Measuring Up 2017
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1. Introduction

Each year, Health Quality Ontario (HQO) produces a report on the health of Ontarians and on how Ontario’s health system is performing. This technical appendix accompanies this year’s *Measuring Up 2017* and the Technical Data table.

The technical appendix provides detailed specifications for each of the indicators presented in the report. It also includes general information on the indicator selection process, analytical methods, data sources and external review process.

Indicator selection

The indicators included in *Measuring Up* are drawn from the Common Quality Agenda, a set of key performance indicators selected in collaboration with health system partners. The Common Quality Agenda indicators reflect the key priorities of patients and health care providers.

The Common Quality Agenda indicators are used to track long-term progress in meeting Ontario’s health goals, and help make the health system more transparent and accountable. The indicators are also used to promote an integrated, patient-focused system.

The Common Quality Agenda has been evolving since its inception and changes are made annually based on indicator relevance, data availability and data quality. It currently includes more than 50 performance indicators. The set is expected to continue to evolve in line with HQO’s public reporting and as HQO works with partners on the Common Quality Agenda.

Each chapter of *Measuring Up* (and the accompanying technical specifications) represents an area of the health system that aligns with the Common Quality Agenda indicators framework Our Health, Primary Care, Mental Health and Addictions, Home Care, Hospital Care, Long-Term Care, Palliative Care, System Integration, and Health Spending.

Analysis

Data over time
For each indicator, we report the data for the most recent year (fiscal year or calendar year) in which the data are complete and scientifically sound (reliable and valid). Where data are available and comparable we present results over time. We report the longest duration available up to a maximum of 10 years. Where provincial targets exist, we also note these, along with the most recent performance of the corresponding indicator.

Comparisons within Ontario
In addition to examining changes in performance for the province as a whole, for most indicators we also report the data at the regional level. There are 14 Local Health Integration Networks (LHINs) in Ontario that are based on geographical regions (Figure 1.1). For regional comparisons in Ontario, we typically report the LHIN region results along with the Ontario results for context. To determine if regional variation is statistically
significant, we compared 95% confidence intervals of the LHINs with the lowest and highest values where available. The report states a difference or variation only when the 95% confidence intervals of the results do not overlap. In the LHIN tab of the technical data table the values are highlighted when the confidence intervals of the LHINs do not overlap with the confidence intervals of the Ontario value.

In addition, where data are available we present the indicator results by different stratifications in Ontario; sex, age groups, income, education and immigration levels, as well as urban and rural settings. The report states an increase/decrease or higher/lower result only when the 95% confidence intervals of the results do not overlap (i.e., when the differences in the results are statistically significant)

**Figure 1.1: Map of Local Health Integration Network regions in Ontario**

How Ontario performs compared to others
To assess how Ontario's health system performs, we also provide comparisons with other provinces in Canada, where possible. We do not include data for Canadian territories as their population sizes are different from Ontario, and they may not be appropriate comparators.

Where data are available to allow for international comparisons, we typically compare Ontario’s performance to other countries. One of the sources for international comparison is the Commonwealth Fund International Health Policy Survey. In addition to Canada, the countries included in the survey are: Australia, France, Germany, Netherlands, New Zealand, Norway, Sweden, Switzerland, United Kingdom and the United States.
These countries have many economic and demographic similarities to Canada and therefore are generally considered to be appropriate comparators. The other source for international comparisons is the Organisation for Economic Co-operation and Development (OECD) data.

When pan-Canadian or international comparisons are available, the estimate of Ontario's performance on an indicator within the same period (e.g., fiscal year) may vary slightly between the pan-Canadian or international comparison and the regional comparison within Ontario. This may be due to differences in the data sources (e.g., one survey for an international comparison and a different one for a regional comparison within Ontario) or due to differences in the methodologies to calculate the indicator e.g. differences in adjustment factors and standard populations resulting in two different values for Ontario performance on the same indicator).

**Adjustments (for age, sex and risk)**
Where appropriate, indicators are age-adjusted or age- and sex-adjusted to the 2011 Canadian Census population, which is a commonly used standard population. In some cases, indicators are risk-adjusted for several factors that are thought to affect the indicator result. Adjustments are done primarily for the purposes of comparison across geographic regions and over time. For details on which indicators were adjusted and the methodology used, please see the individual indicator specifications.

**Data providers and Data Sources**

HQO does not collect personal health information but rather partners with others to analyze and report performance on quality indicators. The indicator results presented in *Measuring Up* were provided to HQO by a variety of data providers, including:
- The Better Outcomes Registry & Network (BORN) Information System
- The Canadian Institute for Health Information (CIHI)
- CorHealth Ontario
- Cancer Care Ontario (CCO)
- The Institute for Clinical Evaluative Sciences (ICES)
- The Ministry of Health and Long-Term Care (MOHLTC)
- Health Shared Services Ontario (HSSO) (formally known as the Ontario Association of Community Care Access Centres)
- The Ontario Hospital Association (OHA)
- Public Health Agency of Canada (PHAC)
- Public Health Ontario (PHO)
- Statistics Canada

The data source(s) for each indicator are listed within the individual indicator specifications. More details on the specific data sources that HQO used to produce the indicators are noted below.

**Better Outcomes Registry & Network (BORN) Information System**

BORN is Ontario’s pregnancy, birth and early childhood registry and network. Established in 2009 to collect and share data about each child born in the province, BORN Ontario manages an advanced database (BORN Information System) that provides reliable, secure and comprehensive information on maternal and child care. The BORN Information System (BIS) enables the collection of, and access to, clinical data on every birth and young child in Ontario. The BIS is a province-wide, web-based system in which data on mothers and babies are directly entered either by care providers or data entry clerks, or extracted and uploaded by a hospital’s
electronic patient record. As of November 2009, all hospitals in the province with a maternal/newborn program were contributing birth data.

**Canadian Community Health Survey (CCHS) – Statistics Canada**

The CCHS is a nationally representative, cross-sectional survey of the Canadian community-dwelling population conducted by Statistics Canada. It collects information related to health status, health care utilization and health determinants of the Canadian population. It relies upon a large sample of respondents and is designed to provide reliable estimates at the health region level every 2 years. Starting in 2007, data for the Canadian Community Health Survey (CCHS) were collected annually instead of every two years. The sample size was changed to 65,000 respondents each year starting in 2007.

The CCHS covers the population 12 years of age and older. Residents living on reserves and other Aboriginal settlements in the provinces; full-time members of the Canadian Forces; the institutionalized population, children aged 12-17 that are living in foster care, and persons living in the Quebec health regions of Région du Nunavik and Région des Terres-Cries-de-la-Baie-James are excluded from the survey. The CCHS is offered in English and French. To remove language as a barrier in conducting interviews, each of the Statistics Canada Regional Offices recruits interviewers with a wide range of language competencies.

In 2012, CCHS began work on a major redesign project that was completed and implemented for the 2015 cycle. The objectives of the redesign were to review the sampling methodology, adopt a new sample frame, modernize the content and review the target population.

As a result of the redesign, the 2015 CCHS has a new collection strategy, is drawing the sample from two different frames and has undergone major content revisions. With all these factors taken together, the report does not compare the data from previous cycles to 2015 data.

**CorHealth Ontario**

CorHealth Ontario is an organization formed by the merger of the Cardiac Care Network of Ontario and the Ontario Stroke Network, with an expanded mandate spanning cardiac, stroke and vascular services through the entire course of care.

CorHealth Ontario proudly advises the Ministry of Health and Long Term Care, Local Health Integration Networks, hospitals and care providers to improve the quality, efficiency, accessibility and equity of cardiac, stroke and vascular services for patients across Ontario.

As part of CorHealth Ontario’s mandate, it oversees the monitoring and measuring of wait times for cardiac procedures in all regions of Ontario, including the priority cardiac services included in Ontario’s Wait Times Strategy, which are presented in this report. CorHealth Ontario maintains a centralized provincial registry of all patients waiting for cardiac surgery, and includes (and reports on) all hospitals that conduct coronary artery bypass graft surgery (CABG), percutaneous coronary intervention (PCI) and diagnostic cardiac catheterization (CATH) in Ontario. CorHealth Ontario calculates an individualized urgency score for all patients awaiting procedures, which determines their urgency level and their individualized wait time. In addition, provincial recommended maximum wait time targets have been set based on urgency levels for each procedure.

**Client and Caregiver Experience Evaluation (CCEE) Survey – National Research Corporation Canada (NRCC) – Health Shared Services Ontario (HSSO)**

The CCEE survey interviews publically-funded home care patients (active in-home, discharged in-home, and placement home care patients) about their home care experiences. The purpose is to provide the home care sector with statistically meaningful information and comparable data about patients’ experience when receiving services and to support the home care sector in identifying gaps, levers and opportunities for quality
improvement. The NRCC developed the CCEE survey tool in collaboration with HSSO, researchers, CCACs and service provider organization members. In Ontario, the survey is conducted in four waves per year in all 14 LHINs by Computer Assisted Telephone methodology.

Client Profile Database (CPRO) – Ministry of Health and Long-Term Care (MOHLTC)
The CPRO contains patient-level application information for individuals placed or waiting to be placed in a long-term care home. The database includes three broad types of information: patient characteristics and location at application, long-term care home choices, and milestone (date) events throughout the long-term care home placement process. CPRO is the authoritative data source for long-term care home bed demand, patient placement and wait list data. The Health Shared Services Ontario submits patient-level data on behalf of each Local Health Integration Network on a monthly basis to support bed utilization monitoring, performance management and long-term care accountability planning. In the fall of 2016, a modernized CPRO was launched to improve data quality and timeliness. Modernized CPRO includes datasets from April 2012 and onward. Data from CPRO are housed by the Ministry of Health and Long-Term Care.

Commonwealth Fund (CMWF) International Health Policy (IHP) Survey
As part of its mandate, the CMWF has been conducting the IHP Survey in 11 countries for more than a decade. In a triennial cycle, the IHP survey targets different populations, including physicians, older adults, and the general adult population.

The 2016 Commonwealth Fund International Health Policy Survey of the General Public reflects the perceptions of a random sample of the general public (aged 18 and older) in 11 countries: Australia, Canada, France, Germany, Netherlands, New Zealand, Norway, Sweden, Switzerland, United Kingdom and United States. In Measuring Up 2017 we compare Ontario data to the 2016 CMWF IHP Survey results where possible. Participants were interviewed by telephone (land line or cellphone) between March 1 and June 22, 2016. In Canada, 4,547 respondents were surveyed; the Ontario sample was 1500 respondents. It was oversampled to be able to calculate provincial estimates from the survey. HQO partners with the Commonwealth Fund to support the survey and support oversampling of the Ontario population so that the survey results can be used to reliably compare Ontario with other provinces and countries.

The 2016 survey of the general public was designed to explore and collect health-related data for the following main topics:

- Overall views of the health care system
- Patient’s access to primary and preventive care, such as availability of same-day appointment
- Patient’s relationship with regular doctor/GP, including experience with coordination of health care
- Patient’s use of and experience with specialists
- Patient’s experience with care in the hospital and emergency room Health care coverage, affordability of care, experience with administrative/financial burdens, and out-of-pocket costs
- Experiences with prescription medication and medical errors
- Patient’s overall health and medical conditions
- Behavioral factors affecting health and social context

Continuing Care Reporting System (CCRS) – Canadian Institute for Health Information (CIHI)
CIHI developed the CCRS to enhance the collection of standardized facility-based long-term care and complex continuing care information for national comparative reporting. The CCRS contains demographic, administrative, clinical and resource utilization information on individuals receiving continuing care services in hospitals or in long-term care homes in Canada. Participating organizations also provide information on facility
characteristics to support comparative reporting. The clinical data are collected using an internationally accepted standard, the Resident Assessment Instrument Minimum Data Set Version 2.0 (RAI-MDS 2.0). Each resident in a long-term care home is assessed at admission and every three months or whenever they experience a significant change in health status. The RAI-MDS 2.0 assessment includes patient-level measures of function, mental and physical health, social support and service use. It was modified by CIHI with permission for Canadian use. All long-term care homes in Ontario have submitted data to CIHI on a quarterly basis since 2009.

**Discharge Abstract Database (DAD) – Canadian Institute for Health Information (CIHI)**

The DAD is a database of information abstracted from hospital records that captures administrative, clinical and patient demographic information on all hospital inpatient separations, including discharges, deaths, sign-outs and transfers. CIHI receives Ontario data directly from participating facilities or from their respective regional health authorities or the Ministry of Health and Long-Term Care. The DAD includes patient-level data for acute care facilities in Ontario. Data are collected, maintained and validated by CIHI. The main data elements of the DAD are patient identifiers (e.g. name, health care number), administrative information, clinical information (e.g. diagnoses and procedures) and patient demographics (e.g. age, sex, geographic location).

**Health Care Experience Survey (HCES) – Ministry of Health and Long-Term Care (MOHLTC)**

The HCES is a voluntary telephone survey aimed at Ontarians aged 16 and older and is conducted on a quarterly basis. The HCES asks randomly selected Ontarians for their views about their health care system, how healthy they are, if they have chronic conditions, if they have a primary care provider (family doctor, nurse practitioner or other health care provider), how long it takes to see their provider, their experience using the health care system, if they have been to an emergency room or a walk-in clinic, and their household and demographic characteristics.

People living in institutions, in households without telephones, and those with invalid/missing household addresses in the Registered Persons Database (RPDB) are excluded. The Ministry of Health and Long-Term Care uses the information from the survey to understand the experience of Ontarians with respect to primary care.

**Home Care Database (HCD) – Ministry of Health and Long-Term Care (MOHLTC)**

The HCD is a clinical, patient-centred database that captures all home care services provided or coordinated by Ontario’s Community Care Access Centres (CCACs), including government-funded home and community services. The HCD is managed by Health Shared Services Ontario (HSSO). It includes patient, intake, assessment, and admission/discharge information. This information is used to determine the eligibility of patients and the intensity of care coordination, care planning, and services that align with their care needs. Clinical data are collected using standardized interRAI tools, including the Resident Assessment Instrument for Home Care (RAI-HC).

**Home Care Reporting System (HCRS) – Canadian Institute for Health Information (CIHI)**

The HCRS was created by CIHI to capture data from organizations responsible for providing publicly funded home care services in Canada. The HCRS contains demographic, clinical, functional and resource utilization information on all long stay (received home care for more than 60 days) individuals who have been accepted into home care programs collected at multiple points throughout their home care services, as well as on individuals who receive an assessment for determining eligibility for placement into long-term care. The information within HCRS is collected using the Resident Assessment Instrument for Home Care (RAI-HC),
which is a standardized, validated and multi-dimensional assessment tools for determining patient needs, measuring changes in clinical status and patient outcomes, and describing relative costs of services and supports that the patient will likely use. The HCRS also contains information on home care organization characteristics to support comparative reporting. Data from the 14 health regions in Ontario have been submitted quarterly to CIHI since 2008.

Laboratory Reporting Tool (LRT) – Cancer Care Ontario (CCO)
The LRT includes data on the Colon Cancer Check (CCC) program, fecal occult blood testing (FOBT) kit distribution, dispensing, and results from CCC-participating laboratories, including a unique physician identifier (the CPSO number) of the ordering physician. Data are available on CCC FOBT kits processed from April 2008 onwards.

National Ambulatory Care Reporting System (NACRS) – Canadian Institute for Health Information (CIHI)
NACRS contains data for all hospital-based and community-based emergency and ambulatory care, including day surgeries, outpatient clinics and emergency departments. Data are collected, maintained and validated by CIHI. CIHI receives Ontario data directly from participating facilities or from their respective regional health authorities or the Ministry of Health and Long-Term Care. Data are collected, maintained and validated by CIHI. Data elements of the NACRS include patient identifiers (e.g. name, health care number), patient demographics (e.g. age, sex, geographic location), clinical information (e.g. diagnoses and procedures), and administrative information.

National Health Expenditure Database (NHEX) – Canadian Institute for Health Information (CIHI)
The NHEX collects, processes, and analyzes summary data on all health spending in Canada from 1975 onwards with health expenditures for the most recent two years being forecasted. Data are extracted manually from various publicly available documents, such as Statistics Canada documents, national and provincial public accounts, and private insurance companies. The NHEX has data on health spending in Canada by spending category (i.e. public and private sectors) and source of funding (e.g. out of pocket, private health insurance, provincial government sector, etc.). National health expenditures in Canada are based on a system of classification consistent with international standards developed by the Organisation for Economic Co-operation and Development (OECD).

OECD Health Data 2017 – The Organisation for Economic Co-operation and Development (OECD)
The OECD is a unique forum where governments work together to address the economic, social and environmental challenges of globalisation. The OECD is also at the forefront of efforts to understand and to help governments respond to new developments and concerns, such as corporate governance, the information economy and the challenges of an ageing population. The Organisation provides a setting where governments can compare policy experiences, seek answers to common problems, identify good practice and work to coordinate domestic and international policies. OECD Publishing disseminates widely the results of the Organisation’s statistics gathering and research on economic, social and environmental issues, as well as the conventions, guidelines and standards agreed by its members.
Patient Experience Survey - National Research Corporation Canada (NRCC) - Ontario Hospital Association (OHA)

NRCC Patient Experience Surveys have been implemented in many Ontario hospitals since 2002. Surveys are provided for the following sectors:

- Inpatient, including acute adult, maternity and obstetrics, and pediatrics, and neonatal intensive care
- Emergency Department
- Urgent Care Centre
- Rehabilitation
- Ambulatory Clinics
- Ambulatory Oncology
- Day Surgery
- Long Stay Resident Experience (LSRE) (Formally Complex Continuing Care and Long Term Care)
- Mental Health (long stay, short stay, out-patient)

The Ontario Hospital Association (OHA) works closely with NRCC to report and improve patient and family experience with their hospital care.

Ontario Diabetes Database (ODD) – Institute for Clinical Evaluative Sciences (ICES) derived cohort

The ODD employs a validated algorithm to identify people with diabetes using data on hospitalizations and physician visits. Hospital discharge abstracts, collected by the Canadian Institute for Health Information (CIHI) from April 1988 onwards were used to identify Ontarians with a valid health card number who had been hospitalized with a new or pre-existing diagnosis of diabetes. Physician claim records held by the Ontario Health Insurance Plan (OHIP) from July 1991 onwards were also used to identify individuals with visits to a physician for diabetes. When there was a hospital record with a diagnosis of pregnancy care or delivery close to a diabetic record (i.e., diabetic record date between 120 days before and 180 days after a gestational admission date), the diabetic record was considered to be for gestational diabetes and was excluded. Individuals were considered to have diabetes if they had at least one hospitalization or two physician service claims over a two-year period. People enter the ODD as incident cases when they are defined as having diabetes (i.e., the first of DAD admission date or OHIP service date over the two-year period as incident date).

An analysis reported that the current algorithm had a sensitivity of 86% and a specificity of 97% for identifying diabetes in the population. The positive predictive value of the algorithm was 80%.

Ontario Health Insurance Plan (OHIP) – Ministry of Health and Long-Term Care (MOHLTC)

The OHIP claims database covers all reimbursement claims to the MOHLTC made by fee-for-service physicians, community-based laboratories and radiology facilities. The OHIP database at ICES contains encrypted patient and physician identifiers, codes for services provided, date of service, the associated diagnosis and fee paid. Services which are missing from the OHIP data include: some lab services; services received in provincial psychiatric hospitals; services provided by health service organizations and other alternate providers; diagnostic procedures performed on an inpatient basis and lab services performed at hospitals (both inpatient and same day). Also excluded is remuneration to physicians through alternate funding plans (AFPs), which could distort analyses because of their concentration in certain specialties or geographic areas.
Ontario Mental Health Reporting System (OMHRS) – Canadian Institute for Health Information (CIHI)
The OMHRS, housed at CIHI, collects information about individuals admitted to designated adult mental health beds in Ontario. OMHRS includes information on admissions and discharges as well as clinical information. Clinical data are collected using the Resident Assessment Instrument for Mental Health (RAI-MH), a standardized assessment instrument for inpatient mental health care. It includes information about mental and physical health, social support and service use. Data are collected on clients from participating hospitals in Ontario at admission, discharge and every three months for patients with extended stays. Data are available from October 1, 2005 onward. The number of active OMHRS sites has varied between 65 and 74 since the start of OMHRS in 2005–2006. In the early years of OMHRS, between 90% and 98% of active sites submitted at least some data every quarter. This rate has increased to 100% for all 4 quarters of 2014–2015. As of May 15, 2017, there were 84 participating facilities that have submitted data at least once to the OMHRS database since the implementation of OMHRS in October 2005.

Registered Persons Data Base (RPDB) – Ministry of Health and Long-Term Care (MOHLTC)
The RPDB provides basic demographic information about anyone who has ever received an Ontario health card number. The RPDB is a historical listing of the unique health numbers issued to each person eligible for Ontario health services. This listing includes corresponding demographic information such as date of birth, sex, address, date of death (where applicable) and changes in eligibility status. Data from the RPDB are enhanced with available information through other administrative data sources at the Institute for Clinical Evaluative Sciences (ICES); however, even the enhanced dataset overestimates the number of people living in Ontario for several reasons, including the source of death information and record linkage issues. Although improvements have been made in recent years, the RPDB still contains a substantial number of individuals who are deceased or no longer living in Ontario. As such, the RPDB will underestimate mortality. To ensure that rates and estimates are correct, a methodology has been developed to adjust the RPDB so that regional population counts by age and sex match estimates from Statistics Canada.

