implementation process is both feasible and appropriate. We recommend the commissioning of an arm's-length formative evaluation of the implementation of the PCPM Framework. The evaluation would identify and build on implementation successes and identify and address implementation challenges. To be most useful, implementation and evaluation of the framework should begin simultaneously.

Structure and Process for Updating and Revising the PCPM Framework

The PCPM Framework will need to be revised to align with emerging evidence, new primary care models, changing policy priorities, new data sources and evolving primary care information needs. In particular, the roles and perspectives of non-physician primary care providers, patients and caregivers need to be better reflected in future iterations of the framework and measures. It is expected that this process will occur every three to five years, or more frequently as the need arises. There is also a need to develop structures and processes that are inclusive of key stakeholders, including patients, caregivers and the public, to direct the updating and revision of this framework.

Summary

Recommendations

To support the transition to better primary care performance measurement, the PCPM Steering Committee will guide the implementation of the PCPM Framework over the next one to two years. Implementation will be a shared responsibility of all primary care stakeholders. The Steering Committee recommends:

1. Accelerating efforts to strengthen vendor requirements to incorporate standardized high-value data elements, facilitate standardized data capture, data transfer and exchange, and simplify processes for extracting and analyzing data. CIHI, eHealth Ontario, OntarioMD and HQO, together with primary care providers who are actively involved in using their own data, are key players in advancing this agenda
2. Developing the necessary infrastructure to make the measures available throughout the province at both the practice and system levels, including: mechanisms for pooling EMR data in order to provide practices with regular performance feedback over time and in comparison with peers; a practice-level patient experience survey that would provide regular feedback to practices over time and allow for comparison with peers; a mechanism for collecting data from individual providers; a mechanism for collecting data from organizations and a mechanism for combining primary care performance measures from multiple sources
3. Developing aggregate measures of primary care performance to provide overall measures of performance at the domain (e.g., Effectiveness) or sub-domain (e.g., management of chronic conditions) levels
4. Identifying organizational responsibility for producing coherent, user-friendly reports using performance measurement data. HQO already provides this at the system level and is beginning to provide this type of reporting at the practice level (Primary Care Practice Reports)
5. Including the PCPM Framework measures in new survey tools or updates of existing ones, recognizing that they have been identified and endorsed through an extensive engagement process.
6. The Ministry of Health and Long-Term Care, HQO and the associations representing primary care providers, in partnership with health scientists and educators, patients and primary care providers, work collaboratively to equip primary care providers, organizations, health system managers and policymakers with an understanding of performance measurement, quality improvement methods and leading practices
7. Updating and revising the PCPM Framework, as required, to align with emerging evidence, changing policy priorities, new data sources and evolving information needs, using structures and processes that are inclusive of stakeholders, including patients, caregivers and the public
8. Commissioning an arm's-length formative evaluation of the implementation of the PCPM Framework to detect and address implementation challenges and to identify and build on implementation successes.

Next Steps

To support the transition to better primary care performance measurement:

1. In the near term, the PCPM Steering Committee will select two priority subsets of measures and recommended approaches for data collection to support immediate measurement at both system and practice levels, to be available in late 2014 or early 2015
2. In the near term, HQO will continue to work in partnership with key stakeholders to develop and test a practice-level patient experience survey that will be made available in 2015 for administration and use by primary care practices
3. Over the next year, in partnership with multiple stakeholder organizations, HQO will develop a plan to identify performance measurement gaps and barriers, and the means to address them
4. HQO will communicate the Steering Committee's recommendations for modified wording of measures in existing surveys (e.g., HCES) to the responsible organizations and participate in pan-Canadian discussions with the Commonwealth Fund about modifying the questions in the Commonwealth Fund International Health Policy Surveys
5. The Ministry of Health and Long-Term Care's Health Analytics Branch will review the PCPM Framework's recommended measures to explore the potential for adding recommended measures to the HCES
6. Drawing on the PCPM Framework measures, HQO will examine the feasibility of working in partnership with researchers to develop aggregate measures that will facilitate the measurement of overall performance across various domains of primary care

Our work to date has strengthened collaborations, increased information sharing and deepened our knowledge of important primary care performance measurement initiatives currently underway. Equally important, we have identified where there are gaps in data availability and reporting. Our recommendations focus on taking action to address the gaps and strengthen the usefulness of what is already available — supporting better primary care performance measurement and, ultimately, better primary care.

Health Quality Ontario and the PCPM Steering Committee look forward to the next phase of our work together to support this important work.

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