

# Measuring Up 2016

## Technical Appendix



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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* 2016.

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 45 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 Health of Ontarians, Primary Care, Mental Health, Home Care, Hospital Care, Long-Term Care, Palliative Care, System Integration, Health Workforce and Health Spending.

### Analysis

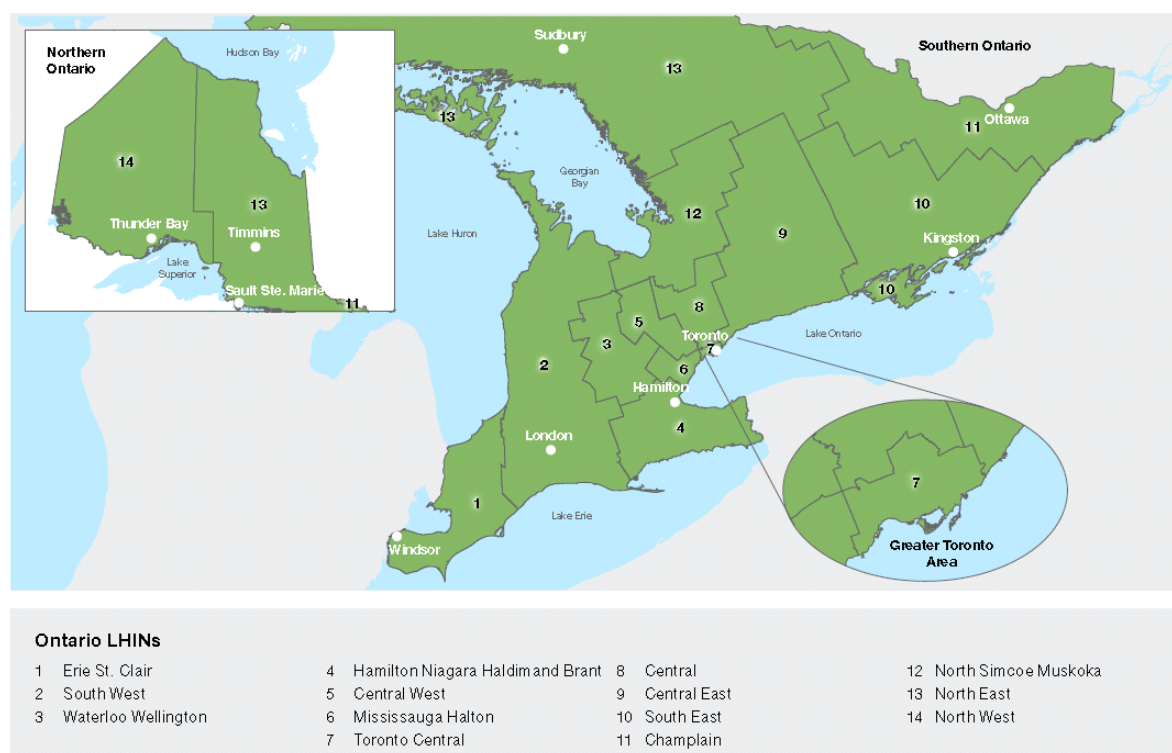
#### Data over time

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 some 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.

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 geographic locations and 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 comparison 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. Statistics Canada uses 1991 Canada's Census population as the standard while the 2011 Canada population is used as the standard for regional comparisons, 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)
- The Cardiac Care Network of Ontario (CCN)
- Cancer Care Ontario (CCO)
- The College of Nurses of Ontario (CNO)
- The Institute for Clinical Evaluative Sciences (ICES)
- The Ministry of Health and Long-Term Care (MOHLTC)
- The Ontario Association of Community Care Access Centres (OACCAC)
- The Ontario Hospital Association (OHA)
- The Ontario Physician Human Resources Data Centre (OPHRDC)
- Public Health Agency of Canada (PHAC)
- Statistics Canada
- The Workplace Safety and Insurance Board (WSIB)

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 covers the population 12 years of age and older. Residents living on Indian Reserves and Crown Lands, institutional residents, full-time members of the Canadian Armed Forces, and residents of certain remote regions 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 addition, the survey questions are translated into Chinese, Punjabi and Inuktitut. As of 2007, data are now collected on an ongoing basis with annual releases rather than every two years, as was the case prior to 2007. The Ontario share files for the CCHS survey are used for all analyses and indicator results were prepared by the Institute for Clinical Evaluative Sciences.