Self-Reporting Initiative (SRI) – Ministry of Health and Long-Term Care (MOHLTC)
The SRI is the self-reporting solution for information collection and sharing among health service providers, Local Health Integration Networks (LHINs) and the MOHLTC. Ontario hospitals submit patient safety data to the MOHLTC through SRI on a regular basis, and the data are publicly reported on Health Quality Ontario’s Public Reporting Patient Safety web pages.

Wait Time Information System (WTIS) – Cancer Care Ontario (CCO)
The Ontario WTIS is maintained by CCO on behalf of the Ministry of Health and Long-Term Care. The web-based system collects data on wait times including surgical and diagnostic imaging and ED wait times and alternate level of care days. The ALC days includes both acute care and post-acute care ALC patients.

External review

We obtained external peer reviews of each chapter in Measuring Up. Subject matter experts, stakeholders and data providers were sent preliminary drafts of the chapters, which included indicator results and our interpretations of the results. We asked reviewers to comment on the accuracy of the data and our
interpretations of the results. We revised chapters accordingly. A list of external reviewers is located in the Acknowledgements section of the main report.

**Indicator Library**

The Indicator Library provides a one-stop, fully searchable library containing technical information of the health system performance quality indicators, reported by Health Quality Ontario including the indicators reported in this technical appendix for MU 2017. Each indicator profile in the indicator library includes a description of the indicator, its technical specifications, the rationale for reporting the indicator, information on its alignment with similar indicators, information about and/or links to data sources, and other details about the indicator where applicable. Visit the indicator library at [http://indicatorlibrary.hqontario.ca](http://indicatorlibrary.hqontario.ca)
2. Our Health

Potential years of life lost prematurely due to all-causes and due to suicides and self-inflicted injuries per 100,000 people

Description
This indicator measures the potential years of life lost prematurely due to all-causes and due to suicide, per 100,000 people. Premature is defined in Canada as deaths before 75 years of age. A lower rate is better.

HQO reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Years per 100,000 people

Calculation Methods
This indicator is calculated as: numerator divided by the denominator and multiplying that figure by 100,000 population

Numerator
Total potential years of life lost uses the sum of differences (for all people who died prematurely) between age 75 and age of death for all-causes
PYLL due to suicide uses the sum of differences (for all people who died prematurely) between age 75 and age of death due to suicides and self-inflicted injuries [X60-X84, Y87.0]

Denominator
Total mid-year population younger than age 75

Adjustment (risk, age/sex standardization)
Age-standardized using the 2011 Canadian population

Data Source
Vital Statistics, Birth and Death Databases

Data provided to HQO by
Statistics Canada

Reported Levels of comparability
Time, Education
OTHER RELEVANT INFORMATION

Caveats and Limitations
An upper age limit of 75 does not imply that deaths in the population older than 75 could not be avoided. However, multiple comorbidities are common among older adults, making the assignment of a single cause of death challenging. An analysis of avoidable mortality over time does not take into account changes in the incidence of disease over time. There is also likely to be a substantial time lag between the introduction of a public health policy, improved healthcare services, innovations in medicine and a corresponding reduction in avoidable mortality. The age limit of 75 is used in Canada and is based on life expectancy; other countries may use different upper age limits making this indicator less comparable across countries.

Comments Summary
Potential years of life lost prematurely is sourced from: Statistics Canada. Table 102-4316 - Premature and potentially avoidable mortality, Canada, provinces and territories, annual, CANSIM. Potential years of life lost due to suicide and self-inflicted injury is sourced from: Statistics Canada. Table 102-4314 - Mortality and potential years of life lost, by selected causes of death and sex, three-year average, census metropolitan areas, occasional, CANSIM.
Percentage of people aged 18 and older who were obese based on self-reported weight and height

Description
This indicator measures the percentage of people who are classified as being obese based on self-reported weight and height. Obesity is measured using body mass index (BMI), based on self-reported height and weight. For adults 18 years and older, BMI > 30 is considered obese. The lower percentage is better.

HWO reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Percentage

Calculation Methods
Numerator divided by denominator times 100

Numerator
Weighted number of respondents aged 18 and older with a BMI > 30.
Inclusions:
If HWTDVISW equals 4, 5, or 6
Codes for HWTDVISW (BMI class):
1 = Underweight: BMI < 18.50 = underweight
2 = Normal weight: 18.50 <= BMI < 25 = normal
3 = Overweight: 25 <= BMI < 30 = overweight
4 = Obese – class 1: 30 <= BMI < 35 = obese (class I)
5 = Obese – class 2: 35 <= BMI < 40 = obese (class II)
6 = Obese – class 3: 40 <= BMI = obese (class III)

This variable assigns adult respondents aged 18 and over (except pregnant women) to one of the following categories, according to their Body Mass Index (BMI): underweight; acceptable weight; overweight; obese class I; obese class II; and, obese class III. Here, the BMI categories are adopted from a body weight classification system recommended by Health Canada and the World Health Organization (WHO) which has been widely used internationally.

Denominator
Weighted number of respondents aged 18 or older that responded to survey question.
Exclusions:
Don’t know, Not stated and Refusal are not included in the analysis
Adjustment (risk, age/sex standardization)
Direct age-adjusted using 2011 Canada population

Data Source
Canadian Community Heath Survey (CCHS)

Data provided to HQO by
Statistics Canada

Reported Levels of comparability
Province, Age, Income, Education, Rurality, Region, Sex

OTHER RELEVANT INFORMATION

Caveats and Limitations
Because of the significant changes to the survey methodology, Statistics Canada does not recommend making comparisons of the redesigned 2015 cycle of the CCHS with past cycles. In addition, surveys’ coverage excludes: persons living on reserves and other Aboriginal settlements in the provinces; full-time members of the Canadian Forces; the institutionalized population, children aged 12-17 that are living in foster care, and persons living in the Quebec health regions of Région du Nunavik and Région des Terres-Cries-de-la-Baie-James. Altogether, these exclusions represent less than 3% of the Canadian population aged 12 and over. A systematic review of the literature concluded that the use of self-reported data among adults underestimates weight and overestimates height, resulting in lower estimates of obesity than those obtained from measured data. Differential musculature or bone mass among individuals, as well as across ethno cultural groups and sexes does not factor into how the BMI is calculated.

Comments Summary
BMI is not calculated for pregnant women. Although calculation of BMI is not recommended for lactating women, the index provided here is calculated for women who report that they are breastfeeding. A major redesign project was completed and implemented for the 2015 CCHS cycle. The objectives of the redesign were to review the sampling methodology, adopt a new sample frame, modernize the content and review the target population. As a result of the redesign, the 2015 CCHS has a new sampling strategy, is drawing the sample from two different frames and has undergone major content revisions. With all these factors taken together, caution should be taken when comparing data from previous cycles to data released for the 2015 cycle onwards. Education stratification analysis is restricted to 25 and older. Proportions and ratios are obtained by summing the final weights of records having the characteristic of the numerator and the denominator, and then dividing the first estimate by the second.
Percentage of people aged 12 and older who self-reported daily or occasionally cigarettes smoking

**Description**
This indicator measures the percentage of people aged 12 and older who report currently smoking cigarettes (daily or occasionally). A lower percentage is better.

**HQQ reporting tool/product**
Public reporting

**DEFINITION AND SOURCE INFORMATION**

**Unit of Measurement**
Percentage

**Calculation Methods**
Numerator divided by denominator times 100

**Numerator**
The weighted number of respondents who reported current daily or occasional smoking of cigarettes.
Inclusions:
If variable SMK_005 equals 1, 2,
Question Text: At the present time, do you smoke cigarettes every day, occasionally or not at all?
Codes for SMKDSTY variable
1 = Daily
2 = Occasionally
3 = Not at all
7 = Don’t know
8 = Refusal

**Denominator**
The weighted number of respondents aged 12 or older that responded to the survey question.
Exclusion:
Don’t know, Not stated and Refusal are not included in the analysis.

**Adjustment (risk, age/sex standardization)**
Direct age-adjusted using 2011 Canada population

**Data Source**
Canadian Community Heath Survey (CCHS)

**Data provided to HQO by**
Reported Levels of comparability
Province, Age, Income, Education, Rurality, Region, Sex

OTHER RELEVANT INFORMATION

Caveats and Limitations
Because of the significant changes to the survey methodology, Statistics Canada does not recommend making comparisons of the redesigned 2015 cycle of the CCHS with past cycles. As this indicator relies on self-reported data, the true rate might in fact be higher or lower. In addition, the surveys’ coverage excludes: persons living on reserves and other Aboriginal settlements in the provinces; full-time members of the Canadian Forces; the institutionalized population, children aged 12-17 that are living in foster care, and persons living in the Quebec health regions of Région du Nunavik and Région des Terres-Cries-de-la-Baie-James. Altogether, these exclusions represent less than 3% of the Canadian population aged 12 and over.

Comments Summary
A major redesign project was completed and implemented for the 2015 cycle. The objectives of the redesign were to review the sampling methodology, adopt a new sample frame, modernize the content and review the target population. As a result of the redesign, the 2015 CCHS has a new collection strategy, is drawing the sample from two different frames and has undergone major content revisions. With all these factors taken together, caution should be taken when comparing data from previous cycles to data released for the 2015 cycle onwards. Education stratification analysis is restricted to 25 and older. Proportions and ratios are obtained by summing the final weights of records having the characteristic of the numerator and the denominator, and then dividing the first estimate by the second.
Percentage of people aged 18 and older who reported being physically inactive

Description
This indicator measures the percentage of people aged 18 or older who reported being physically inactive, based on the number of minutes of physical activity reported in the last 7 days and indicates they didn't engage in any moderate or vigorous physical activity that lasted a minimum of 10 continuous minutes in a week. Moderate exercise is defined as an activity that causes a person to breathe harder and sweat at least a little. A lower percentage is better.

HQO reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Percentage

Calculation Methods
Numerator divided by denominator times 100

Numerator
Total weighted number of respondents categorized as “inactive”.
Inclusions:
The variable used in 2015 is PAADVAC2.
When PAADVAC2 is equal to 4 (Sedentary) considered the respondent inactive.
PAADVAC2 This derived variable represents an alternate classification of physical activity for adults, based on the number of minutes of moderate to vigorous activity done in a week. It breaks down those who were not above the threshold of 150 minutes per week into subcategories of their activity level. Derived based on another variable PAADVMVA
- PAADVMVA => 150 Active
- 75 <= PAADVMVA < 150 Moderately active
- 3. 0 < PAADVMVA < 75 Somewhat active
- PAADVMVA = 0 Sedentary

PAADVMVA
- Based on PAA_005, PAA_015, PAA_020, PAA_030, PAA_035, PAA_045, PAA_050, PAA_060, PAA_065, PAA_075, PAA_080

This derived variable represents the total number of minutes a respondent engaged in active transportation and moderate to vigorous recreational and other physical activities.
This derived variable indicates whether a respondent is physically active according to the Canadian Physical Activity Guidelines (CPAG).
Physically active is defined by the Canadian Physical Activity Guidelines as having at least 150 minutes of moderate- to vigorous-intensity aerobic physical activity per week, in bouts of 10 minutes or more.

Denominator
Total weighted number of respondents aged 18 and older that responded to the survey question.
Exclusions:
Don’t know, Not stated and Refusal are not included in the analysis

**Adjustment (risk, age/sex standardization)**
Direct age-adjusted using 2011 Canada population

**Data Source**
Canadian Community Heath Survey (CCHS)

**Data provided to HQO by**
Statistics Canada

**Reported Levels of comparability**
Province, Age, Income, Education, Rurality, Region, Sex

**OTHER RELEVANT INFORMATION**

**Caveats and Limitations**
Because of the significant changes to the survey methodology, Statistics Canada does not recommend making comparisons of the redesigned 2015 cycle of the CCHS with past cycles. As this indicator relies on self-reported data, the true rate might in fact be higher or lower. In addition, the surveys’ coverage excludes: persons living on reserves and other Aboriginal settlements in the provinces; full-time members of the Canadian Forces; the institutionalized population, children aged 12-17 that are living in foster care, and persons living in the Quebec health regions of Région du Nunavik and Région des Terres-Cries-de-la-Baie-James. Altogether, these exclusions represent less than 3% of the Canadian population aged 12 and over.

**Comments Summary**
A major redesign project was completed and implemented for the 2015 cycle. The objectives of the redesign were to review the sampling methodology, adopt a new sample frame, modernize the content and review the target population. As a result of the redesign, the 2015 CCHS has a new collection strategy, is drawing the sample from two different frames and has undergone major content revisions. With all these factors taken together, caution should be taken when comparing data from previous cycles to data released for the 2015 cycle onwards. Education stratification analysis is restricted to 25 and older. Proportions and ratios are obtained by summing the final weights of records having the characteristic of the numerator and the denominator, and then dividing the first estimate by the second.
Percentage of people aged 12 and older reporting excellent/very good, good or fair/poor health

Description
Percentage of the population aged 12 and older who rated their general health as excellent/very good, good, and fair/poor.

HQO reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Percentage

Calculation Methods
Numerator divided by denominator times 100

Numerator
Weighted number of respondents who rated their health as:
- Excellent/Very good if GENDVHDI equals 3, 4
- Good if GENDVHDI equals 2;
- Fair/Poor if GENDVHDI equals 0,1

Codes for GENDVHDI
0 = POOR
1 = FAIR
2 = GOOD
3 = VERY GOOD
4 = EXCELLENT

Denominator
Weighted number of respondents aged 12 or above who responded to survey question.

Exclusions:
Don’t know, Not stated and Refusal are not included in the analysis

Adjustment (risk, age/sex standardization)
Direct age -adjusted using 2011 Canada population 12 and older

Data Source
Canadian Community Heath Survey (CCHS)

Data provided to HQO by
Statistics Canada
Reported Levels of comparability
Province, Age, Income, Education, Rurality, Region, Sex

OTHER RELEVANT INFORMATION

Caveats and Limitations
Because of the significant changes to the survey methodology, Statistics Canada does not recommend making comparisons of the redesigned 2015 cycle of the CCHS with past cycles. As this indicator relies on self-reported data, the true rate might in fact be higher or lower. In addition, the surveys' coverage excludes: persons living on reserves and other Aboriginal settlements in the provinces; full-time members of the Canadian Forces; the institutionalized population, children aged 12-17 that are living in foster care, and persons living in the Quebec health regions of Région du Nunavik and Région des Terres-Cries-de-la-Baie-James. Altogether, these exclusions represent less than 3% of the Canadian population aged 12 and over.

Comments Summary
A major redesign project was completed and implemented for the 2015 cycle. The objectives of the redesign were to review the sampling methodology, adopt a new sample frame, modernize the content and review the target population. As a result of the redesign, the 2015 CCHS has a new collection strategy, is drawing the sample from two different frames and has undergone major content revisions. With all these factors taken together, caution should be taken when comparing data from previous cycles to data released for the 2015 cycle onwards. Education stratification analysis is restricted to 25 and older. Proportions and ratios are obtained by summing the final weights of records having the characteristic of the numerator and the denominator, and then dividing the first estimate by the second.
Life expectancy at birth

Description
This indicator measures the number of years a person would be expected to live, starting at birth (for life expectancy at birth if the age- and sex-specific mortality rates for a given observation period (such as a calendar year) were held constant over his/her life span. A higher result is better.

HQO reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Years

Calculation Methods
This indicator is calculated as: the numerator divided by the denominator
Age- and sex-specific mortality rates corresponding to the reference period are applied to a hypothetical cohort, typically of 100,000. Starting at birth, the probability of dying at each age or age interval is applied to the number of people surviving to that age or the beginning of the age interval, respectively.

Numerator
Cumulative number of person-years lived, for a cohort of 100,000 persons

Denominator
Number of persons in an initial cohort of 100,000 live births

Exclusions:
1. Births to mothers who are not residents of Canada
2. Births to mothers who are residents of Canada whose province or territory of residence was unknown
3. Deaths of non-residents of Canada
4. Deaths of residents of Canada whose province or territory of residence was unknown
5. Deaths for which age or sex of the decedent was unknown

Adjustment (risk, age/sex standardization)
None

Data Source
Vital Statistics, Birth and Death Databases

Data provided to HQO by
Statistics Canada
Reported Levels of comparability
Time, Education

OTHER RELEVANT INFORMATION

Caveats and Limitations
This indicator does not provide information on the individual causes of deaths or on quality of life.

Comments Summary
Percentage of one dose quadrivalent meningococcal conjugate vaccine coverage among 12-year-olds

Description
This indicator provides an estimate of the percentage of 12-year-olds who have received one valid dose of the quadrivalent meningococcal conjugate vaccine (MCV4) as part of Ontario’s school-based vaccination program delivered in grade 7, at the conclusion of the school year (August 31st). Valid dose refers to one dose of MCV4 administered within five years prior to August 31st of school year of assessment and administered on the same day or at least 168 days after any previous meningococcal polysaccharide dose. For example, for the 2015-16 school year, valid MCV4 doses must be administered on or after September 1, 2011. A higher percentage is better.

HQO reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Percentage

Calculation Methods
Numerator divided by the denominator times 100

Numerator
The number of students who have received one valid dose of MCV4-containing vaccine by August 31 of the school year under assessment (i.e., August 31, 2016 for the 2015-16 school year).

Denominator
The number of 12-year-old students with an active client record in the Digital Health Immunization Repository (DHIR) and with at least one school record during the school year of analysis. The 12-year-old birth cohort is defined as those students in DHIR who have turned 12 years of age by December 31st of the school year under assessment (i.e., December 31, 2015 for the 2015-2016 school year).

Adjustment (risk, age/sex standardization)
None

Data Source
MOHLTC, Digital Health Immunization Repository

Data provided to HQO by
Public Health Ontario (PHO)
Reported Levels of comparability
Public health units, Public health regions, Province, Time

OTHER RELEVANT INFORMATION

Caveats and Limitations
Immunization coverage may be under-estimated if immunizations received by Ontario students are not reported to Ontario PHUs for subsequent data capture within the DHIR.

Comments Summary
Public health region-specific estimates can be compared. Due to the change in the immunization information system (from IRIS to Panorama) and the change in methodology used to assess immunization coverage since the implementation of Panorama and the DHIR, the coverage estimates provided cannot be directly compared to previous assessments of immunization coverage. Inter-provincial comparisons are possible, where immunization coverage is publicly-reported, up-to-date coverage methodology is used and the MCV4 product is also used. International comparisons are limited by variations in the IMD immunization strategy (target age group, and vaccine product used).
Percentage of two dose measles coverage among 7-year-olds, in Ontario, school year

Description
This indicator measures the percentage of 7-year-olds who have received two valid doses of measles-containing vaccine or have documented evidence of immunity against measles at the conclusion of the school year (August 31st). Valid doses refer to doses of measles-containing vaccine that were given in accordance with the following criteria:
First valid dose administered on or after the first birthday and received on the same day or at least 28 days after any preceding live virus vaccine. Second valid dose administered at least 28 days after any preceding measles-containing vaccine (or any other live virus vaccine).
A higher percentage is better

HQO reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Percentage

Calculation Methods
Numerator divided by the denominator times 100

Numerator
The number of students who have received two valid doses of measles-containing vaccine or have a documented exemption on the basis of evidence of immunity against measles by August 31 of the school year under assessment (i.e. August 31, 2016 for the 2015-2016 school year).

Denominator
The number of 7-year-old students with an active client record in the Digital Health Immunization Repository (DHIR) and with at least one school record during the school year of analysis. The 7-year-old birth cohort is defined as those students in DHIR who have turned 7 years of age by December 31st of the school year under assessment (i.e., December 31, 2015 for the 2015-2016 school year).

Adjustment (risk, age/sex standardization)
NA

Data Source
MOHLTC, Digital Health Immunization Repository

Data provided to HQO by
Public Health Ontario (PHO)

Reported Levels of comparability
OTHER RELEVANT INFORMATION

Caveats and Limitations
Immunization coverage may be under-estimated if immunizations received by Ontario students are not reported to Ontario PHUs for subsequent data capture within the DHIR.

Comments Summary
PHU-specific estimates can be compared across the 2013-14 to 2015-16 school years. Due to the change in the immunization information system (from IRIS to Panorama) and the change in methodology used to assess immunization coverage since the implementation of Panorama and the DHIR, the coverage estimates provided cannot be directly compared to previous assessments of immunization coverage. Inter-provincial comparisons are possible, where immunization coverage is publicly-reported and up-to-date coverage methodology is used. International comparisons are also possible, although the methodology for coverage assessment (i.e. survey, registry, administrative billing data) will vary.
3. Primary Care

Continuity of primary care

**Description**
This indicator measures the percentage of people with more than 3 primary care physician visits in the past 2 years who had:
- less than 50% of their primary care visits to the same primary care physician (low continuity)
- 50% - 74% of their primary care visits to the same primary care physician (medium continuity)
- More than 75% of their primary care visits to the same primary care physician (high continuity)

**HQO reporting tool/product**
Public reporting

**DEFINITION AND SOURCE INFORMATION**

**Unit of Measurement**
Percentage

**Calculation Methods**
The calculation of this indicator starts at the individual person level by:
- defining how many primary care physician visits each person had in the past two years,
- looking at how many physicians contributed to these visits and
- identifying the percentage of visits to their most regular (highest number of visits) provider.
Later the results are aggregated and grouped into people who had:
- (low continuity) <50% of their visits to the same (regular) primary care physician (the provider with the highest number of visits) in the past two years.
- (medium continuity) 50% - 74% visits to the same (regular) primary care physician
- (high continuity) 75%+ visits to the same (regular) primary care physician

**Numerator**
Number of people with more than 3 visits in the past 2 year who had:
- <50% of their visits to the same primary care physician (the provider with the highest number of visits)
- 50% - 74% visits to the same primary care physician
- 75%+ visits to the same primary care physician

**Denominator**
Total number of people who had more than 3 primary care visits with a doctor in the past 2 years.

**Includes:**
All visits to primary care physicians obtained by specialty codes= 00, 05, 26 for the 2 year period preceding the index date for the following fee codes: A001, A003, A007, A903, E075, G212, G271, G372, G373, G365, G538, G539, G590, G591, K005, K013, K017, P004, A261, K267, K269, K130, K131, K132 – core Primary Care codes
Adjustment (risk, age/sex standardization)
None

Data Source
Ontario Health Insurance Plan (OHIP) Claims History Database, Registered Persons Database (RPDB)

Data provided to HQO by
Institute for Clinical Evaluative Sciences (ICES)

Reported Levels of comparability
Time, Age, Income, Rurality, Region, Sex

OTHER RELEVANT INFORMATION

Caveats and Limitations
We do not know the reasons and other details for the visit. The visit to a different provider may be influenced by factors such as the time of the visit, geographic location, physician working hours (part time/vs full time), that are not captured by data. In addition, data does not capture visits to other non-physician providers of the teams or phone calls. Data does not include visits to specialists either and people with low continuity with the primary care doctor maybe regularly seeing the specialist. Additionally we are not able to assess continuity with NPs or for models of care that do not use billings (CHCs).

Comments Summary
The data shows the continuity with the primary care doctors only.
Percentage of people aged 16 and older who were able to see their primary care provider or another primary care provider in their office, on the same day or next day when they were sick

Description
Percentage of people in Ontario aged 16 and older who reported that in the last 12 months they were able to see their primary care provider (i.e. a family doctor, a general practitioner or GP, or nurse practitioner) or someone else in their office on the same day or the next day, when they were sick or were concerned that they had a health problem.

HQC reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Percentage

Calculation Methods
Numerator divided by the denominator times 100

Numerator
Weighted number of respondents who answered "same day" or "next day" to the following question:

How many days did it take from when you first tried to see your [fill fd_type] to when you actually saw them or someone else in their office?

- Saw doctor same day
- Saw doctor next day
- 2 to 19 (enter number of days)
- Twenty or more days
- Don’t know
- Refused

Denominator
Weighted number of respondents who answered "yes" to the following questions:
Not counting yearly check-ups or monitoring of an ongoing health issue, in the last 12 months did you want to see your [name type of provider] because you were sick or were concerned that you had a health problem?

- Yes
- No
• Don’t know
• Refused

AND

Respondents who answered "yes saw own doctor", "yes saw someone else in office", or "saw both [fill fd_type] and someone else (and others)" to the following question:

Did you actually see your [fill fd_type] or someone else in their office?

• Yes saw own doctor
• Yes saw someone else in office
• Saw both [fill fd_type] and someone else (others)
• No
• Don’t know
• Refused

Adjustment (risk, age/sex standardization)
None

Data Source
Health Care Experience Survey (HCES)

Data provided to HQO by
Ministry of Health and Long-Term Care (MOHLTC)

Reported Levels of comparability
International comparison, Province, Immigration, Language, Age, Income, Education, Rurality, Region, Sex

OTHER RELEVANT INFORMATION

Caveats and Limitations
Only people aged 16 years and older can complete the survey. People living in institutions, in households without telephones, and those with invalid/missing household addresses in the Registered Persons Database (RPDB) are excluded. Respondents who were unable to speak English or French or were not healthy enough (physically or mentally) to complete the interview were not surveyed.

Comments Summary
The results are weighted to account for the design characteristics of the survey and post-stratified by age and sex to reflect the Ontario population. In addition, the LHIN and community weighting is applied. References ‘fill fd_type’ in the question can mean a family doctor, GP, nurse practitioner, or anyone else the respondent said they get their primary care from. International and provincial comparisons are reported in Measuring Up report. Data source for international and provincial comparisons is Commonwealth Fund International Health Policy Survey of Adults, that has a similar question: The survey question in CMWF IHP is: “Last time you were sick or needed medical attention, how quickly could you get an appointment to see a doctor or a nurse? The CMWF survey population is adults aged 18 and older. A similar indicator is included in the primary care QIP as well. The data source for it is local data collection. The question advised in the QIP guidance document is: The last time you were sick or were concerned you had a health problem, how many days did it take from when you first tried to see your doctor or nurse practitioner to when you actually SAW him/her or someone else in their office?
Percentage of people aged 16 and older who reported that getting access to care on an evening or weekend, without going to the emergency department, was very difficult or somewhat difficult

Description
Percentage of people in Ontario aged 16 and older who reported that last time when they needed medical care, getting access to care without going to the emergency department, in the evening, on a weekend, or on a public holiday was very or somewhat difficult. A lower percentage is better.

HMQO reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Percentage

Calculation Methods
Numerator divided by the denominator times 100

Numerator
Weighted number of respondents who answered "very difficult" or "somewhat difficult" to the following question:
The last time when you needed medical care in the evening, on a weekend, or on a public holiday, how easy or difficult was it to get care without going to the emergency department?
- Very easy
- Somewhat easy
- Somewhat difficult
- Very difficult
- Never tried to do this/never needed care
- Don’t know
- Refused

Denominator
Weighted total number of survey respondents to the question:
The last time when you needed medical care in the evening, on a weekend, or on a public holiday, how easy or difficult was it to get care without going to the emergency department?
Exclusion:
Those who selected "never tried to do this/never needed care", "Don't know" or "refused" response options in the above question.

Adjustment (risk, age/sex standardization)
None

Data Source
Health Care Experience Survey (HCES)

Data provided to HQO by
Ministry of Health and Long-Term Care (MOHLTC)

Reported Levels of comparability
International comparison, Province, Age, Income, Education, Rurality, Region, Sex

OTHER RELEVANT INFORMATION

Caveats and Limitations
Only people aged 16 years and older can complete the survey People living in institutions, in households without telephones, and those with invalid/missing household addresses in the Registered Persons Database (RPDB) are excluded. Respondents who were unable to speak English or French or were not healthy enough (physically or mentally) to complete the interview were not surveyed. Inability to distinguish if people consider Telehealth to be access to primary care after hours

Comments Summary
Weighted to account for the design characteristics of the survey and post-stratified by age and sex to reflect the Ontario population. In addition, the LHIN and community weighting is applied. The data source for international and provincial comparisons is Commonwealth Fund International Health Policy Survey 2016 . Survey question in CMWF IHP: How easy or difficult is it to get medical care in the evenings, on weekends, or holidays without going to the hospital emergency department/Accident and Emergency (A and E) Department/emergency room? The survey population is adults aged 18 and older.
Percentage of people aged 50-74 overdue for colorectal cancer screening

Description
Percentage of Ontario screen-eligible individuals, 50-74 years old, who were overdue for colorectal screening in each calendar year. Overdue defined as not having Fecal Occult Blood Test (FOBT) in the last 2 years, colonoscopy in the last 10 years, and flexible sigmoidoscopy in the last 10 years. A lower percentage is better.

HQO reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Percentage

Calculation Methods
Numerator divided by the denominator times 100

Numerator
Number of Ontario screen-eligible individuals, 50-74 years old, who were overdue for colorectal screening by the end of the calendar year as defined by not having any of the following*:
Fecal Occult Blood Test (FOBT) in the last 2 years:
Program CCC FOBT was identified in LRT or OHIP:
• L179A ColonCancerCheck Fecal Occult Blood Testing
Non-program FOBT was identified using fee codes in OHIP
• L181A Lab Med - Biochem - Occult Blood
Colonoscopy in the last 10 years
- Identified using fee codes Z555A, Z491A-Z499A in OHIP
Flexible sigmoidoscopy in the last 10 years
- Identified using fee code Z580A in OHIP
Multiple claims with the same Health Insurance Number (HIN), service date and fee code were assumed to be a single claim. Each individual was counted once regardless of the number of tests performed

Denominator
Number of Ontario screen-eligible individuals, 50-74 years old in each calendar year.

Exclusions:
• Individuals with a missing or invalid HIN, date of birth, sex or postal code
• Individuals with an invasive colorectal cancer prior to Jan 1 of the calendar year of interest; prior diagnosis of colorectal cancer was defined as: ICD-O-3 codes C18.0, C18.2-C18.9, C19.9, C20.9; a morphology indicative of colorectal cancer, microscopically confirmed with a path report
• Individuals with a total colectomy prior to Jan 1 of the calendar year of interest
• Total colectomy was defined in OHIP by fee codes S169A, S170A, S172A
Adjustment (risk, age/sex standardization)
The 2011 Canadian population was used as the standard population for calculating direct age-standardized rates

Data Source
Ontario Health Insurance Plan (OHIP) Claims History Database, Registered Persons Database (RPDB), Colonoscopy Interim Reporting Tool (CIRT), Laboratory Reporting Tool (LRT), Ontario Cancer Registry (OCR)

Data provided to HQO by
Cancer Care Ontario (CCO)

Reported Levels of comparability
Time, Age, Income, Rurality, Region, Sex

OTHER RELEVANT INFORMATION

Caveats and Limitations
Historical RPDB address information is incomplete; therefore, the most recent primary address was selected for reporting, even for historical study periods FOBTs in hospital labs could not be captured A small proportion of FOBTs performed as diagnostic tests could not be excluded from the analysis This indicator does not capture tests performed as part of the Registered Nurse Flexible Sigmoidoscopy Project.

Comments Summary
•Multiple claims with the same Health card Number and service date were assumed to be a single claim •Each individual was counted once regardless of the number of tests performed •Some methodology changes are made for 2015 analysis (flexible sigmoidoscopy timeframe is changed from five to ten years) Neighbourhood income quintiles for urban residents only. Similar indicator is reported in QIP.
Percentage of people aged 16 or older who report that their primary care provider always or often, involved them in decisions about their care

Description
The percentage of people in Ontario aged 16 and older who reported that their primary care provider (i.e. a family doctor, a general practitioner or GP, or nurse practitioner) always or often involves them as much as they want in decisions about their care and treatment. A higher percentage is better.

HQO reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Percentage

Calculation Methods
Numerator divided by the denominator times 100

Numerator
Weighted number of respondents who answered "always" or "often" to the following question:
When you see your [fill fd_type] or someone else in their office, how often do they involve you as much as you want to be in decisions about your care and treatment?
- Always
- Often
- Sometimes
- Rarely
- Never
- It depends on who they see and/or what they are there for
- Not using/on any treatments/not applicable
- don't know
- refused

Denominator
Weighted number of respondents who answered the survey question on involvement in decisions about their care and treatment.
Exclusions:
- It depends on who they see and/or what they are there for - Not using/on any treatments/not applicable
- don't know
- refused
Adjustment (risk, age/sex standardization)
None

Data Source
Health Care Experience Survey (HCES)

Data provided to HQO by
Ministry of Health and Long-Term Care (MOHLTC)

Reported Levels of comparability
International comparison, Province, Immigration, Language, Age, Income, Education, Rurality, Region, Sex

OTHER RELEVANT INFORMATION

Caveats and Limitations
Only people aged 16 years and older can complete the survey. People living in institutions, in households without telephones, and those with invalid/missing household addresses in the Registered Persons Database (RPDB) are excluded. Respondents who were unable to speak English or French or were not healthy enough (physically or mentally) to complete the interview were not surveyed. Inability to capture if people consider Telehealth to be access to primary care after hours.

Comments Summary
Weighted to reflect the design characteristics of the study and post-stratified by age and sex to reflect the Ontario population. In addition, the LHIN and community weighting is applied. References ‘fill fd_type’ in the questionnaire can mean a family doctor, GP, nurse practitioner, or anyone else the respondent said they get their primary care from. In Measuring up international and provincial comparisons are reported as well. The data source for international and provincial comparisons is Commonwealth Fund International Health Policy Survey of Adults. The survey questions is "When you need care or treatment, how often does your regular doctor or medical staff you see involve you as much as you want to be in decisions about your care and treatment?”. The CMWF survey population is adults aged 18 and older. A similar indicator is included in the primary care QIP as well. The data source for it is local data collection. The question advised in the QIP guidance document is: When you see your doctor or nurse practitioner, how often do they or someone else in the office involve you as much as you want to be in decisions about your care and treatment?
**Percentage of people aged 20 and older with diabetes who had a diabetes eye exam**

**Description**
This indicator measure the percentage of Ontarians with diabetes aged 20 and older who had an eye exam within a 2-year period. A higher percentage is better.

**HQO reporting tool/product**
Public reporting

**DEFINITION AND SOURCE INFORMATION**

**Unit of Measurement**
Percentage

**Calculation Methods**
Numerator divided by the denominator times 100

**Numerator**
Number of people with diabetes aged 20 and older (for that specific fiscal year) with a record for eye exam within a 2-year period.
Inclusions:
OHIP feecodes = A115 (major eye exam), A233 to A240 (ophthalmology), C233 to C236 (ophthalmology emergency and out-patient department), Optometrist fee codes V401, V402, V404 to V409, V450, V451 Note: use spec=all when extracting OHIP OHIP fee codes = K065, K066 where spec=23 (Ophthalmology) A110, A111, A112, A114, A252, A253 and A254.

**Denominator**
Total number of people with diabetes aged 20 and older in ODD database for the specific fiscal year.
Exclusions:
- People who were not resident in Ontario in each year
- Age on index date in each corresponding year exams: <20 years
- Died before end of follow-up period.

**Adjustment (risk, age/sex standardization)**
Direct age and sex adjustment using denominator population (diabetes population aged 20 and older) in the most recent year.
Age groups: 20-29, 30-39, 40-49, 50-59, 60-69, 70+

**Data Source**
Ontario Health Insurance Plan (OHIP) Claims History Database, Ontario Diabetes Database (ODD)

**Data provided to HQO by**
Institute for Clinical Evaluative Sciences (ICES)
Reported Levels of comparability
Time, Age, Income, Rurality, Region, Sex

OTHER RELEVANT INFORMATION

Caveats and Limitations
- ODD doesn't distinguish type1 and type 2 diabetes
- The ODD is re-created yearly using updated OHIP, CIHI/SDS, and RPDB data.
- It is not possible to identify the details/type of the screening using the admin database, instead it was attempted to select all possible opportunities for retinal screening.
- The indicator does not specify patients with diabetes that have been already diagnosed with retinopathy.
- According to guidelines the appropriate eye exam monitoring intervals are established based on severity of disease.

Comments Summary
For this indicator the most recent year's denominator (diabetes population) is used as a standard population, as the age and sex distribution of the diabetes population is very different from the 2011 Canadian Census population, which is used as standard for other indicators in the report.
Percentage of people aged 16 and older who have a family doctor or other primary care provider

Description
Percentage of people in Ontario aged 16 and older who reported having a family doctor, a general practitioner or GP, or nurse practitioner that they see for regular check-ups and when they get sick. A higher percentage is better.

HQO reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Percentage

Calculation Methods
Numerator divided by the denominator times 100

Numerator
Weighted number of survey respondents who answered "yes" to the following question: Do you have a family doctor, a general practitioner or GP, or nurse practitioner that you see for regular check-ups, when you are sick and so on?

- Yes
- No
- Don't know
- Refused

Denominator
Weighted number of respondents to the survey question: Do you have a family doctor, a general practitioner or GP, or nurse practitioner that you see for regular check-ups, when you are sick and so on?

Exclusions:
Respondents who answered "don't know" or refused to answer the above question

Adjustment (risk, age/sex standardization)
None

Data Source
Health Care Experience Survey (HCES)

Data provided to HQO by
Ministry of Health and Long-Term Care (MOHLTC)
Reported Levels of comparability
International comparison, Province, Immigration, Language, Age, Income, Education, Rurality, Region, Sex

OTHER RELEVANT INFORMATION

Caveats and Limitations
Only people aged 16 years and older can complete the survey. People living in institutions, in households without telephones, and those with invalid/missing household addresses in the Registered Persons Database (RPDB) are excluded. Respondents who were unable to speak English or French or were not healthy enough (physically or mentally) to complete the interview were not surveyed.

Comments Summary
The results are weighted to account for the design characteristics of the survey and post-stratified by age and sex to reflect the Ontario population. After the LHIN and community weighting is applied. In the Measuring Up report the international and provincial comparisons are reported as well. The data source for international and provincial comparisons is Commonwealth Fund International Health Policy Survey of Adults (ages 18 and older). The results are based on the following survey questions in CMWF IHP: Is there one doctor you usually go to for your medical care? Is there one doctor’s group, health center, or clinic you usually go to for most of your medical care? The CMWF survey population is adults aged 18 and older.
4. Mental Health

First contact in the emergency department for Mental Health & Addictions

Description
This indicator measures the percentage of people who did not receive mental health care from doctor or psychiatrist over the preceding two years, among people aged 15 and older who visited the emergency department for a mental illness or addiction.

HQO reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Percentage

Calculation Methods
(Numerator/denominator)*100

Numerator
Number of adults with an unscheduled mental health & addictions emergency department visit (NACRS)

Only includes adults without mental health & addictions outpatient visits and/or claims (OHIP), emergency department visits (NACRS), or hospital admission (DAD/OMHRS) in past 2 years.

Exclusions (apply to both numerator and denominator):
• Invalid OHIP number
• Missing sex
• Age: <15,>105
• Planned or scheduled ED visits:
  ◦ This is excluded from denominator/numerator

Any mental health & addictions emergency department visit (including planned) is included in lookback for past mental health & addictions are in 2 years to determine first contact status.

Denominator
All adults with a mental health & addictions emergency department visit (NACRS).

If an individual has multiple mental health & addictions emergency department visits in a fiscal year their incident claim is used.
Adjustment (risk, age/sex standardization)
Age- and sex-standardized to the 2011 RPDB population

Data Source
National Ambulatory Care Reporting System (NACRS), Ontario Health Insurance Plan (OHIP) Claims History Database, Ontario Mental Health Reporting System (OMHRS), Registered Persons Database (RPDB), Discharge Abstract Database (DAD)

Data provided to HQO by
Institute for Clinical Evaluative Sciences (ICES)

Reported Levels of comparability
Time, Rurality, Region

OTHER RELEVANT INFORMATION

Caveats and Limitations
Limitations include potential coding errors and a lack of data on contributing factors (e.g., substance use), education levels, and use of non-physician mental health services (e.g., nurse practitioners, psychologists, and social workers).

Comments Summary
Percentage of patients who saw a family doctor or psychiatrist within seven days of discharge after hospitalization for mental illness or addiction

Description
This indicator measures the percentage of psychiatric discharges that had a follow-up visit to either a primary care physician or psychiatrist, within 7 days of discharge. A higher rate is better.