### Cardiac Care Network of Ontario (CCN) Cardiac Registry

The CCN oversees the planning and provision of cardiac services in Ontario, which includes monitoring and measuring wait times for cardiovascular procedures in all regions of Ontario, including the priority cardiac services included in Ontario's Wait Times Strategy, which are presented in this report. CCN 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. The CCN 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.

### Census – Ministry of Finance's population estimates

For some indicators, the Ministry of Finance provides population estimates for the province and for each LHIN region. The Ministry of Finance methodology for allocating populations to LHIN regions differs from that used by Statistics Canada. The Ministry of Finance uses the most recent Statistics Canada population estimates by census subdivision as the base for the LHIN region population projections. The method of allocation to LHIN regions varies depending on the geographic makeup of the LHINs. Population projections are based on a Statistics Canada base year (2013) population estimate, and then adjusted for births, deaths and migration, and are calculated for each of the 49 census divisions. These census divisions are then summed to provide regional and provincial population estimates.

### Client and Caregiver Experience Evaluation (CCEE) Survey – National Research Corporation Canada (NRCC)

The CCEE survey interviews Community Care Access Centre (CCAC) home care patients (active in-home, discharged in-home, and placement home care patients) and their caregivers. 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 levers and opportunities for quality improvement. The NRCC developed the CCEE survey tool in collaboration with researchers, CCACs and service provider organization members. In Ontario, the survey is conducted in four waves per year in all 14 CCACs by Computer Assisted Telephone methodology. The tool is currently being used in home care environments across Canada.

### Client Profile Database (CPRO) – Ministry of Health and Long-Term Care (MOHLTC)

The CPRO contains long-term care (LTC) home application information at the patient level. 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 LTC placement process. CPRO receives patient-level data from each Community Care Access Centre on a monthly basis to support bed utilization monitoring, performance management and LTC accountability planning. 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 2013 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* 2016 we compare Ontario data to the 2013 CMWF IHP Survey results where possible. Participants were interviewed by telephone (land line or cellphone) between March and June 2013. In Canada, 5,412 respondents were surveyed; the Ontario population 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 2013 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

## Community Care Access Centre (CCAC) Client Management System

The CCAC Client Management System supports CCAC staff in the management of patients, referrals and services for residents of Ontario requiring information about health and community services, services at home or school, referrals to community services and/or access to long term care or post-acute hospital units. The system also supports the sharing of health information with service providers, vendors and external health partners.

## 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, and 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 all acute- and chronic-care hospitals, and rehabilitation hospitals in Ontario. Data are collected, maintained and validated by CIHI. The main data elements of the DAD are patient identifier (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 the Ontario Association of Community Care Access Centres (OACCAC). 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 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 eight 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 identifier (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).

## 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 the end of 2014–2015, there were 82 participating facilities that have submitted data at least once to the OMHRS database since the implementation of OMHRS in October 2005.

### Physicians In Ontario Report – Ontario Physician Human Resources Data Centre (OPHRDC)

The OPHRDC maintains the Active Physician Registry, which includes information on all licensed physicians practicing in Ontario. The OPHRDC produces the annual *Physicians In Ontario* (POI) report from the data held in the registry. The POI report provides the number of active physicians, attritions and additions in Ontario by geographic regions, specialty of practice, sex and age.

### Membership Statistics Report – College of Nurses of Ontario (CNO)

The CNO is the governing body for nurse practitioners, registered nurses and registered practical nurses in Ontario. Members of the CNO are required to renew their membership every year for nurses in the General, Extended, and Non-Practising classes. The CNO releases the annual *Membership Statistics Report* which describes CNO's membership and statistics on nursing employment and overall gains and losses for each nursing class.