HQO reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Percentage

Calculation Methods
This indicator is calculated as: the numerator divided by the denominator, multiplied by 100

Numerator
The number of patients who within 7 days of discharge following index hospitalization had at least one psychiatrist or primary care physician visit.
All-cause follow-up: Any visit to a primary care provider (IPDB mainspecialty = ‘GP/FP’ or ‘F.P./Emergency medicine’) or a psychiatrist (IPDB mainspecialty = ‘psychiatry’) taking place in office, home, or long-term care (OHIP - location = ‘O’ or ‘H’ or ‘L’)

Denominator
Number of acute care discharges from episode of care in which a Mental Health and Addiction condition is diagnosed and is coded as most responsible diagnosis (CIHI - ICD-10 with dxtype = M, OMHRS - DSM-IV in Q2A/Q2D or provisional dx Q1D/Q1E/Q1F/Q1G/Q1O/Q1P = 1 ) in the first hospitalization of the episode within each fiscal year (minus last 7 days for follow up
1. Substance-related disorders-ICD-10-CA: F55, F10 to F19; DSM-IV: 291.x (0, 1, 2, 3, 5, 81, 89, 9), 292.0, 292.11, 292.12, 292.81, 292.82, 292.83, 292.84, 292.89, 292.9, 303.xx (00, 90), 304.xx (00, 10, 20, 30, 40, 50, 60, 80, 90), 305.xx (00, 10 to 90 excluding 80); Provisional diagnosis**: (d) substance-related disorder; or
2. Schizophrenia, delusional and non-organic psychotic disorders-ICD-10-CA: F20 (excluding F20.4), F22, F23, F24, F25, F28, F29, F53.1; DSM-IV: 295.xx (10, 20, 30, 40, 60, 70, , 90), 297.1, 297.3, 298.8, 298.9; Provisional diagnosis**: (e) schizophrenia disorder; or
3. Mood/affective disorders-Mood/affective disorders-ICD-10-CA: F30, F31, F32, F33, F34, F38, F39, F53.0; DSM-IV: 296 .0x, 296.2x, 296.3x, 296.4x, 296.5x, 296.6x, 296.7, 296.80, 296.89, 296.90, 300.4, 301.13; Provisional diagnosis**: (f) mood disorders; or
4. Anxiety disorders-ICD-10-CA: F40, F41, F42, F43, F48.8, F48.9.; DSM-IV: 300.xx (00, 01, 02, 21, 22, 23, 29), 300.3, 308.3, 309.x (0, 3, 4, 9), 309.24, 309.28, 309.81; Provisional diagnosis**: (g) anxiety disorders or (o) adjustment disorders or
5. Selected disorders of adult personality and behaviour-Selected disorders of adult personality and behaviour-ICD-10-CA: F60, F61, F62, F69, F21; DSM-IV: 301.0, 301.20, 301.22, 301.4, 301.50, 301.6, 301.7, 301.81, 301.82, 301.83, 301.9 Provisional diagnosis**: (p) personality disorders.
6. Age range to include: 15 - 120 years
Exclude:
7. Patients without a valid health insurance number
8. Patients without an Ontario residence
9. Gender not recorded as male or female
10. Invalid date of birth, admission date/time, discharge date/time
11. Discharge where the patient signed him/herself out or the patient died
12. Patients who die or had Hospitalizations with a subsequent readmission (any cause) to acute care (CIHI or OMHRS) within 7 days of index hospitalization discharge date
Note: if OMHRS records occurs within 24 hours of discharge/admission from institution then this should be considered as part of the same episode of care. **For provisional diagnoses: only for data extracted from the Ontario Mental Health Reporting System (OMHRS) with no DSM-IV code recorded.

Adjustment (risk, age/sex standardization)
Direct standardization using 2011 census population by:
- Age (15-18, 19-44, 45-64, 65-79,80+)
- Sex

Data Source
Ontario Health Insurance Plan (OHIP) Claims History Database, Ontario Mental Health Reporting System (OMHRS), Registered Persons Database (RPDB), Discharge Abstract Database (DAD)

Data provided to HQO by
Institute for Clinical Evaluative Sciences (ICES)

Reported Levels of comparability
Time, Income, Region

OTHER RELEVANT INFORMATION

Caveats and Limitations
The rate does not capture medical services delivered in other forms of post-discharge care and by non-physician providers. (e.g., salaried physicians, community mental health programs, client based initiatives).

Comments Summary
Percentage of patients readmitted to hospital for mental illness and addiction within 30 days of discharge after hospitalization for mental illness or addiction

Description
This indicator measures the percentage of psychiatric (mental health and addiction) discharges that are followed within 30 days by another mental health and addiction hospital admission.

HQO reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Percentage

Calculation Methods
This indicator is calculated as: numerator divided by the denominator, multiplied by 100

Numerator
Number of individuals with any MH&A hospital readmissions* within 30 days following the incident hospital discharge

Notes:
• Separately report the number of individuals who died and re-admitted during the follow-up period overall in all years.
• Calculate within 30 days acute care re-admission proportion following the index MH&A hospital discharge date (i.e. Count only one visit per IKN per 30 day follow-up period).
• *Reason for re-admission can be for a different MH&A reason than the initial MH&A diagnosis.
• Incident discharges are restricted to calendar years but 30 day follow-up for readmission can cross over into the next calendar year.

Denominator
Total number of incident MH&A hospital discharges between calendar years of interest
Incident = 1st event in a calendar period without any look-back for past events (If multiple hospital visits in CY, use first). Keep only one discharge per IKN per year.

Data source: CIHI-DAD, OMHRS

Age ranges to include:
• Age => 15 or Age <= 105 (other stratifications)
Exclude:
• Patients without a valid health insurance number
• Patients without an Ontario residence
• Gender not recorded as male or female
• Age < 15 or Age > 105
• Invalid date of birth, admission date/time, discharge date/time
• Individuals who die within 30 days of discharge (based on RPDB) before a follow-up or outcome occurs (i.e. a person dies before they have been readmitted or is readmitted but dies before they are discharged)

Note: For OMHRS records if admission to an institution or occurs within 24 hours of discharge from institution then this should be considered as part of the same episode of care.

**For provisional diagnoses: only for data extracted from the Ontario Mental Health Reporting System (OMHRS) with no DSM-IV code recorded

Adjustment (risk, age/sex standardization)
The rates are risk-adjusted to the following factors:
• Sex
• Age 15-19, 20-44, 45-64, 65-79, and 80+.

Data Source
Ontario Mental Health Reporting System (OMHRS), Registered Persons Database (RPDB), Discharge Abstract Database (DAD)

Data provided to HQO by
Institute for Clinical Evaluative Sciences (ICES)

Reported Levels of comparability
Time, Income, Region

OTHER RELEVANT INFORMATION

Caveats and Limitations
It is not possible to differentiate between elective and non-elective admissions in OMHRS database. It would be possible to do for the CIHI records that would approximately comprise around 23% of the cases, the remaining 77% are identified through OMHRS. These numbers cannot tell us what happens to individuals between discharge and readmission to hospital within 30 days. Both planned/unplanned readmissions are counted. Index discharges were all derived using the OMHRS. This may underestimate the total number of psychiatric admissions in the province because a certain proportion of psychiatric admissions are captured using only the CIHI-DAD

Comments Summary
Percentage of patients in mental health designated beds who were physically or mechanically restrained

Description
This indicator measures the percentage of patients in mental-health-designated beds in Ontario who had an indication of the use of a physical or mechanical restraint in their Ontario Mental Health Reporting System record.

HQO reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Percentage

Calculation Methods
This indicator is calculated as: the numerator divided by the denominator, multiplied by 100.

Numerator
Patients who had the following restraint use indicated on their OMHRS records:
- Mechanical restraint use (M1A greater or equal to 1)
- Chair prevents rising (M1B greater or equal to 1)
- Physical /manual restraint by staff (M1C greater or equal to 1)

Denominator
Total number of individuals who were discharged from a designated adult mental health bed in an Ontario hospital and had a full assessment
Inclusions:
1. Patients with records in OMHRS
2. Assessments with variables M1A, M1B and M1C
3. Valid OHIP number

Adjustment (risk, age/sex standardization)
Direct standardized using the 2011 Canadian census population by:
- Age groups (15-19, 20-44, 45-64, 65-79, 80+)
- Sex

Data Source
Ontario Mental Health Reporting System (OMHRS)
Data provided to HQO by
Institute for Clinical Evaluative Sciences (ICES)

Reported Levels of comparability
Time

OTHER RELEVANT INFORMATION

Caveats and Limitations
Control interventions in OMHRS are reported in full assessment records which typically occur at set intervals and may not capture information about incidents that occur between intervals. This is related to the fact that there is no reporting requirement for control interventions and, therefore, in instances where hospital stays are longer, a larger number of control interventions may go unreported. The analysis was limited by the exclusion of individuals with hospital stays of three days or less. Short-stay RAI-MH assessments do not require all data elements to be coded.

Comments Summary
NA
5. Hospital Care

Time to initial assessment in emergency

Description
This indicator measures average time elapsed from triage or registration (whichever is earlier) to initial assessment by a doctor, nurse-practitioner or dentist for all patients in the emergency department.

HQO reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Hours

Calculation Methods
Average wait time is calculated by dividing the total wait time for all patients by the total count of ED visits.

Inclusion criteria:
Unscheduled emergency visits with a valid and known registration time or triage time and a valid and known initial assessment time.

Exclusion criteria:
1. Cases where Registration date/time and Triage date/time are both blank/unknown
2. Cases where the MIS functional centre under Emergency Trauma, Observation, or Mental Health Services (as of January 2015 data)
3. Duplicate cases within the same functional centre where all ED data elements have the same values except for Abstract ID number
4. Cases where ED visit indicator is = "0" (i.e. scheduled ED visit)
5. When ONLY PIA date/time are completed:
   • Cases where PIA date/time are blank/unknown
   • Cases where time to PIA is greater than or equal to 100,000 minutes (1,666 hours)
   • Cases where PIA date/time is AFTER Disposition date/time or Patient left ED date/time
6. When ONLY NPIA date/time and service are complete:
   • Cases where NPIA date/time are blank/unknown
• Cases where NPIA service are blank/unknown
• Cases where NPIA service is NOT Nurse Practitioner, Physician Assistant, or Dentist
• Cases where NPIA is AFTER Disposition date/time or Patient left ED date/time
• Cases where Time to PIA is greater than or equal to 100,000 minutes (1,666 hours)

7. When PIA date/time and NPIA date/time and service are complete:
• Cases where both PIA and NPIA date/time are blank/unknown
• Cases where NPIA service is NOT Nurse Practitioner, Physician Assistant, or Dentist
• Cases where Time to PIA is greater than or equal to 100,000 minutes (1,666 hours)

Numerator
NA

Denominator
NA

Adjustment (risk, age/sex standardization)
None

Data Source
National Ambulatory Care Reporting System (NACRS)

Data provided to HQO by
Cancer Care Ontario (CCO)

Reported Levels of comparability
Province, Time, Institution

OTHER RELEVANT INFORMATION

Caveats and Limitations
1. Scheduled visits to the ED are excluded from this indicator. 2. Patients who registered in the ED but left before being seen are not included

Comments Summary
Average time patients spent in emergency department

Description
This indicator measures the average time (hours) that patients can expect to spend in the emergency department (ED) waiting for and receiving treatment. The ED length of stay (LOS) is calculated as the average time interval between the earlier of triage date/time or registration date/time and the date/time when a patient is admitted to the hospital or discharged from the ED (non-admitted patients). A lower number is better. Provincial targets have been set for the maximum amount of time patients should spend in the ED, waiting and being treated, before being discharged or admitted to the hospital, based on clinical evidence.

HQO reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Hours

Calculation Methods
The average time spent in ED is calculated by dividing total time spent in the ED by total number of ED visits.

Inclusion:
1. ED visits with a valid and known registration date/time or triage date/time and a valid and known date/time patient left the ED or disposition date/time
2. Admitted patients: unscheduled emergency visits with Disposition Codes 06 - 07
3. Non-admitted patients with CTAS level 1-5: unscheduled emergency visits with Disposition Codes 01, 03-05, 08-15

Exclusion:
1. Scheduled visits to the emergency department
2. ED visits with Visit Disposition 02 (Left without being seen or triaged)
3. Visits with both unknown/invalid registration and triage date/time OR with unknown/invalid patient left ED date/time
4. Negative ER LOS (i.e. the registration or triage date/time is after the date/time that the patient left ER)
5. Duplicate records within the same functional centre
6. Detailed exclusion based on the year of data:

From April 2013 onwards:
• Cases where Registration Date/Time and Triage Date/Time are both blank/unknown (9999)
• Cases where the MIS functional centre under Emergency Trauma, Observation and Emergency Mental Health Services (as of January 2015 data)
• Duplicate cases within the same functional center where all ER data elements have the same values except for Abstract ID number
• Cases where the ED visit Indicator is = '0'
• Cases where Patient Left ED Date/Time are blank/unknown (9999)
• Cases where patient has left without being seen by a physician during his/her visit (Disposition Code 02 & 03)
• ED LOS is greater than or equal to 100000 minutes (1666 hours)

From FY 2011-2012 to FY 2012-2013
• Cases where Patient Left ED Date/Time are blank/unknown (9999)
• Cases where Registration Date/Time and Triage Date/Time are both blank/unknown (9999)
• Cases where patients over the age of 125 on the earlier of triage or registration date
• Duplicate cases within the same functional center where all ER data elements have the same values except for Abstract ID number
• Cases where the ED visit Indicator is = '0'
• Cases where patient has left without being seen by a physician during his/her visit (Disposition Code 02 & 03)
• ED LOS is greater than or equal to 100000 minutes (1666 hours)

Numerator
NA

Denominator
NA

Adjustment (risk, age/sex standardization)
None

Data Source
National Ambulatory Care Reporting System (NACRS)

Data provided to HQO by
Cancer Care Ontario (CCO)

Reported Levels of comparability
Time, region, disposition status with acuity Level

OTHER RELEVANT INFORMATION

Caveats and Limitations
1. Scheduled visits to the ED are excluded from this analysis. 2. Patients who registered in ED but left without being seen or triaged are not included in the analysis. 3. For non-admitted patients, patients who left without seen or treatment and who left after triage and initiation of treatment are included in the analysis. 4. This indicator can also be calculated with percentiles, such as the 50th or 90th percentile. 5. Many factors can influence the indicator results, including triage level, patient population and hospital resources. 6. Depending
on the acuity of the case or hospital procedures, triage may occur before registration or vice versa. Therefore, the earlier of these 2 events is used as the starting point for calculation of this indicator.

Comments Summary
Percentage of cancer patients who had their first surgical appointment within a target time following a referral

Description

This indicator measures the percentage of patients whose appointment was completed within the access target for the surgical service area being reported. In this case, the higher the percentage completed, the better. Priority levels and access targets are the recommended maximum wait times for wait time to see a surgeon and wait time to surgery. Priority levels and access targets were created by a Provincial Clinical Expert Panel (Physicians, Clinicians and Healthcare Administrators) based on clinical evidence and are designed to help guide decision making; and, prioritize, manage and improve patient access to services.

The percentage of patients who had their appointment with the surgeon within the provincial target time represents the ability of the health system to provide patients with the care they need in a timely way.

HQQ reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Percentage

Calculation Methods
Numerator divided by the denominator times 100

Numerator
Number of cancer patients in the denominator who had the first surgical appointment within a target time and met the inclusion/exclusion criteria.

Denominator
Total number of cancer patients who had the first surgical appointment following a referral and met the inclusion/exclusion criteria below.

Inclusions:

1. All closed wait list entries with procedure dates within the reporting period.

2. For adult surgical procedures, patients that are 18 years and older on the day the procedure was completed.
3. For paediatric surgical procedures, patients that are younger than 23 years on the day the procedure was completed.

4. Treatment Cancer procedures only.

5. Patients who were referred for consult as new referrals and re-referrals with referral dates and consult dates

6. Patients assigned as Priority Level 2 - 4 for specialist consult (Wait 1)

Exclusions:

1. Diagnostic, Palliative and Reconstructive cancer procedures.

2. Procedures on Skin - Carcinoma, Skin-Melanoma, and Lymphomas.

3. Procedures no longer required cases

4. Patients assigned as Priority Level 1 for specialist consult (Wait 1)

5. Wait list entries identified by hospitals as data entry errors.

Adjustment (risk, age/sex standardization)
None

Data Source
Wait Time Information System (WTIS)

Data provided to HQO by
Cancer Care Ontario (CCO)

Reported Levels of comparability
Corporation, Province, Priority level, Time

OTHER RELEVANT INFORMATION

Caveats and Limitations
1. This indicator is only collected for patients who have completed their surgery. That is, for patients who do not proceed to surgery or for those who have not yet completed their surgery, this indicator is not available. 2. Data are collected not at the surgeon level but rather at the level of the facility where the procedure took place. 3. Ninety among 114 surgical facilities in Ontario report surgical wait times to the WTIS; the remaining 24 facilities do not receive wait time funding for reporting and so do not report wait times. 4. There are other factors that affect wait times for a surgical procedure that do not relate to a hospital’s efficiency, to a particular doctor or the availability of resources. They include: a. Patient Choice – a patient with a non-life-threatening condition may choose a non-surgical treatment or may decide to delay treatment for personal or family reasons.
to a more convenient time. b. Patient Condition – a patient’s condition may need to improve before the surgery or exam takes place. c. Follow-up Care – a patient who has an existing condition may be pre-booked for a follow-up treatment or exam a long time in advance. d. Treatment Complexity – a patient with special requirements may need specific equipment or a certain kind of facility and there is a delay until these can be scheduled.

Comments Summary

If patient unavailable dates fall outside the referral date up until the date of the appointment, the patient unavailable dates are not deducted from the patient’s wait days. These are considered data entry errors.
Percentage of patients who had their surgery completed within the target wait time

Description
This indicator measures the percentage of patients whose surgery was completed within the provincial wait time target for the surgical service area/surgery being reported. The wait time represents the time, in days, from when the patient and surgeon decides to proceed with surgery to having the surgery completed. In this case, the higher the percentage completed the better. The surgical service area/surgery reported in Measuring Up includes general surgeries, cancer surgeries, hip and knee replacements. Patients are assigned a priority level for their surgery by the physician based on clinical evidence.

HQO reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Percentage

Calculation Methods
Numerator divided by the denominator times 100

Numerator
Number of patients in the denominator whose surgery or procedure was completed within the provincial target wait time.

Denominator
All patients whose surgery or procedure was completed and met the criteria below to be included.

Inclusions:
1. All closed wait list entries with procedure dates within the reporting period.
2. For adult surgical procedures, patients that are 18 years and older on the day the procedure was completed.
3. For paediatric surgical procedures, patients that are younger than 23 years on the day the procedure was completed.
4. Treatment Cancer procedures only.
5. Patients assigned as Priority Level 2 - 4 for surgery (Wait 2)

Exclusions:
1. Diagnostic, Palliative and Reconstructive cancer procedures.
2. Procedures on Skin - Carcinoma, Skin-Melanoma, and Lymphomas.
3. Procedures no longer required cases
4. Patients assigned as Priority Level 1 for surgery (Wait 2)

5. Wait list entries identified by hospitals as data entry errors.

Adjustment (risk, age/sex standardization)
None

Data Source
Wait Time Information System (WTIS)

Data provided to HQO by
Cancer Care Ontario (CCO)

Reported Levels of comparability
Corporation, Province, Priority level, Time

OTHER RELEVANT INFORMATION

Caveats and Limitations
1. This indicator is collected for patients who have undergone their surgery. That is, patients who are still waiting are not included in the calculation. 2. Data are collected not at the surgeon level but rather at the level of the facility where the procedure took place. 3. Ninety among 114 surgical facilities in Ontario report surgical wait times to the WTIS; the remaining 24 facilities do not receive wait time funding for reporting and so do not report wait times. 4. There are other factors that affect wait times for a surgical procedure or diagnostic exam that do not relate to a hospital’s efficiency, to a particular doctor or the availability of resources. They include: a. Patient Choice – a patient with a non-life-threatening condition may choose a non-surgical treatment or may decide to delay treatment for personal or family reasons to a more convenient time. b. Patient Condition – a patient’s condition may need to improve before the surgery or exam takes place. c. Follow-up Care – a patient who has an existing condition may be pre-booked for a follow-up treatment or exam a long time in advance. d. Treatment Complexity – a patient with special requirements may need specific equipment or a certain kind of facility and there is a delay until these can be scheduled.

Comments Summary
Percentage of patients who had their MRI or CT scan completed within the target wait time

Description

This indicator measures the percentage of patients whose diagnostic imaging scan was completed within the access target. In this case, the higher the percentage completed the better.

Patients are assigned a priority level for their diagnostic imaging scan by the physician based on clinical evidence.

HQO reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Percentage

Calculation Methods
Numerator divided by the denominator times 100

Numerator
Number of patients in the denominator whose imaging scan was completed within the provincial target wait time.

Denominator
All patients whose diagnostic imaging scan was completed within the period and met the criteria below to be included.

Inclusion Criteria:

1. All closed wait list entries with scan dates within the reporting period.
2. For adult scans, patients that are 18 years and older on the day the scan was completed.
3. Cases classified as specified date procedures (SDP) or timed procedures are excluded from MRI and CT wait time information as of January 1, 2008.
4. Patients assigned as Priority Level 2 - 4 for scan.

Exclusion Criteria:

1. Scans no longer required
2. Patients assigned as Priority Level 1 for scan
3. Wait list entries identified by hospitals as data entry errors

Adjustment (risk, age/sex standardization)
Data Source
Wait Time Information System (WTIS)

Data provided to HQO by
Cancer Care Ontario (CCO)

Reported Levels of comparability
Corporation, Province, Priority level, Time

OTHER RELEVANT INFORMATION

Caveats and Limitations
1. This indicator is collected for patients who have received their diagnostic imaging scan. That is, patients who are still waiting are not included in the calculation. 2. There are other factors that affect wait times for a diagnostic exam that do not relate to a hospital’s efficiency or the availability of resources, e.g. patient choice.

Comments Summary
Percentage of patients who underwent a cardiac surgery or procedure within the provincial access target

Description

This indicator measures the percentage of patients that require a cardiac surgery or procedure and receive it within the provincial wait time target. Wait times were calculated from the day the patient and doctor decided to go ahead with the surgery or procedure, to the day it was performed. A higher percentage is better. The indicator is reported by priority level. Patients are assigned a priority level for the surgery based on their clinical assessment.

There are three cardiac surgeries or procedures reported Online:

1. A diagnostic cardiac catheterization (CATH), or angiography, is a catheter based diagnostic test that involves selectively injecting x-ray contrast dye into one or more coronary arteries in order to visualize blockages in the arteries and vessels that supply blood to the heart.

2. A percutaneous coronary intervention (PCI), or angioplasty, is a procedure that involves using a catheter to insert a stent that opens blocked blood vessels in the coronary arteries.

3. Coronary artery bypass graft (CABG) is a surgical procedure performed on patients with coronary artery disease to bypass areas of blockage. Blood vessels, most commonly from the legs or chest wall, are grafted onto the heart to allow blood to flow past diseased heart vessels.

HQO reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Percentage

Calculation Methods
Numerator divided by the denominator times 100

Numerator
Number of a cardiac surgery or procedures completed within the provincial access target

Denominator
Total number of patients who underwent a cardiac surgery or procedure that was done in the reporting period within Ontario's 19 advanced cardiac service hospitals and met the inclusion criteria below:

Inclusions:
1. Static (month-end) Data.

2. Must be onlisted and offlisted as that procedure: Onlisted and offlisted refers to being put on the waiting list. Once a patient sees a specialist (cardiologist, cardiac surgeon) and that physician accepts the patient for a procedure (CATH, PCI, CABG) they are "onlisted" to the wait list. Once the patient receives their treatment and the procedure is over the patient is "offlisted" from the wait list (because the treatment is done).

3. Wait time takes into account DART* per patient.

*DART stands for Dates Affecting Readiness to Treat. It means that a wait list clock is paused because the patient asked the physician to pause it. There is no limit to the number of DARTS that can be applied to a surgery. If a patient changes priority, the wait time clock is restarted against the target for the new priority.

Exclusions:

1. Patients who die before they receive their procedures

Adjustment (risk, age/sex standardization)
None

Data Source
CorHealth Ontario

Data provided to HQO by
CorHealth Ontario

Reported Levels of comparability
Corporation, Province, Priority level, Time

OTHER RELEVANT INFORMATION

Caveats and Limitations
1. This indicator is collected for patients who have undergone this procedure. That is, patients who are still waiting are not included in the calculation. 2. Data are collected not at the surgeon level but rather at the level of the facility where the procedure took place. 3. Certain components of wait times may be difficult to capture. For example, the "decision to treat" date data element has a less standardized definition which may be open to some interpretation.

Comments Summary
Percentage of survey respondents who would definitely recommend the emergency department (ED) to family and friends

Description
Percentage of survey respondents who responded “yes, definitely” to the following survey question: "Would you recommend this emergency department to family and friends?” A higher percentage is better.

HQO reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Percentage

Calculation Methods
Numerator divided by the denominator times 100

Numerator
Number of survey respondents who answered "yes, definitely" to the following survey question: "Would you recommend this emergency department to family and friends?"
• Yes, definitely
• Yes, probably
• No

Denominator
Number of survey respondents to the above mentioned question

Adjustment (risk, age/sex standardization)
None

Data Source
National Research Corporation Canada (NRCC) Survey

Data provided to HQO by
Ontario Hospital Association (OHA)

Reported Levels of comparability
Province, LHIN, Time
OTHER RELEVANT INFORMATION

Caveats and Limitations
This indicator is based on self reported data and therefore may be prone to sampling and response biases.

Comments Summary
QIP related indicator has been transitioned from NRC Canada Survey to Ontario Emergency Department Patient Experience of care Survey (EDPEC) for 2017/18.
Percentage of survey respondents who would definitely recommend this hospital to family and friends

Description
Percentage of respondents who responded "yes, definitely" to the following survey question: "Would you recommend this hospital to family and friends?" A higher percentage is better

HQO reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Percentage

Calculation Methods
Numerator/ Denominator * 100

Numerator
Number of survey respondents who answered "yes, definitely" to the following survey question: "Would you recommend this hospital to family and friends?"
- Yes, definitely
- Yes, probably
- No

Denominator
Number of survey respondents

Adjustment (risk, age/sex standardization)
None

Data Source
National Research Corporation Canada (NRCC) Survey

Data provided to HQO by
Ontario Hospital Association (OHA)

Reported Levels of comparability
Province, LHIN, Time
OTHER RELEVANT INFORMATION

Caveats and Limitations
This indicator is based on self-reported data and therefore may be prone to sampling and response biases.

Comments Summary
QIP related indicator has been transitioned from NRC Canada Survey to CIHI Canadian Patient Experiences Survey – Inpatient Care (CPES-IC) for 2017/18
Percentage of low-risk deliveries by delivery type

**Description**
This indicator measures the proportion of deliveries among low-risk women who gave birth in Ontario hospitals by delivery type:
- caesarean section
- vaginal delivery

**HQO reporting tool/product**
Public reporting

**DEFINITION AND SOURCE INFORMATION**

**Unit of Measurement**
Percentage

**Calculation Methods**
Numerator divided by the denominator times 100

**Numerator**
Number of cases within denominator resulting in:
- caesarean section
- vaginal delivery

**Denominator**
Total number of women with a low-risk delivery in Ontario.

**Inclusions:**
- Robson criteria 1 to 4:
  - Robson 1: Nullipara (first time mothers) who had singleton, full-term (gestational age ≥37 weeks), and cephalic (head first) delivery with spontaneous labour
  - Robson 2: Nullipara (first time mothers) who had singleton, full-term (gestational age ≥37 weeks), and cephalic (head first) delivery with induced labour or caesarean section before labour
  - Robson 3: Multipara (women who have given birth before) who had singleton, full-term (gestational age ≥37 weeks), and cephalic (head first) delivery with spontaneous labour
  - Robson 4: Multipara (women who have given birth before) who had singleton, full-term (gestational age ≥37 weeks), and cephalic (head first) delivery with induced labour or caesarean section before labour

**Exclusions:**
- Autoimmune - lupus; rheumatoid arthritis; autoimmune other
- Cancer - diagnosed in pregnancy; medication exposure in pregnancy-chemotherapeutic agents
- Maternal cardiovascular - acquired heart disease; antihypertensive therapy outside of pregnancy; cardiovascular disease; congenital heart defect; congenital heart disease; pre-existing hypertension; renal disease; other cardiovascular
- Diabetes - diabetes and pregnancy
• Gastrointestinal - liver/ gallbladder - cholecystitis; colitis; crohn’s; hepatitis; liver/ gallbladder - intrahepatic cholestasis of pregnancy;
• Genitourinary - acquired renal (insufficiency; chronic infections); congenital/ genetic renal (renal agenesis; pelvic kidney); renal disease; uterine anomalies; genitourinary other
• Maternal haematology - gestational thrombocytopenia; haemophilia (a; b von willebrand); idiopathic thrombocytopenia; sickle cell disease; thalassemia; thrombophilia; haematology other
• Hypertensive disorders in pregnancy - gestational hypertension; eclampsia; hellp; preeclampsia; preeclampsia requiring magnesium sulfate; pre-existing hypertension with superimposed preeclampsia; maternal unknown
• Musculoskeletal - muscular dystrophy/ neuromuscular disorder; myotonic dystrophy; osteogenesis imperfecta; achondroplasia; musculoskeletal other
• Neurology - cerebral palsy; multiple sclerosis; myasthenia gravis; spina bifida/ neural tube defect; neurology other
• Placental - placenta accreta; placenta increta; placenta percreta; placenta previa; placental abruption; placental other
• Fetal complications - anomalies; isoimmunization/ alloimmunization; intrauterine growth restriction; oligohydramnios; fetal therapy – fetal surgery
• Fetal genetic anomalies - cgh microarray abnormality polymorphism; chromosome abnormality; other birth defects; other genetic inherited disorders/ syndromes

Adjustment (risk, age/sex standardization)
None

Data Source
BORN Information System (BIS)

Data provided to HQO by
Ontario Better Outcomes Registry & Network (BORN)

Reported Levels of comparability
Time, Region

OTHER RELEVANT INFORMATION

Caveats and Limitations
Data can only be reported for hospitals who submit and acknowledge their own data. Data from FY2012/13 onwards are extracted from the BORN Information System (BIS). Maternal neighborhood income quintile was assigned using the Postal Code Conversion File Plus (PCCF+) based on a mother's postal code. The national neighbourhood income quintile was included in the applicable tables. Missing data on this variable represents records where either a valid postal code was not entered or the PCCF+ program was unable to assign a neighbourhood income quintile

Comments Summary
Similar external indicators which do not align: • CIHI: Low-Risk Caesarean Section Rate among singleton term cephalic pregnancies for women without placenta previa or previous C-Section Reporting. Hospital data are shown only if data have been acknowledged for submission. 2014/15 data from the BIS were not complete and therefore not included in the MU report.
Percentage of deliveries by delivery type

**Description**
This indicator measures the proportion of deliveries among women who gave birth in Ontario hospitals by delivery type:
- Caesarean section
- Vaginal delivery

**HQUO reporting tool/product**
Public reporting

**DEFINITION AND SOURCE INFORMATION**

**Unit of Measurement**
Percentage

**Calculation Methods**
The percentage is calculated as: numerator divided by the denominator times 100

**Numerator**
Number of cases within denominator resulting in:
- caesarean section
- vaginal delivery

**Denominator**
Total number of women who delivered in Ontario hospitals

**Inclusions:**
Live and stillbirth

**Exclusions:**
Deliveries occurring outside of Ontario hospital

**Adjustment (risk, age/sex standardization)**
None

**Data Source**
BORN Information System (BIS)

**Data provided to HQO by**
Ontario Better Outcomes Registry & Network (BORN)

**Reported Levels of comparability**
Time, Region
OTHER RELEVANT INFORMATION

Caveats and Limitations
Data can only be reported for hospitals who submit and acknowledge their own data. Data from FY2012/13 onwards extracted from the BORN Information System (BIS) 2014/15 data was not complete and therefore not included in the MU report.

Comments Summary
Maternal neighbourhood income quintile was assigned based on a mother’s postal code.
Rate of hospital-acquired C. difficile infection (CDI) per 1,000 inpatient days

Description
The indicator measures the incidence rate of hospital acquired Clostridium difficile infection (CDI) per 1,000 inpatient days within hospitals.

HQO reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Rate per 1,000 inpatient days

Calculation Methods
Numerator divided by the denominator times 1,000

Numerator
Total number of new nosocomial (i.e. hospital acquired) CDI cases

Inclusion:
1. All publicly funded hospitals
2. Inpatient beds
3. Laboratory-confirmed CDI cases (i.e. confirmation of a positive toxin assay (A/B) for Clostridium difficile together with diarrhea OR visualization of pseudomembranes on sigmoidoscopy or colonoscopy, or histological/pathological diagnosis of pseudomembranous colitis)
4. New nosocomial case associated with the reporting facility defined as - the infection was not present on admission (i.e., onset of symptoms > 72 hours after admission) or the infection was present at the time of admission but was related to a previous admission to the same facility within the last 4 weeks and the case has not had Clostridium difficile-Associated Disease (CDAD) in the past 8 weeks.

Exclusion:
Patients less than 1 year of age

Denominator
Total number of inpatient days

Inclusion:
1. All publicly funded hospitals
2. Inpatient beds

Exclusion:
1. Patients less than 1 year of age
Adjustment (risk, age/sex standardization)
None

Data Source
Self-Reporting Initiative (SRI) (July 2012 to present) and Web Enabled Reporting System (WERS) (2008-June 2012), Ministry of Health and Long-Term Care

Data provided to HQO by
Ministry of Health and Long-Term Care (MOHLTC)

Reported Levels of comparability
Province, Time

OTHER RELEVANT INFORMATION

Caveats and Limitations
Data are self-reported by hospitals. Results include only hospital-acquired infections. The following cases are not included in the rate calculation:
1. New nosocomial case associated with other health care facilities: The infection was present on admission (i.e., onset of symptoms < 72 hours after admission) and the patient was exposed to another health care facility (including LTC) other than the reporting facility within the last 4 weeks and the case has not had CDAD in the past 8 weeks.
2. New case associated with a source other than a health care facility or unknown/indeterminate source: The infection was present on admission (i.e., onset of symptoms < 72 hours after admission) and the patient was not exposed to any health care facility (including LTC) within the last 4 weeks or the source of infection cannot be determined and the case has not had CDAD in the past 8 weeks.

Comments Summary
Rate of antibiotic-resistant bloodstream infections per 1,000 inpatient days

Description
This indicator measures the incidence rate of nosocomial (hospital-acquired) Methicillin-resistant Staphylococcus aureus (MRSA) and Vancomycin-resistant Enterococcus (VRE) infections associated with the reporting facility per 1,000 inpatient days.

HQO reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Rate per 1,000 inpatient days

Calculation Methods
Numerator divided by denominator times 1,000

Numerator
MRSA:
1. Laboratory-confirmed bloodstream MRSA bacteremia cases (i.e. confirmation through a single positive blood culture for MRSA);
2. New nosocomial cases associated with the reporting facility, where the infection was not present on admission (i.e. onset of symptoms >72 hours after admission) or the infection was present at the time of admission but was related to a previous admission to the same facility within the last 72 hours.

VRE:
1. Laboratory-confirmed bloodstream VRE bacteremia cases (i.e. confirmation through a single positive blood culture for VRE);
2. New nosocomial cases associated with the reporting facility where the infection was not present on admission (i.e. onset of symptoms >72 hours after admission) or the infection was present at the time of admission but was related to a previous admission to the same facility within the last 72 hours.

Includes:
1. All publicly funded hospitals;
2. Inpatient beds

Exclusion:
1. New case associated with other health care facility.
2. New case associated with a source other than a health care facility or unknown/indeterminate source

Denominator
Total number of inpatient days in the reporting period
Inclusion:
1. All publicly funded hospitals;
2. Inpatient beds

Adjustment (risk, age/sex standardization)
None

Data Source
Self-Reporting Initiative (SRI) (July 2012 to present) and Web Enabled Reporting System (WERS) (2008-June 2012), Ministry of Health and Long-Term Care

Data provided to HQO by
Ministry of Health and Long-Term Care (MOHLTC)

Reported Levels of comparability
Province, Time, Institution

OTHER RELEVANT INFORMATION

Caveats and Limitations
Data are self-reported by hospitals.

Comments Summary
6. System Integration

Percentage of patients who saw a family doctor or specialist within seven days of discharge after hospitalization for chronic obstructive pulmonary disease

Description
Percentage of follow up visits with a doctor within 7 days of discharge after hospitalization for chronic obstructive pulmonary disease (COPD) among patients aged 40 and older. A higher percentage is better.

HQO reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Percentage

Calculation Methods
The percentage is calculated as: numerator divided by the denominator times 100

Numerator
Number of patients discharged from acute care hospitals after an admission for COPD who had at least one doctor visit within 7 days after discharge.
The follow-up data are received in the following subcategories:
• By any health care provider
• By primary care physician (GP/FP)
• By specialist (respiratory specialist)
Inclusions:
1. Ontario doctor visits taking place in office, home, or long-term care (would capture most of the follow-up (planned) visits in ED)
2. Doctor visits occurring between days 0 to 7 post-discharge (i.e., includes date of discharge)*
   *If a patient's discharge time was before 8 am, the OHIP visit was counted on the day 0, otherwise the visit was not counted on the same day as it is impossible to distinguish if it happened before or after discharge. (OHIP has only the day)
Exclusions:
3. Negated OHIP claims, duplicate claims and lab claims
4. Records with missing or invalid data on discharge/admission date, health number, age and gender

**Denominator**
Number of patients aged 40 and older discharged from hospital after an admission for COPD.

Inclusions:
- Discharges from acute care hospitals with discharge date in the reporting period
- Admission for COPD (ICD10 codes J41, J42, J43, J44)
- Diagnosis type = "M" (main)
- Discharged home

Exclusions:
- Patients under age 40
- Deaths, acute transfers, patient sign-outs against medical advice
- Records with missing or invalid data on discharge/admission date, health number, age and sex
- Transfers to hospital or other care settings (palliative care/hospice, addiction treatment centre….) as defined by discharge disposition ‘01’, ‘03’

**Adjustment (risk, age/sex standardization)**
Direct age and sex adjusted using 2011 Canadian census population

Age groups are: 40-64, 65-79, 80+

**Data Source**
Ontario Health Insurance Plan (OHIP) Claims History Database, Registered Persons Database (RPDB), Physician Database (IPDB), Discharge Abstract Database (DAD)

**Data provided to HQO by**
Institute for Clinical Evaluative Sciences (ICES)

**Reported Levels of comparability**
Time, Region

**OTHER RELEVANT INFORMATION**

**Caveats and Limitations**
The indicator captures a visit with a doctor for any reason and may not necessarily have the same reason as the hospitalization. Follow up by non-physician providers (i.e. nurse practitioners in family health teams) or providers that do not provide billing or shadow billing will not be captured. Hard to interpret the results as there is some variation in recommended time-period for the follow-up (ranging from one week to one month).

**Comments Summary**
The admissions are unique by episode – so one patient can have more than one admission during the fiscal year
Percentage of patients who saw a family doctor or specialist within seven days of discharge after hospitalization for congestive heart failure (CHF)

**Description**
Percentage of follow up visits with a doctor within 7 days of discharge after hospitalization for congestive heart failure (CHF) among patients aged 40 and older. A higher percentage is better.

**HQO reporting tool/product**
Public reporting

**DEFINITION AND SOURCE INFORMATION**

**Unit of Measurement**
Percentage

**Calculation Methods**
The percentage is calculated as: numerator divided by the denominator times 100

**Numerator**
Number of patients discharged from acute care hospitals after an admission for CHF who had at least one physician visit within 7 days after discharge. The follow-up data are received in the following subcategories:
- By any health care provider
- By primary care physician (GP/FP)
- By specialist (cardiologist)

* * * *

**Inclusions:**
- Ontario physician visits taking place in office, home, or long-term care (includes most of the follow-up (planned) ED visits)
- Physician visits occurring between days 0 to 7 post-discharge (i.e., includes date of discharge)

* * * *

* If a patient’s discharge time was before 8 am, the OHIP visit was counted on the day 0, otherwise the OHIP visit was not counted on the same day as it was impossible to distinguish if the visit happened before or after the discharge (OHIP has date only).*

**Exclusions:**
- Negated OHIP claims, duplicate claims and lab claims
- Records with missing or invalid data on discharge/admission date, health number, age and gender

**Denominator**
Number of patients aged 40 and older discharged from hospital after an admission for CHF.

* * * *

* * * *

**Inclusions:**
- Discharges from acute care hospitals with discharge date in the reporting period
- Admission for CHF (ICD10 codes I500, I501, I509)
• Diagnosis type ="M" (main)
• Discharged home

Exclusions:
• Patients under age 40
• Deaths, acute transfers, patient sign-outs against medical advice
• Records with missing or invalid data on discharge/admission date, health number, age and gender
• Transfers to other hospital or to other care settings (palliative care/hospice, addiction treatment centre…) as defined by discharge disposition ‘01’, ‘03’

Adjustment (risk, age/sex standardization)
Direct age and sex adjusted using 2011 Canadian census population
Age groups are: 40-64, 65-79, 80+

Data Source
Ontario Health Insurance Plan (OHIP) Claims History Database, Registered Persons Database (RPDB), Physician Database (IPDB), Discharge Abstract Database (DAD)

Data provided to HQO by
Institute for Clinical Evaluative Sciences (ICES)

Reported Levels of comparability
Time, Region

OTHER RELEVANT INFORMATION

Caveats and Limitations
The indicator captures a visit with a doctor for any reason and may not necessarily have the same reason for visit as the hospitalization. Follow up by non-physician providers (i.e. Nurse practitioners in family health teams) or providers that do not provide billing or shadow billing will not be captured. Hard to interpret the results as there is some variation in recommended time-period for the follow-up (ranging from one week to one month).

Comments Summary
The admissions are unique by episode – so one patient can have more than one admission during the fiscal year.
Percentage of inpatients days that beds were occupied by patients who could have been receiving care elsewhere

Description
This indicator measures the total number of alternate level of care (ALC) days contributed by ALC patients within the specific reporting month/quarter using near-real time acute and post-acute ALC information and monthly bed census data. A lower rate is better.

HQO reporting tool/product
Public reporting, Quality Improvement Plans (QIPs)

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Rate per 100 inpatient days

Calculation Methods
This indicator is calculated as the numerator divided by the denominator times 100
Please note that only those facilities (acute & post-acute) submitting both ALC data (to the Wait Time Information System (WTIS) and Bed Census Summary (BCS) data (through the Health Database Web Portal) are included in ALC Rate calculation. Any master number that does not have inpatient days reported to the BCS for a given month/quarter will be excluded from reporting for that month/quarter.

Numerator
Total number of inpatient days designated as ALC in a given time period (i.e. monthly, quarterly, and yearly). Inpatient service type is identified in the WTIS.
Calculation:
• Acute ALC days equals the total number of ALC days contributed by ALC patients waiting in non-surgical, surgical, and intensive/critical care beds.
• Post-acute ALC days equals ALC days for Inpatient Services in complex continuing care, rehabilitation and mental health beds
Exclusions:
1. ALC cases discontinued due to ‘Data Entry Error’.
2. ALC cases having Inpatient Service = Discharge Destination for Post-Acute Care (*exception: Bloorview Rehab, complex continuing care to complex continuing care).
3. ALC cases identified by the facility for exclusion.
Notes:
• The day of ALC designation is counted as an ALC day but the date of discharge or discontinuation is not counted as an ALC day.
• For cases with an ALC designation date on the last day of a reporting period and no discharge/discontinuation date, then ALC days are equal to 1.
• The ALC Rate indicator methodology makes the assumption that the Inpatient Service data element (as defined in the WTIS) is comparable to the Bed Type data element (as defined in the BCS).

**Denominator**
Total number of inpatient days in a given time period (i.e. monthly, quarterly, and yearly).

Calculation:
• Acute patient days equals the total number of patient days contributed by patients in the following units: medical (MED), surgical (SURG), combined medical & surgical (CMS), intensive care and coronary care (ICU), obstetrics (OBS), paediatric (PAE), child/adolescent mental health (Children MH), acute addiction (Addiction), pediatrics in nursery (Paed Days in Nursery) and newborns
• Post-acute patient days equals the total number of patient days contributed by inpatients in the following units: chronic (Chronic), general rehabilitation (Gen. Rehab), special rehabilitation (Spec. Rehab), acute psych (Acute Psy), addiction (Addiction), Forensic (Forensic), psychiatric crisis unit (Crisis Unit) and Longer Term Psychiatric (Long Term)
• CCC patient days = the total number of patient days contributed by inpatients in complex continuing care (Chronic) beds
• Rehabilitation patient days = the total number of patient days contributed by inpatients in general rehabilitation (Gen. Rehab) and special rehabilitation (Spec. Rehab)
• Mental health patient days = the total number of patient days contributed by inpatients in the following units: acute psych (Acute Psy), addiction (Addiction), forensic (Forensic), psychiatric crisis unit (Crisis Unit) and longer term psychiatric (Long Term)

Exclusions:
Patient days contributed by patients in the emergency department

**Adjustment (risk, age/sex standardization)**
None

**Data Source**
Wait Time Information System (WTIS), Bed Census Summary (BCS)

**Data provided to HQO by**
Cancer Care Ontario (CCO)

**Reported Levels of comparability**
Time, Region

**OTHER RELEVANT INFORMATION**

**Caveats and Limitations**
ALC rate indicator excludes facilities that are currently not reporting ALC data to the WTIS. WTIS-ALC data are only available since July 2011. The BCS has a three month reporting lag. Validation is required to ensure that specific bed types (in BCS) correspond to those in WTIS. The information for both the numerator (WTIS) and denominator (BCS) are based on data that are available at a specific point in time. Therefore, rates calculated using these data are subject to change depending on when the calculations are made.

**Comments Summary**
This indicator looks at "inpatient days" – a count of the days individual hospital beds were occupied by patients – to measure the percentage of days hospital beds were occupied by patients identified as requiring an alternate level of care, meaning they did not require the type of care for which the bed was designated. Patients designated as requiring alternate level of care are usually waiting for a place elsewhere in the health system that provides the type of care they need, such as a long-term care home or home care.
Visits to emergency for conditions people thought could have been treated by their primary care provider

**Description**
This indicator measures the percentage of people with a regular primary care provider who reported in a survey that the last time they went to the emergency department, it was for a condition that they thought could have been treated by their provider if that provider had been available. It includes only patients aged 16 and older who visited the emergency department in the previous 12 months. A lower percentage is better.

**HQA reporting tool/product**
Public reporting

**DEFINITION AND SOURCE INFORMATION**

**Unit of Measurement**
Percentage

**Calculation Methods**
The indicator is calculated as numerator divided by denominator times 100

**Numerator**
Number of respondents who answered “Yes” to the following survey question:
Survey question “The last time you went to the hospital emergency department/accident and emergency department/emergency room, was it for a condition you thought could have been treated by the doctors or staff at the place where you usually get medical care if they had been available?”

**Denominator**
Denominator  All respondents
Exclusions:
- Respondents without a regular doctor/place of care and have not used the emergency department in the past two years.
- Those that skipped the survey question

**Adjustment (risk, age/sex standardization)**
None

**Data Source**
Health Care Experience Survey (HCES)

**Data provided to HQO by**
Ministry of Health and Long-Term Care (MOHLTC)

**Reported Levels of comparability**
International comparison, Province, Immigration, Language, Age, Income, Education, Rurality, Region, Sex

OTHER RELEVANT INFORMATION

Caveats and Limitations
Only people aged 16 years and older can complete the survey. People living in institutions, in households without telephones, and those with invalid/missing household addresses in the Registered Persons Database (RPDB) are excluded. Respondents who were unable to speak English or French or were not healthy enough (physically or mentally) to complete the interview were not surveyed. Data are based on self-report whereby responses cannot be validated with respect to context and severity of or reason for visiting the emergency department instead of one’s care provider nor actual availability of the regular care provider.

Comments Summary
The results are weighted to account for the design characteristics of the survey and post-stratified by age and sex to reflect the Ontario population. In addition, the LHIN and community weighting is applied.
Hospital readmission rate within 30 days of leaving hospital for medical or surgical treatment

**Description**
This indicator measures the rate, per 100 patient discharges, of unplanned returns to the hospital within 30 days of discharge. It includes medical patients who were hospitalized for non-surgical treatment, and patients who had surgery while in hospital. A lower rate is better.

**HQO reporting tool/product**
Public reporting

**DEFINITION AND SOURCE INFORMATION**

**Unit of Measurement**
Rate per 100 discharges

**Calculation Methods**
The unadjusted indicator is calculated as the numerator divided by the denominator per 100 patient discharges.

**Numerator**
Number of episodes of care for medical and surgical patients with an urgent readmission within 30 days of previous discharge

Inclusions:
1. Emergent or urgent (non-elective) readmission to an acute care hospital.
2. When the time between the admission date on readmission record and the discharge date on the last record of the index episode of care is less than or equal to 30 days.

Exclusions:
Presence of at least one record in the episode with one of the following:
3. Delivery (ICD-10-CA: O10-O16, O21-O29, O30-O37, O40-O46, O48, O60-O69, O70-O75, O85-O89, O90-O92, O95, O98, O99 with a sixth digit of 1 or 2; or Z37 recorded in any diagnosis field)
4. Chemotherapy for neoplasm (ICD-10-CA: Z51.1) as MRDx
5. Admission for mental illness (MCC = 17)
6. Admission for palliative care (ICD-10-CA: Z51.5) coded as MRDx.
7. Records with an invalid admission date

**Denominator**
Number of episodes of care discharged between April 1 and March 1 of the fiscal year 2013/14 for surgical and medical patients
- Surgical Group MCC Partition Code = I (intervention)
- Medical Group MCC Partition Code = D (diagnosis) (not an intervention)

Inclusions:
1. Episodes involving inpatient care. An episode may start or end in a day surgery setting. Episodes that both start and end in day surgery settings are not included.
2. Discharges between April 1 and March 1 of the following year (period of case selection ends on March 1 of the following year to allow for 30 days of follow-up)
3. Sex recorded as male or female
4. Ontario resident
5. Age 20 and older
Exclusions:
6. Records with an invalid health card number
7. Records with an invalid date of birth
8. Records with an invalid admission date or time
9. Records with an invalid discharge date or time
10. Records with an admission category of still birth or cadaveric donor
11. Episodes with a discharge of death or self sign-out
12. Presence of at least one record in the episode with MCC 17 (Mental Diseases and Disorders)
13. Presence of at least one record in the episode with palliative care (ICD-10-CA: Z51.5) coded as most responsible diagnosis (MRDx).
14. Presence of at least one record in the episode with MCC 13 (Pregnancy and Childbirth)

Adjustment (risk, age/sex standardization)
Risk adjustment factors: Age group, sex, acute care hospitalization in previous six months, urgent admission, Charlson Comorbidity score group* and selected CMG group**

Data Source
National Ambulatory Care Reporting System (NACRS), Discharge Abstract Database (DAD)

Data provided to HQO by
Canadian Institute for Health Information (CIHI)

Reported Levels of comparability
Time, Institution, Region

OTHER RELEVANT INFORMATION

Caveats and Limitations
Sometimes patients have to be hospitalized again shortly after being discharged from a previous hospitalization. Such an event is referred to as a readmission and is not always avoidable. A readmission may be needed if the patient’s condition is getting worse.

Comments Summary
NA
Hospitalization rate for conditions that can be managed outside hospital

**Description**
This indicator measures the rate of hospitalization, per 100,000 people under age 75, for one of the following conditions that if effectively managed or treated earlier may not have resulted in admission to hospital: asthma, diabetes, chronic obstructive pulmonary disease, heart failure, hypertension, angina and epilepsy. A lower rate is better.

**HQO reporting tool/product**
Public reporting

**DEFINITION AND SOURCE INFORMATION**

**Unit of Measurement**
Rate per 100,000 people

**Calculation Methods**
This indicator is calculated as the numerator divided by the denominator per 100,000 population

**Numerator**
Number of inpatient records from acute care hospitals during each fiscal year with any of ACSCs as the most responsible diagnosis.
Hospitalization with most responsible diagnosis (DXTYPE=M) code of:
- Asthma: J45;
- Congestive heart failure and pulmonary edema:I50, J81; excluding cases with CCI codes for cardiac surgical procedures (see below);
- Chronic obstructive pulmonary disease: J41 to J44, J47 or J10.0,J11.0,J12-J16,J18,J20,J21,J22 when J44 is also present as a secondary diagnosis;
- Grand mal status and other epileptic convulsions: G40, G41;
- Hypertension: I10.0, I10.1, I11; excluding cases with CCI codes for cardiac surgical procedures (see below);
- Angina: I20, I23.82, I24.0, I24.8, I24.9, excluding cases with CCI codes for cardiac surgical procedures (see below);
- Cardiac surgical procedures for exclusion: J1HA58, 1HA80, 1HA87, 1HB53, 1HB54, 1HB55, 1HB87, 1HD53, 1HD54, 1HD55, 1HH59, 1HJ76, 1HJ82, 1HM57, 1HM78, 1HM80, 1HN71, 1HN80, 1HN87, 1HP76, 1HP78, 1HP80, 1HP82, 1HP83, 1HP87, 1HR71, 1HR80, 1HR84, 1HR87, 1HS80, 1HS90, 1HT80, 1HT89, 1HT90, 1HU80, 1HU90, 1HV80, 1HV90, 1HW78, 1HW79, 1HX71, 1HX78, 1HX79, 1HX80, 1HX83, 1HX86, 1HX87, 1HY85, 1HZ53 rubric (except 1HZ53LAKP), 1HZ55 rubric (except 1HZ55LAKP), 1HZ56, 1HZ57, 1HZ59, 1HZ80, 1HZ85, 1HZ87, 1IF83, 1IJ50, 1IJ55, 1IJ57, 1IJ76, 1IJ86, 1IJ80, 1IK57, 1IK80, 1IK87, 1IN84, 1LA84, 1LC84, 1LD84, 1YY54LANJ

Exclusions:
1. Death before discharge
2. Patients sign themselves out.
3. Transfers from another acute care facility.
4. Patients age 75 and older.

**Denominator**
Number of Ontario adults aged 0-74
Exclusions:
1. Birthdate after April 1st of given fiscal year.
2. Death date before April 1st of given fiscal year.
4. Non-Ontario resident (April 1st of given fiscal year).
5. Age less than 0 or greater than 74 (April 1st of given fiscal year).
6. Not eligible for OHIP (April 1st of given fiscal year)

**Adjustment (risk, age/sex standardization)**
Direct age-sex standardized rate using the 2011 Canadian population

**Data Source**
Registered Persons Database (RPDB), Discharge Abstract Database (DAD)

**Data provided to HQO by**
Institute for Clinical Evaluative Sciences (ICES)

**Reported Levels of comparability**
Time, Institution, Income, Rurality, Region

**OTHER RELEVANT INFORMATION**

**Caveats and Limitations**
This indicator is affected by the health status of the population since a healthier population will have fewer hospitalizations overall. For example, a population with fewer smokers is likely to have fewer people with lung disease that may require hospitalization.

**Comments Summary**
Percentage of patients who had an unscheduled emergency department visit that potentially could have been treated in an alternative primary care setting

**Description**
This indicator describes the percentage of patients aged 16 or older who had an unscheduled emergency department visit that potentially could have been treated in an alternative primary care setting, such as a family doctor's office. A lower percentage is better.

**HQO reporting tool/product**
Public reporting

**DEFINITION AND SOURCE INFORMATION**

**Unit of Measurement**
Percentage

**Calculation Methods**
The percentage is calculated as: numerator divided by the denominator times 100

**Numerator**

**Denominator**
Number of Ontario adults aged 0-74

**Exclusions:**
1. Birthdate after April 1st of given fiscal year.
2. Death date before April 1st of given fiscal year.
4. Non-Ontario resident (April 1st of given fiscal year).
5. Age less than 0 or greater than 74 (April 1st of given fiscal year).
6. Not eligible for OHIP (April 1st of given fiscal year)

**Adjustment (risk, age/sex standardization)**
Direct age-sex standardized rate using the 2011 Canadian population
Data Source
National Ambulatory Care Reporting System (NACRS), Registered Persons Database (RPDB)

Data provided to HQO by
Institute for Clinical Evaluative Sciences (ICES)

Reported Levels of comparability
Province, Institution

OTHER RELEVANT INFORMATION

Caveats and Limitations
It is not possible to know for sure if an emergency department visit could be treated in an alternative primary care setting. An emergency department for these conditions visit may not always be reflective of poor access to care for a patient. In some cases, a patient may go to the emergency department because their primary care provider works there.

Comments Summary
Conditions selected for this indicator are considered common high volume conditions. If multiple conditions are diagnosed throughout the emergency visit, the diagnosis/condition responsible for the greatest resource use is chosen as the most clinically significant reason for the visit.
7. Home Care

Percentage of home care patients who felt involved in developing their care plan

Description
This indicator measures the percentage of home care patients surveyed who reported feeling involved in developing their care plan. A higher percentage is better.

HQO reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Percentage

Calculation Methods
The percentage is calculated as: numerator divided by the denominator times 100

Numerator
The percentage of respondents who responded "Strongly agree" or "somewhat agree", given a five point Likert scale to the question: "Thinking about the planning of your care, please tell me whether you agree or disagree with the following statements: I felt involved in developing my plan".

Denominator
The number of total responses to the question minus the total number of responses not applicable to these questions.

Inclusions:
General Survey Inclusion criteria:
All unique active or discharged patients receiving in-home services and discharged patients to placement in one of the following categories during the specified time period:
• admission final
• withdrawn, interim became final
• withdrawn, placement by other CCAC
• refused bed.

Exclusions:
General Survey Exclusion criteria:
1. Excludes patients who received in-school service only
2. Nursing clinic services
3. Respite services
4. Medical supplies and equipment
5. End-of-life patients (SRC 95)
6. Clients not yet categorized (SRC 99)
7. In-home patients classified as out of region
8. Convalescent care patients
Other exclusions: Home care patients with hospital or death discharges; patients on hold in hospital; patients with a claim against the CCAC or before the Ontario Health Services Appeal and Review Board.
Question specific exclusion criteria: Respondents are excluded if they did not know the case manager or have not seen or spoken to the case manager, do not recall the in-home service, or were surveyed about placement services.

Adjustment (risk, age/sex standardization)

Data Source
Client and Caregiver Experience Evaluation (CCEE) Survey

Data provided to HQO by
Health Shared Services Ontario (HSSO)

Reported Levels of comparability
Time, Region

OTHER RELEVANT INFORMATION

Caveats and Limitations
Several types of home care patients and services are excluded (e.g. end-of-life patients, respite services, nursing clinic services), suggesting these results cannot be widely applied to all home care patients and all home care services. Caregivers were surveyed in place of clients in the event any of the following criteria were met: 1) Patient is <19 years of age at time of sample selection 2) Patient is identified as cognitively incapable 3) Patient is discharged from placement with one of the four discharge dispositions listed under the General Survey Inclusion Criteria. Surveying may be done while a person is still a home care patient. They may feel like they cannot respond honestly because of risk to their services. This is mitigated by the survey not being conducted by the provider.

Comments Summary
The survey is intended to be an ongoing evaluation tool, with four sample waves conducted annually in each region. The survey population comprises individuals who have received publically funded home care services. Both active and discharged clients are included in the survey population.
Percentage of long-stay home care patients who complained or showed evidence of daily severe pain

Description
This indicator measures the percentage of long-stay home care patients who complained or showed evidence of daily severe pain in the three days prior their assessment, among patients who received home care services for more than 60 days. A lower percentage is better.

HQA reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Percentage

Calculation Methods
The percentage is calculated as: numerator divided by the denominator times 100.

Numerator
Number of long-stay home care patients who complained or showed evidence of daily severe pain
The following data elements are used:
K4a Pain frequency = daily
K4b Pain intensity = severe

Denominator
Number of long-stay home care patients
General Exclusion Criteria:
To prevent capturing outcomes that result from the care received outside of the home care settings, assessments are excluded according to the following criteria:
- if case open date is missing and Reason for Assessment is "Initial Assessment"
- if the assessment took place within 60 days of when the referral was first received/case open date
- if the assessment was completed in a hospital setting

Adjustment (risk, age/sex standardization)
This indicator is risk adjusted.
Adjustment Factors:
Age >= 65
Shortness of Breath
Unsteady Gait
ADL Long
Clinical Risk
ADL Short
Number of Months between Assessments
Institutional Risk
Age >=80
Depression Rating Scale 3+

Data Source
Home Care Reporting System (HCRS)

Data provided to HQO by
Canadian Institute for Health Information (CIHI)

Reported Levels of comparability
Time, Region

OTHER RELEVANT INFORMATION

Caveats and Limitations
1) The underlying denominator changes each year as the characteristics of the home care population change; therefore, careful interpretation of trends over time is required since any change may be the result of a combination of changes in the underlying population as well as the resource utilization of the patients being served and the performance of the service providers and CCACs. Risk adjustment may not be able to compensate for all of these changes. 2) Jurisdictions differ in their requirements for RAI-HC assessment frequency, in the process that the data go through for production, and in the regions assessed; therefore comparison of Ontario results to other jurisdictions should only be made with these limitations noted. 3) Only long-stay home care patients receive RAI-HC assessment and are included in the HCRS database (i.e., clients who require care for more than 60 days of continuous service). These long-stay patients represent approximately half of home care clients. The other half of patients are short-stay patients who require short-term service while they recover from injury or surgery.

Comments Summary
Data are based on information from mandatory Resident Assessment Instrument - Home Care (RAI-HC) assessments.
Percentage of long-stay home care patients whose primary informal caregiver experienced continued distress, anger or depression in relation to their caregiving role.

**Description**
This indicator measures the percentage of long-stay home care patients whose primary informal caregiver experienced distress, anger or depression in relation to their caregiving role, as reported in at least two consecutive patient assessments (six months apart). It includes only patients who had at least one unpaid informal caregiver and received home care for at least six months. A lower percentage is better.

**HQO reporting tool/product**
Public reporting

**DEFINITION AND SOURCE INFORMATION**

**Unit of Measurement**
Percentage

**Calculation Methods**
The percentage is calculated as: numerator divided by the denominator times 100

**Numerator**
The number of patients with informal caregivers who reported distress, anger or depression in relation to their caregiving role, in two consecutive home care patient assessments.
The following data elements are used:
G2c Primary caregiver expresses feelings of distress, anger or depression.

**Denominator**
The number of home care patients with at least two consecutive assessments and at least one informal caregiver.
The following data elements are used:
G1ea (primary informal caregiver) lives with client. An informal caregiver ("caregiver") may be a family member, friend or neighbour (but not a paid provider) who helps the home care patient with activities of daily living, such as meal preparation, housework, transportation, bathing and dressing, or who provides advice or emotional support to the patient.

**General Exclusion Criteria:**
To prevent capturing outcomes that result from the care received outside of the home care settings, assessments are excluded according to the following criteria:
- if case open date is missing and Reason for Assessment is "Initial Assessment"
- if the assessment took place within 60 days of when the referral was first received/case open date
- if the assessment was completed in a hospital setting
Adjustment (risk, age/sex standardization)
This indicator is risk adjusted. Adjustment factors:
• Age >= 65
• 12 Months or less between Assessments
• Cognitive Problem CPS +1
• IADL difficulty
• Difficulty with locomotion
• Decision Making Difficulty
• Sadness
• Difficulty housework
• ADL Decline
• Poor Health
• Unstable Condition
• Hospital Stays

Data Source
Home Care Reporting System (HCRS)

Data provided to HQO by
Health Shared Services Ontario (HSSO), Canadian Institute for Health Information (CIHI)

Reported Levels of comparability
Time, Region

OTHER RELEVANT INFORMATION
Caveats and Limitations
Comments Summary
Data are based on information from mandatory Resident Assessment Instrument - Home Care (RAI-HC) assessments.
Percentage of home care patients aged 19 and older who received their first nursing visit within five days of service authorization

Description
This indicator measures the percentage of home care patients authorized for nursing services who received their first nursing visit within five days. The wait time is described as the number of days between service authorization date and the date of formal in-home nursing. A greater percentage is better.

HQA reporting tool/product
Public reporting, Quality Improvement Plans (QIPs)

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Percentage

Calculation Methods
Numerator divided by the denominator times 100

Numerator
Number of home care patients in a fiscal year who received their first nursing service visit within 5 days of the date they were authorized for nursing services by the LHIN. The wait time equals the number of days between the first service date and the care authorization date.

Denominator
The number of adult home care patients who received in-home nursing services
Inclusions:
1. New patients
2. Existing patients who now require a new service
3. Existing patients who are receiving services after a break in service
4. Home care patients who requested in-home program at the time of referral (Request program = 1)
5. Home care patients who received in-home service (SRC = 91 to 95)
6. Home care patients who received nursing services (Service type = 1, 17, 18)
7. Home care patients whose age at service authorization date is greater than 18
Exclusions:
8. Shift nursing (Service type = 2)
9. Mental health and addiction nursing service, which is a service delivered in school setting for children (Service type = 16)
10. Children receiving nursing service (Age < 19)
11. Service delivered in school setting (Care site = 12, 24, 25)
12. Episodes of care where service on hold date falls between the service authorization date and first service date
Adjustment (risk, age/sex standardization)
None

Data Source
Client Health and Related Information System (CHRIS), Home Care Database (HCD)

Data provided to HQO by
Ministry of Health and Long-Term Care (MOHLTC)

Reported Levels of comparability
Time, Region

OTHER RELEVANT INFORMATION

Caveats and Limitations
Each case is reported under the fiscal year and quarter in which the home care patient received their first home care service. Since wait times are not counted until the patient has received the service, wait lists in LHINs can impact the indicator results.

Comments Summary
This indicator is a priority indicator in Quality Improvement Plans (QIPs). The reporting period for current performance for QIPs is October - September. This indicator was developed by a working group with representation from the Ministry of Health and Long-Term Care (ministry), CCACs, Local Health Integration Networks (LHINs), the Ontario Community Support Association (OCSA), and Health Quality Ontario. Home care assessments occur over a period of time rather than on a single date. A number of possible dates could be used to measure the wait from assessment, including the date of initial assessment (start of the assessment stage) or the service authorization date (end of the assessment stage). The benefit of using service authorization date is that it applies to both new patients as well as patients starting other services.
Percentage of home care patients aged 19 and older with complex needs who received their personal support visit within five days of service authorization

Description
This indicator measures the percentage of complex home care patients aged 19 and older who waited 5 days or less for personal support services. The wait time is described as the number of days between the service authorization date and the date of receipt of Local Health Integration Network (LHIN) in-home personal support. A higher percentage is better.

HQO reporting tool/product
Public reporting, Quality Improvement Plans (QIPs)

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Percentage

Calculation Methods
Numerator divided by the denominator times 100

Numerator
Number of complex home care patients who received their first personal support service visit within 5 days of the date they were authorized for personal support services by the LHIN. The wait time equals the number of days between the first service date and the care authorization date.

Denominator
Number of adult complex home care patients who received in-home personal support services
Inclusions:
1. New patients
2. Existing patients who now require a new service
3. Existing patients who are receiving services after a break in service
4. Home care patients with complex needs (Authorization Client Care Model Population = 1)
5. Home care patients who requested in-home program at the time of referral (Request program=1)
6. Home care patients who received in-home service (SRC = 91 to 95)
7. Home care patients who received personal support services (Service Type = 11, 12, 13, 15)
8. Home care patients whose age at service authorization date is greater than 18

Exclusions:
1. Children receiving personal support service (Age < 19)
2. Service delivered in school setting (Care site = 12, 24, 25)
3. Episodes of care where service on hold date falls between the service authorization date and first service date
Adjustment (risk, age/sex standardization)
None

Data Source
Client Health and Related Information System (CHRIS), Home Care Database (HCD)

Data provided to HQO by
Ministry of Health and Long-Term Care (MOHLTC)

Reported Levels of comparability
Time, Region

OTHER RELEVANT INFORMATION

Caveats and Limitations
Each case is reported under the fiscal year and quarter in which the home care patient received their first home care service. Since wait times are not counted until the patient has received the service, wait lists in LHINs can impact the indicator results.

Comments Summary
This indicator is a priority indicator in Quality Improvement Plans (QIPs). The reporting period for current performance for QIPs is October- September. This indicator was developed by a working group with representation from the Ministry of Health and Long-Term Care (ministry), CCACs, Local Health Integration Networks (LHINs), the Ontario Community Support Association (OCSA), and Health Quality Ontario. Home care assessments occur over a period of time rather than on a single date. A number of possible dates could be used to measure the wait from assessment, including the date of initial assessment (start of the assessment stage) or the service authorization date (end of the assessment stage). The benefit of using service authorization date is that it applies to both new patients as well as patients starting other services.
Percentage of home care patients who had unplanned emergency department visits within 30 days for referrals from hospital to Community Care Access Centre after acute hospital discharge

Description
This indicator measures the percentage of patients who were newly referred for home care services from the hospital that had an unscheduled emergency department (ED) visit within 30 days of initial hospital discharge. Generally, a lower percentage is better.

HQO reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Percentage

Calculation Methods
The percentage is calculated as: numerator divided by the denominator times 100.

Numerator
The number of unscheduled emergency department visits by home care patients newly referred to home care services within 30 days of initial hospital discharge.
Exclusions:
1. Planned or scheduled emergency department visits
2. Transfers between emergency departments

Denominator
Number of patients referred to home care from hospital who were discharged from hospital and received their first home care service visit within the time period of interest.
The first home care service visit corresponds to the service associated with the home care referral and does not include case management, placement services, respite or other.
Exclusions:
1. Not an Ontario resident
2. Invalid age (age < 0 or age > 120 years )
3. If age >= 65 years and date of last contact > 5 years prior to hospitalization (e.g., invalid age, invalid ICES Key Number, non-Ontarians)
4. Missing home care service date
5. First home care service date precedes home care admission date
6. Not defined as a long-stay or acute/short-stay home care patient
Adjustment (risk, age/sex standardization)
None

Data Source
Home Care Database (HCD), National Ambulatory Care Reporting System (NACRS), Registered Persons Database (RPDB)

Data provided to HQO by
Institute for Clinical Evaluative Sciences (ICES)

Reported Levels of comparability
Province, Region

OTHER RELEVANT INFORMATION

Caveats and Limitations
The ED visit may occur before or after the first home care service visit.

Comments Summary
1) 30 days are subtracted from the end of each fiscal year (i.e., March) to allow for 30 day follow up during the last reported quarter. This is done for results by fiscal year and by fiscal quarter, resulting in the fourth fiscal quarter having smaller counts than the other three quarters. 2) Indicator is reported for new home care clients only (i.e. numerator counts referrals and referrals only occur for patients not already receiving home care). 3) Indicator assumes that referrals with a referral date between hospital admission date and seven days after hospital discharge are referrals from hospital. It does not capture the location of the referral.
8. Long-term Care

Percentage of long-term care home residents without psychosis using antipsychotic medications

Description
This indicator measures the percentage of long-term care home residents without psychosis who were given antipsychotic medication in the 7 days preceding their resident assessment. Residents were excluded from this indicator if they had a diagnosis of schizophrenia or Huntington’s chorea, experienced hallucinations or delusions, have an end-stage disease or are receiving hospice care. The indicator is calculated as a rolling 4 quarter average. This indicator was jointly developed by interRAI and the Canadian Institute for Health Information (CIHI). A lower percentage is better.

HQO reporting tool/product
Audit/Feedback (practice reports), Public reporting, Quality Improvement Plans (QIPs)

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Percentage

Calculation Methods
The indicator is calculated using 4 rolling quarters of data by summing the number of residents that meet the inclusion criteria for the target quarter and each of the previous 3 fiscal quarters. This is done for both the numerator and denominator. The unadjusted value is the quotient of the summed numerator divided by the summed denominator, multiplied by 100 to get the percentage.

Numerator
Number of LTC home residents in a fiscal quarter who received antipsychotic medication on 1 or more days in the 7 days before their Resident Assessment Instrument - Minimum Data Set 2.0 (RAI-MDS) target assessment
Inclusions:
O4a = 1, 2, 3, 4, 5, 6 or 7
Where, O4A = Number of days the resident received an antipsychotic medication during the last 7 days [0-7]

Denominator
Number of LTC home residents in a fiscal quarter with a valid RAI-MDS assessment, excluding those with schizophrenia, Huntington’s chorea, hallucinations or delusions, as well as residents who are end-stage disease or receiving hospice care
Inclusions:
To be considered valid, the resident assessment must:
• Be the latest assessment in the quarter
• Be carried out more than 92 days after the admission date
• Not be an admission full assessment

Exclusions:
1. Residents who are end-stage disease (J5c = 1) or receiving hospice care (P1ao = 1)
2. Residents who have a diagnosis of schizophrenia (I1ii = 1) or Huntington's chorea (I1x = 1), or those experiencing hallucinations (J1i = 1) or delusions (J1e = 1)

Adjustment (risk, age/sex standardization)
This indicator is risk adjusted at the individual covariate level and through direct standardization.

Individual covariates:
• Motor agitation
• Moderate/impaired decision-making problem
• Long-term memory problem
• Cognitive Performance Scale (CPS)
• Combination Alzheimer’s disease/other dementia
• Age younger than 65 years

Direct standardization:
• Case Mix Index (CMI)*

*The relative resource use compared to the overall average resource use for all Ontario LTC residents.

Data Source
Continuing Care Reporting System (CCRS)

Data provided to HQO by
Canadian Institute for Health Information (CIHI)

Reported Levels of comparability
Province, Time, Region

OTHER RELEVANT INFORMATION

Caveats and Limitations
Includes only long-stay beds. The indicator uses 4 rolling quarters of data to have a sufficient number of assessments for risk-adjustment and to stabilize the indicator results from quarter-to-quarter variations, especially for smaller facilities, but this methodology makes it more difficult to detect quarterly changes. Risk-adjusted values are censored if the denominator is less than 30. There are also general limitations when using RAI-MDS data, including random error, coding errors, and missing values. Captures antipsychotic medication use over 4 7-day periods during the course of the year, so will not capture all antipsychotic use. Presence of psychosis and antipsychotic use are determined from the same assessment, so residents may be on an antipsychotic for hallucinations or delusions that would no longer be present and therefore not captured in the RAI-MDS assessment. These residents would be counted in the numerator. Antipsychotic use does not consider dose or duration of use.

Comments Summary
Antipsychotic use is defined as any use by a resident in the 7 days prior to the assessment date. Delusions and hallucinations are captured in the assessment if these conditions were present in the 7 days prior to the assessment date. The unadjusted indicator result is a priority indicator in Quality Improvement Plans (QIPs) and is included in LTC Practice Reports.
Percentage of long-term care home residents who were physically restrained on a daily basis

Description
This indicator measures the percentage of long-term care home residents in physical restraints every day during the 7 days preceding their resident assessment. The indicator is calculated as a rolling 4 quarter average. This indicator was jointly developed by interRAI and the Canadian Institute for Health Information (CIHI). A lower percentage is better.

HQO reporting tool/product
Audit/Feedback (practice reports), Public reporting, Quality Improvement Plans (QIPs)

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Percentage

Calculation Methods
The indicator is calculated using 4 rolling quarters of data by summing the number of residents that meet the inclusion criteria for the target quarter and each of the previous 3 fiscal quarters. This is done for both the numerator and denominator. The unadjusted value is the quotient of the summed numerator divided by the summed denominator, multiplied by 100 to get the percentage.

Numerator
Number of LTC home residents in a fiscal quarter who were recorded as having been physically restrained daily during the 7 days preceding their target Resident Assessment Instrument - Minimum Data Set 2.0 (RAI-MDS) assessment
Inclusions:
(P4c = 2) OR (P4d = 2) OR (P4e = 2)
Where,
P4c = Trunk restraint [0,1,2]
P4d = Limb restraint [0,1,2]
P4e = Chair prevents rising [0,1,2]
0 = not used
1 = used less than daily
2 = used daily

Denominator
Number of LTC home residents in a fiscal quarter with valid RAI-MDS assessments

Inclusions:
To be considered valid, the resident assessment must:
• Be the latest assessment in the quarter
• Be carried out more than 92 days after the admission date
• Not be an admission full assessment

Exclusions:
1. Residents who were comatose (B1 = 1)
2. Residents who were quadriplegic (I1bb = 1)

Adjustment (risk, age/sex standardization)
This indicator can is risk adjusted through direct standardization using the Activities of Daily Living (ADL) Long Form, which includes bed mobility, transfer, locomotion, dressing, eating, toileting and personal hygiene self-performance.

Data Source
Continuing Care Reporting System (CCRS)

Data provided to HQO by
Canadian Institute for Health Information (CIHI)

Reported Levels of comparability
Province, Time, Region

OTHER RELEVANT INFORMATION

Caveats and Limitations
Does not measure the use of bed rails or chemical restraints (i.e. medication). Includes only long-stay beds. The indicator uses 4 rolling quarters of data to have a sufficient number of assessments for risk-adjustment and to stabilize the indicator results from quarter-to-quarter variations, especially for smaller facilities, but this methodology makes it more difficult to detect quarterly changes. Risk-adjusted values are censored if the denominator is less than 30. There may be some inconsistencies in how homes code restraints due to the difference in RAI-MDS physical restraint definition and the Ministry legislated definition. There are also general limitations when using RAI-MDS data, including random error, coding errors, and missing values.

Comments Summary
A physical restraint is any manual method, or any physical mechanical device, material or equipment that is attached or adjacent to the resident’s body, that the resident cannot remove easily, and that restricts the resident’s freedom of movement or normal access to his or her body. It is the effect the device has on the resident that classifies it into the category of restraint, not the name or label given to the device, nor the purpose or intent of the device. This definition is different from that of the definition for physical restraint used by the Ministry of Health and Long-Term Care, where intent plays an important role. The restraint use items capture restraint use in the 7 days prior to the target assessment. The unadjusted indicator result is an additional indicator in Quality Improvement Plans (QIPs).
Percentage of long-term care home residents who experienced moderate pain daily or any severe pain

Description
This indicator measures the percentage of long-term care home residents who experienced moderate pain daily or any severe pain during the 7 days preceding their resident assessment. The indicator is calculated as a rolling 4 quarter average. This indicator was jointly developed by interRAI and the Canadian Institute for Health Information (CIHI). A lower percentage is better.

HQO reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Percentage

Calculation Methods
The indicator is calculated using 4 rolling quarters of data by summing the number of residents that meet the inclusion criteria for the target quarter and each of the previous 3 fiscal quarters. This is done for both the numerator and denominator. The unadjusted value is the quotient of the summed numerator divided by the summed denominator, multiplied by 100 to get the percentage.

Numerator
Number of LTC home residents in a fiscal quarter with moderate pain at least daily or horrible/excruciating pain at any frequency documented on their target Resident Assessment Instrument - Minimum Data Set 2.0 (RAI-MDS) assessment
Inclusions:
(J2a = 2 AND J2b = 2) OR J2b = 3
Where,
J2a = pain symptoms frequency [0,1,2]
0 = no pain
1 = pain less than daily
2 = pain daily
J2b = pain symptoms intensity [1,2,3]
1 = mild pain
2 = moderate pain
3 = times when pain is horrible or excruciating

Denominator
Number of LTC home residents in a fiscal quarter with a valid RAI-MDS assessment
Inclusions:
To be considered valid, the resident assessment must:
• Be the latest assessment in the quarter
• Be carried out more than 92 days after the admission date
• Not be an admission full assessment

Exclusions:
1. Resident assessments with no pain symptoms frequency (J2a = 0) AND have pain symptoms intensity (J2b = 1, 2, 3) on their target assessment

**Adjustment (risk, age/sex standardization)**
This indicator is risk adjusted at the individual covariate level and through direct standardization

Individual covariates:
• Cognitive Performance Scale (CPS)
• Long-term memory problem
• Age younger than 65 years

Direct standardization:
• Depression Rating Scale (DRS)

**Data Source**
Continuing Care Reporting System (CCRS)

**Data provided to HQO by**
Canadian Institute for Health Information (CIHI)

**Reported Levels of comparability**
Province, Time, Region

**OTHER RELEVANT INFORMATION**

**Caveats and Limitations**
Pain is subjective in nature and can be difficult to measure. Includes only long-stay beds. The indicator uses 4 rolling quarters of data to have a sufficient number of assessments for risk-adjustment and to stabilize the indicator results from quarter-to-quarter variations, especially for smaller facilities, but this methodology makes it more difficult to detect quarterly changes. Risk-adjusted values are censored if the denominator is less than 30. There are also general limitations when using RAI-MDS data, including random error, coding errors, and missing values.

**Comments Summary**
NA
Median number of days waited to move into a long-term care home

Description
This indicator measures the median number of days residents waited to be placed in a long-term care home from the date of long-term care home application or consent to the date of placement, whichever is longer. Fewer number of days is better.

HQO reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Days

Calculation Methods
The median time, in days, for each included placement from the earlier of long-term care home application date or consent date to date of placement. The median is the number of days within which 50% of individuals waited from the date of application or consent to the date of placement. The median time can be stratified by location of the individual prior to placement (e.g., placed from hospital or placed from community). The median is calculated for each of the following placements:
1) All placements
   Inclusions:
   • Includes residents placed from hospitals (acute, rehab, complex continuing care (CCC), etc.), supportive housing and retirement homes, home, or other.
   Exclusions:
   • Residents placed from another long-term care home (i.e. residents who were transferred from another long-term care home)
   • Residents for whom "Admitted from" and/or "Prior Location Code" is unknown
2) Placed from acute care
   Inclusions:
   • All residents placed from acute care hospitals (includes priority category 3A, 3B, 4A, 4B). Does not include residents placed from rehab, CCC, etc.
3) Placed from community
   Inclusions:
   • All residents placed from the home, retirement homes, and supportive housing only

Numerator
NA

Denominator
NA
Adjustment (risk, age/sex standardization)
None

Data Source
Modernized Client Profile Database (CPRM Modernized)

Data provided to HQO by
Ministry of Health and Long-Term Care (MOHLTC)

Reported Levels of comparability
Prior location Time, Region

OTHER RELEVANT INFORMATION

Caveats and Limitations
The wait time for long-term care placement is measured among individuals who have been placed into long-term care, so does not capture individuals who are waiting for long-term care but die or find alternative arrangements before receiving long-term care home accommodation. This indicator does not include the wait time for individuals transferring from another long-term care home.

Comments Summary
This is a system indicator and not an indicator of individual long-term care home performance.
Percentage of long-term care home residents who fell

Description
This indicator measures the percentage of long-term care home residents who fell during the 30 days preceding their resident assessment. The indicator is calculated as a rolling 4 quarter average. This indicator was jointly developed by interRAI and the Canadian Institute for Health Information (CIHI). A lower percentage is better.

HQO reporting tool/product
Audit/Feedback (practice reports), Public reporting, Quality Improvement Plans (QIPs)

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Percentage

Calculation Methods
The indicator is calculated using 4 rolling quarters of data by summing the number of residents that meet the inclusion criteria for the target quarter and each of the previous 3 fiscal quarters. This is done for both the numerator and denominator. The unadjusted value is the quotient of the summed numerator divided by the summed denominator, multiplied by 100 to get the percentage.

Numerator
Number of LTC home residents in a fiscal quarter who had a fall in the last 30 days recorded on their target Resident Assessment Instrument - Minimum Data Set 2.0 (RAI-MDS) assessment
Inclusions:
J4a = 1
Where,
J4a = Fell in past 30 days [0,1]
0 = No
1 = Yes

Denominator
Number of LTC home residents in a fiscal quarter with a valid RAI-MDS assessment
Inclusions:
To be considered valid, the resident assessment must:
• Be the latest assessment in the quarter
• Be carried out more than 92 days after the admission date
• Not be an admission full assessment

Adjustment (risk, age/sex standardization)
This indicator is be risk adjusted at the individual covariate level and through direct standardization. Individual covariates:
• Not totally dependent in transferring
• Locomotion problem
• Personal Severity Index (PSI)*: Subset 2: Non-Diagnoses
  • Any wandering
  • Unsteady gait/cognitive impairment
  • Age younger than 65

Direct standardization:
  • Case Mix Index (CMI)**

*PSI is statistically linked to the likelihood of death within six months
**The relative resource use compared to the overall average resource use for all Ontario LTC home residents

Data Source
Continuing Care Reporting System (CCRS)

Data provided to HQO by
Canadian Institute for Health Information (CIHI)

Reported Levels of comparability
Province, Time, Region

OTHER RELEVANT INFORMATION

Caveats and Limitations
Includes only long-stay beds. The indicator uses 4 rolling quarters of data to have a sufficient number of assessments for risk-adjustment and to stabilize the indicator results from quarter-to-quarter variations, especially for smaller facilities, but this methodology makes it more difficult to detect quarterly changes. Risk-adjusted values are censored if the denominator is less than 30. There are also general limitations when using RAI-MDS data, including random error, coding errors, and missing values.

Comments Summary
The unadjusted indicator result is an additional indicator in Quality Improvement Plans (QIPs) and is included in LTC Practice Reports.
Percentage of long-term care home residents with new or worsening pressure ulcers

Description
This indicator measures the percentage of long-term care home residents who developed a stage 2 to 4 pressure ulcer or had a pressure ulcer that worsened to a stage 2, 3 or 4 since their previous resident assessment. The indicator is calculated as a rolling 4 quarter average. This indicator was jointly developed by interRAI and the Canadian Institute for Health Information (CIHI). A lower percentage is better.

HQO reporting tool/product
Public reporting, Quality Improvement Plans (QIPs)

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Percentage

Calculation Methods
The indicator is calculated using 4 rolling quarters of data by summing the number of residents that meet the inclusion criteria for the target quarter and each of the previous 3 fiscal quarters. This is done for both the numerator and denominator. The unadjusted value is the quotient of the summed numerator divided by the summed denominator, multiplied by 100 to get the percentage.

Numerator
Number of LTC home residents in a fiscal quarter who had a pressure ulcer at stage 2 to 4 on their target Resident Assessment Instrument - Minimum Data Set 2.0 (RAI-MDS) assessment and either they did not have a pressure ulcer on their previous assessment or the stage of pressure ulcer is greater on their target compared with their previous assessment
Inclusions:
M2a > 1 AND (M2a - Prev_M2a) > 0 AND Prev_M2a < 4
Where,
M2a = Stage of pressure ulcer at target assessment [0-4]
Prev_M2a = Stage of pressure ulcer at prior assessment [0-4]

Denominator
Number of LTC residents in a fiscal quarter with 2 valid RAI-MDS assessments, excluding those who had a stage 4 pressure ulcer on their prior assessment (i.e., residents are only included if they did not have a pressure ulcer at the maximum stage on their previous assessment)

Inclusions:
LTC home residents with 2 valid resident assessments within consecutive quarters. The assessment selected as the "target" assessment in the current quarter must:

• Be the latest assessment in the quarter
• Be carried out more than 92 days after the admission date
• Not be an admission full assessment
• Be from a resident that had an assessment in the previous quarter
• Have 45 to 165 days between the target assessment and assessment in the previous quarter (note: If there are multiple assessments from the previous quarter that meet the time period criteria, the latest assessment is selected as the "prior" assessment)

Exclusions:
1. Prev_M2a = 4

Where,
Prev_M2a = Stage of pressure ulcer at prior assessment [0-4]

Adjustment (risk, age/sex standardization)
This indicator is risk adjusted at the individual covariate level and through direct standardization

Individual covariates:
• Age younger than 65 years
• Resource Utilization Group (RUG)
• Late Loss Activities of Daily Living (ADL)

Direct standardization:
• Case Mix Index (CMI)*

*The relative resource use compared to the overall average resource use for all Ontario LTC home residents

Data Source
Continuing Care Reporting System (CCRS)

Data provided to HQO by
Canadian Institute for Health Information (CIHI)

Reported Levels of comparability
Province, Time, Region

OTHER RELEVANT INFORMATION

Caveats and Limitations
Some anecdotal evidence that assessors may not remove bandages to assess ulcers or re-stage pressure ulcers as instructed in RAI-MDS manual. The indicator calculation is based on the stage of pressure ulcer for the pressure ulcer at the highest stage, so if a long-term care home resident develops a new pressure ulcer at a lower stage than a pressure ulcer that did not change stage since the last assessment, the new pressure ulcer would not be captured in the numerator for the calculation of this indicator. Includes only long-stay beds. The indicator uses 4 rolling quarters of data to have a sufficient number of assessments for risk-adjustment and to stabilize the indicator results from quarter-to-quarter variations, especially for smaller facilities, but this methodology makes it more difficult to detect quarterly changes. Risk-adjusted values are censored if the denominator is less than 30. There are also general limitations when using RAI-MDS data, including random error, coding errors, and missing values.

Comments Summary
This indicator includes residents who developed a new pressure ulcer (stage 2 to 4) and residents whose pressure ulcer worsened from their prior assessment. Pressure ulcers are coded for the highest stage in the
last 7 days from 0 (no ulcer) to 4 (ulcer reaches muscle and bone). The unadjusted indicator result is an additional indicator in Quality Improvement Plans (QIPs).
9. Palliative Care

Percentage of people, among those who died, who had at least one unplanned emergency department visit in their last 30 days of life

Description
This indicator measures the percentage of eligible people, among those who died, who had at least one unplanned emergency department visit in their last 30 days of life.

HQO reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Percentage

Calculation Methods
Numerator divided by the denominator times 100

Numerator
Number of people who had at least one unplanned emergency department visit in their last 30 days of life.

Inclusions:
People who had unplanned ED visit in NACRS
Unscheduled/unplanned ED visits are identified by:
NACRS variables VISITTYPE = [1,2,4] or SCHEDEDVISIT = N

Exclusions:
Planned ED visits

Denominator
Number of people in Ontario who died in each year of interest.

Exclusions:
People who spent their last month in the hospital, CCC or NRS

Adjustment (risk, age/sex standardization)
None
**Data Source**
National Ambulatory Care Reporting System (NACRS), Ontario Health Insurance Plan (OHIP) Claims History Database, Registered Persons Database (RPDB), Continuing Care Reporting System (CCRS), Discharge Abstract Database (DAD)

**Data provided to HQO by**
Institute for Clinical Evaluative Sciences (ICES)

**Reported Levels of comparability**
Time, Age, Income, Rurality, Region, Sex

**OTHER RELEVANT INFORMATION**

**Caveats and Limitations**
- Missing the information on clinical details, health care needs, preferences and appropriateness of the unplanned emergency visits. • Hard to interpret as there are no benchmarks or targets on the acceptable rate of ED visits in this patient population.

**Comments Summary**
This indicator aligns with other internal and external initiatives.
Percentage of people, among all those who lived in the community during their last 30 days of life, who received at least one home care service during that period

**Description**
This indicator measures the percentage of people, who lived in the community during their last 30 days of life who received at least one home care service within that period, reported as:

- Any home care
- Palliative home care
A higher percentage is better.

**DefOnSource**
Public reporting

**DEFINITION AND SOURCE INFORMATION**

**Unit of Measurement**
Percentage

**Calculation Methods**
Numerator divided by the denominator times 100

**Numerator**
Number of people specified in the denominator, who received at least one home care service during their last 30 days of life, reported as:

1. Any home care (who had any of the codes listed below)

**Inclusions:**
Home Care Database (HCD): services variable SERVICE = [1-13, 16-18]
SERVICE = Type of service provided (home care service)
- 1 = Nursing - Visit
- 2 = Nursing - Shift (Hour)
- 3 = Respiratory Services
- 4 = Nutrition/Dietetic
- 5 = Physiotherapy
- 6 = Occupational Therapy
- 7 = Speech Language Therapy
- 8 = Social Work
- 9 = Psychology
- 10 = Case Management
- 11 = Personal Services (Hour)
- 12 = Homemaking Services (Hour)
- 13 = Combined Ps And Hm Services (Hour)
• 14 = Placement Services
• 15 = Respite
• 16 = Mental Health and Addiction Nursing Visit
• 17 = Nurse Practitioner Palliative Visit
• 18 = Rapid Response Nursing Visit
• 99 = Other

1. Palliative home care (who had any of the codes listed below)

Home Care Database (HCD):

• SRC_admission = 95: Service recipient code (i.e., classification) of end of life on admission
• Service_RPC = 95: Service care goal of end of life; patient provided service under end of life designation
• Residence_type = 2000: Staying in hospice or palliative care unit while receiving service
• SRC_discharge = 95: Service recipient code of end of life on discharge

**Denominator**
Number of people who died and were in the community in the last 30 days of their life.

**Exclusions:**
People who spent their last month in the hospital, LTC/CCC or NRS.

**Adjustment (risk, age/sex standardization)**
None

**Data Source**
Home Care Database (HCD), National Ambulatory Care Reporting System (NACRS), National Rehabilitation Reporting System (NRS), Ontario Health Insurance Plan (OHIP) Claims History Database, Registered Persons Database (RPDB), Continuing Care Reporting System (CCRS), Discharge Abstract Database (DAD)

**Data provided to HQO by**
Institute for Clinical Evaluative Sciences (ICES)

**Reported Levels of comparability**
Region

**OTHER RELEVANT INFORMATION**

**Caveats and Limitations**
- The data don't show information on the details and quality of the home care, health care needs, preferences and appropriateness of the care
- The data shows the number of people who had at least one home care service, which may not be sufficient
- There is no evidence of what is the appropriate amount or mix of home care services to which this could be compared.
- The data do not show if people had any other home support or a caregiver.

**Comments Summary**
This indicator aligns with other internal and external initiatives.
Percentage of people, among all those who lived in the community during their last 30 days of life, who had at least one physician home visit during that period

**Description**
This indicator measures percentage of people, among all those who lived in the community during their last 30 days of life, who had at least one physician home visit during that period. A higher percentage is better.

**HQC reporting tool/product**
Public reporting

**DEFINITION AND SOURCE INFORMATION**

**Unit of Measurement**
Percentage

**Calculation Methods**
Numerator divided by the denominator times 100

**Numerator**
Number of people specified in the denominator who had at least one physician home visit in their last 30-days of life.
- G511: Telephone services to patient receiving PC at home (max 2/week)
- B966: Travel premium for palliative care (billed with B998/B996)
- B998: Home visit for palliative care between 07:00 and 24:00 (Sat, Sun, and holidays) or
- B997: Home visit for palliative care between 24:00 and 07:00
- A901: (GP/FP house call)
- B990 Special visit to patient's home (weekday/daytime)
- B992 Special visit to patient's home (weekday/daytime), with sacrifice to office hours
- B994 (special visit to patient’s home, non-elective, evenings)
- B996 (special visit to patient’s home, night time, first patient of the night)
- G511: Telephone services to patient receiving PC at home (max 2/week)
- B966: Travel premium for palliative care (billed with B998/B996)
- B998: Home visit for palliative care between 07:00 and 24:00
- B997: Home visit for palliative care between 24:00 and 07:00

**Denominator**
Number of people who died and were in the community in their last 30 days of life.

*Exclusions:*
People who spent their last month in the hospital, LTC/CCC or NRS.
Adjustment (risk, age/sex standardization)
None

Data Source
National Ambulatory Care Reporting System (NACRS), National Rehabilitation Reporting System (NRS), Ontario Health Insurance Plan (OHIP) Claims History Database, Registered Persons Database (RPDB), Continuing Care Reporting System (CCRS), Discharge Abstract Database (DAD)

Data provided to HQO by
Institute for Clinical Evaluative Sciences (ICES)

Reported Levels of comparability
Time, Age, Income, Rurality, Region, Sex

OTHER RELEVANT INFORMATION

Caveats and Limitations
- The data doesn’t include information on the quality of the care, clinical details, health care needs, preferences and appropriateness of the house call. - The data shows the number of people who had at least one house call. There is no evidence of what is the appropriate number of house calls to which this could be compared - The indicator doesn't capture home visits with other non-physician providers

Comments Summary
This indicator aligns with other internal and external initiatives.
Percentage of people who died in hospital, in Ontario

Description
This indicator measures the proportion of deaths in:
• Hospital (inpatient, emergency department (ED), Complex Continuing Care (CCC), and rehab)
• Long-term care
• Community (home, residential hospices, retirement homes and assisted living homes)

HQO reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Percentage

Calculation Methods
Numerator divided by the denominator times 100

Numerator
Number of people who died in each of the following settings:
• Hospital (inpatient, ED, CCC and rehab)
• Long-term care home
• Community (home, residential hospices, retirement homes and assisted living homes)

Inclusions:
• Hospital deaths are identified by the following codes:
  • Inpatient: DAD – SDS dischdisp = 07
  • ED: NACRS – Visit disposition = 10 or 11
  • CCC: CCRS discharge_to_facility_type = 11
  • Rehab: NRS dreason=8

LTC:
• CCRS-LTC discharge_to_facility_type = 11

Community
• All other deaths not included in one of the above categories

Denominator
Number of people in Ontario who died in each year of interest.

Adjustment (risk, age/sex standardization)
None

Data Source
Home Care Database (HCD), National Ambulatory Care Reporting System (NACRS), Ontario Health Insurance Plan (OHIP) Claims History Database, Registered Persons Database (RPDB), Continuing Care Reporting System (CCRS), Discharge Abstract Database (DAD)

Data provided to HQO by
Institute for Clinical Evaluative Sciences (ICES)

Reported Levels of comparability
Region

OTHER RELEVANT INFORMATION

Caveats and Limitations
The data show the location of the death, but not the location where care was received before death (i.e. the death may have occurred in the ED but in general the care may have been provided in LTC). - No information of the preferred place of death is provided.

Comments Summary
If there are multiple death records with different death date in each of the above administrative database, the last (i.e. most recent) death record for each unique health card number was selected. •If one health card number appears in multiple care settings, the following hierarchy based on the care intensity were used to assign death setting: acute care, Emergency, CCC, Rehabilitation facilities, LTC homes. There should only be one record per health card number.
Number of days people spend at home in the last 6 months of life

Description
This indicator measures the average (mean) number of days people spent at home in the last 6 months before death. A higher number of days is better.

HQO reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Days

Calculation Methods
Numerator divided by the denominator

Numerator
Number of days people spent at home in the last 6 months of life.

Identifying the number of days that they have spent in the last 6 month:
- in the hospital
- Inpatient rehab
- CCC beds
- Mental health beds
- Unplanned EDs (count as a full day for each unplanned ED visit)

Calculation for 6 months: 180 minus the sum of the days spent in the above mentioned settings

Denominator
Number of individuals who died in Ontario

Adjustment (risk, age/sex standardization)
NA

Data Source
National Ambulatory Care Reporting System (NACRS), National Rehabilitation Reporting System (NRS), Ontario Mental Health Reporting System (OMHRS), Continuing Care Reporting System (CCRS), Discharge Abstract Database (DAD)

Data provided to HQO by
Institute for Clinical Evaluative Sciences (ICES)

Reported Levels of comparability
Time, Age, Income, Rurality, Region, Sex
OTHER RELEVANT INFORMATION

Caveats and Limitations
The data does not show the quality of the care received at home.

Comments Summary
10. Health Spending

Percentage of survey respondents who had serious problems paying or were unable to pay their medical bills

**Description**
This indicator measures the percentage of survey respondents who reported having serious problems paying or were unable to pay their medical bills. A lower value is better.

**HQA reporting tool/product**
Public reporting

**DEFINITION AND SOURCE INFORMATION**

**Unit of Measurement**
Percentage

**Calculation Methods**
Numerator divided by the denominator times 100

**Numerator**
Number of respondents who answered “Yes” to the following question: During the past 12 months, were there times when you had serious problems paying or were unable to pay your medical bills?

**Denominator**
Total number of survey respondents

**Adjustment (risk, age/sex standardization)**
Weighted by age, gender, educational attainment, and phone-status (cell phone only or not) to reflect the populations.

**Data Source**
2016 Commonwealth Fund International Health Policy Survey

**Data provided to HQO by**
The Commonwealth Fund

**Reported Levels of comparability**
International comparison, province, age, sex and other
OTHER RELEVANT INFORMATION

Caveats and Limitations
This indicator relies on self-reported survey data, the true percentage might in fact be higher or lower.

Comments Summary
The percentage is provided by Commonwealth Fund. No calculation is conducted on-site. Survey is administered via telephone to randomly selected people aged 18 years or older.
Health spending on drugs per person

**Description**
This indicator measures health spending on drugs in dollars per person in a given period of time.

**HQA reporting tool/product**
Public reporting

**DEFINITION AND SOURCE INFORMATION**

**Unit of Measurement**
Dollars per person

**Calculation Methods**
Numerator divided by denominator.

**Numerator**
Total dollars of health spending on drugs in a given period of time.

**Denominator**
The most recent revised population estimates from the Demography Division of Statistics Canada

**Adjustment (risk, age/sex standardization)**
To compare spending over time in Ontario, constant (1997) dollars are used to adjust for both population growth and inflation, which varied over time. To compare spending levels between countries, Purchasing Power Parities (PPPs), which are the rates of currency conversion that equalize the purchasing power of different currencies, is used to eliminate differences in price levels between countries. Health spending per person is converted to a common currency (US dollar) and adjusted to take account of the different purchasing power of the national currencies.

**Data Source**
National Health Expenditure Database (NHEX), OECD Health Statistics,

**Data provided to HQO by**
Canadian Institute for Health Information (CIHI), Organisation for Economic Cooperation and Development (OECD)

**Reported Levels of comparability**
International comparison

**OTHER RELEVANT INFORMATION**

**Caveats and Limitations**
OECD member countries are asked to report health spending according to concepts presented in the OECD manual A System of Health Accounts (SHA). Countries are at varying stages of reporting total health spending according to the boundary of health care proposed in the SHA manual. That means data presented in OECD health Statistics 2016 is at the varying levels of comparability. This indicator most closely follows the health care boundaries proposed in the SHA and is believed to be fairly comparable, although some deviations from SHA definitions may still exist among sub-categories.

Comments Summary
The data are obtained from National Health Expenditure Database (NHEX) or OECD database i.e. they are not calculated by HQO.
Total health spending per person

Description
This indicator measures total spending on health care in dollars per person in a given period of time.

HQO reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Dollars per person

Calculation Methods
Numerator divided by denominator.

Numerator
Total spending on health care both public and private sources on medical services and goods, public health and prevention programs and administration in dollars in a given period of time.

Denominator
The most recent revised population estimates from the Demography Division of Statistics Canada

Adjustment (risk, age/sex standardization)
To compare spending over time in Ontario, constant (1997) dollars are used to adjust for both population growth and inflation, which varied over time. To compare spending levels between countries, Purchasing Power Parities (PPPs), which are the rates of currency conversion that equalize the purchasing power of different currencies, is used to eliminate differences in price levels between countries. Health spending per person is converted to a common currency (US dollar) and adjusted to take account of the different purchasing power of the national currencies.

Data Source
National Health Expenditure Database (NHEX), OECD Health Statistics

Data provided to HQO by
Canadian Institute for Health Information (CIHI), Organisation for Economic Cooperation and Development (OECD)

Reported Levels of comparability
International comparison, Province
OTHER RELEVANT INFORMATION

Caveats and Limitations
OECD member countries are asked to report health spending according to concepts presented in the OECD manual A System of Health Accounts (SHA). Countries are at varying stages of reporting total health spending according to the boundary of health care proposed in the SHA manual. That means data presented in OECD health Statistics 2015 is at the varying levels of comparability. This indicator most closely follows the health care boundaries proposed in the SHA and is believed to be fairly comparable, although some deviations from SHA definitions may still exist among sub-categories.

Comments Summary
The data are obtained from National Health Expenditure Database (NHEX) or OECD database i.e. they are not calculated by HQO.
Percentage of survey respondents, aged 12 to 64 years, who report having prescription medication insurance

Description
This indicator reports the percentage of Ontarians aged 12 to 64 who report having prescription medication insurance.

HQO reporting tool/product
Public reporting

DEFINITION AND SOURCE INFORMATION

Unit of Measurement
Percentage

Calculation Methods
Numerator divided by the denominator times 100

Numerator
Respondents who report having prescription medication insurance (INS_Q005)

CCHS variable INS_Q005:
Do you have insurance that covers all or part of the cost of: your prescription medications?
1: Yes
2: No
8: RF
9: DK

Denominator
All respondents aged 12 to 64 who answered the survey question.
Exclusion:
Don’t know, Not stated and Refusal are not included in the analysis

Adjustment (risk, age/sex standardization)
Direct adjustment (age) using 2011 Canadian Census population aged 12-64.

Data Source
Canadian Community Heath Survey (CCHS)

Data provided to HQO by
Statistics Canada

Reported Levels of comparability
Province, Age, Income, Education, Rurality, Region, Sex

OTHER RELEVANT INFORMATION

Caveats and Limitations
Because of the significant changes to the survey methodology, Statistics Canada does not recommend making comparisons of the redesigned 2015 cycle of the CCHS with past cycles. As this indicator relies on self-reported data, the true percentage might in fact be higher or lower. In addition, surveys' coverage excludes: persons living on reserves and other Aboriginal settlements in the provinces; full-time members of the Canadian Forces; the institutionalized population, children aged 12-17 that are living in foster care, and persons living in the Quebec health regions of Région du Nunavik and Région des Terres-Cries-de-la-Baie-James. Altogether, these exclusions represent less than 3% of the Canadian population aged 12 and over.

Comments Summary
When reporting percentage of prescription medication insurance by level of education, age is restricted to Ontarians aged 25 to 64. A major redesign project that was completed and implemented for the 2015 cycle. The objectives of the redesign were to review the sampling methodology, adopt a new sample frame, modernize the content and review the target population. As a result of the redesign, the 2015 CCHS has a new collection strategy, is drawing the sample from two different frames and has undergone major content revisions. With all these factors taken together, caution should be taken when comparing data from previous cycles to data released for the 2015 cycle onwards. Proportions and ratios are obtained by summing the final weights of records having the characteristic of the numerator and the denominator, and then dividing the first estimate by the second.