## Scott's Medical Database (SMDB) – Canadian Institute for Health Information (CIHI)

The SMDB provides information on the number of physicians across Canada and their distribution and migration. It is managed by CIHI and contains information on physician demographics, specialty, activity status and education. Each year, Scott's Directories provides CIHI with information from a database to update the SMDB. Scott's Directories maintains this database with physician information collected from organizations and institutions such as jurisdictional registrars, medical schools, the Royal College of Physicians and Surgeons of Canada, the College of Family Physicians of Canada, the Collège des médecins du Québec and Canadian hospitals. The information is confirmed and updated through a biannual questionnaire sent to active physicians as well as new medical school graduates. Data in the SMDB are used by CIHI in their annual reports *Physicians in Canada Summary Report* and *Supply, Distribution and Migration of Physicians in Canada*.

## Healthy Workforce Database (HWDB) – Canadian Institute for Health Information (CIHI)

The HWDB contains information about 30 groups of health care professionals, including nurses. The HWDB provides standardized, comparative data on the supply, demographic, geographic and distribution characteristics, education and employment details of registered nurses/nurse practitioners and licensed practical nurses across Canada. CIHI receives data from every provincial and territorial regulatory authority collected through the mandatory annual registration process completed by all nurses practising in Canada. CIHI releases the annual report *Regulated Nurses* using data from the HWDB to highlight trends in nursing practice in Canada across a variety of supply, employment and demographic characteristics.

## 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.

## Workplace Safety and Insurance Board (WSIB) Statistical Report

Information on the frequency of work-related injury and disability by health care sector in the Ontario health care system was produced by the WSIB using a standardized data resource termed the Enterprise Information Warehouse. The results are presented in the *By the Numbers: WSIB Statistical Report* for the following rate groups: for the following rate groups: long-term care homes, hospitals, nursing services (home care and other settings), treatment clinics and specialized services, homes for residential care, group homes and professional offices and agencies. *By the Numbers: WSIB Statistical Report* is released to the public every year and provides information on the wider prevention system and individual workplaces. It provides a valuable resource for workers and employers as they continue the important work of making their workplaces safer and healthier. The WSIB administers compensation and no-fault insurance for Ontario workplaces.

## 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 2016.

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 indicator library <http://indicatorlibrary.hqontario.ca>



## 2. Health of Ontarians

### Percentage of the population aged 12 and older who report having inadequate fruit and vegetable intake

#### **INDICATOR DESCRIPTION**

##### **Description**

This indicator measures the proportion of the population aged 12 or older who report inadequate fruit and vegetable intake (less than 5 times daily). A lower rate 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**

Number of respondents who reported “eating fruits and vegetables less than 5 times per day”

##### **Inclusion:**

If derived variable FVCGTOT equals 1

Codes for CCHS variable FVCGTOT:

- **FVCDTOT < 5** (Eats fruits and vegetables less than 5 times per day)
- (5 <= FVCDTOT <= 10) (Eats fruits and vegetables between 5 and 10 times per day),
- FVCDTOT > 10 (Eats fruits and vegetables more than 10 times per day)

##### **Denominator**

Total number of respondents aged 12 or older.

##### **Adjustment (risk, age/sex standardization)**

Direct age -adjusted using 2011 Canada population 12 and older

Age groups are 12-17, 18-29, 30-39, 40-49, 50-59, 60-69, 70+

##### **Data Source**

Canadian Community Health Survey (CCHS)

##### **Data provided to HQO by**

Institute for Clinical Evaluative Sciences (ICES)

##### **Reported level of comparability**

Time

Education

Region

Province

#### **OTHER RELEVANT INFORMATION**

##### **Caveats and Limitations**

As this indicator relies on self-reported data, the true rate might in fact be higher or lower.

Questions related to fruit and vegetable intake are limited to the number of times (frequency) and not the amount consumed, thus not translating to number of servings per day.

In addition, this survey excludes individuals living on Indian Reserves and on Crown Lands, institutional residents, full-time members of the Canadian Forces, and residents of certain remote regions, which will affect the representativeness of the sample and underestimation of the true rates. Altogether, these exclusions represent <3% of the target population.

### Comments Summary

Inadequate intake was measured via the FVCGTOT variable in the CCHS. This variable classifies the respondent based on the total number of times per day he/she eats fruits and vegetables. The CCHS measures the number of times (frequency), not the amount consumed.

The derived variable is based on questions asked in CCHS that included daily consumption (number of times) of:

- Fruit juice
- Other fruit
- Green salad
- Potatoes
- Carrots
- Other vegetables

In addition, sampling weights are used for calculating all estimates. Education stratification analysis is restricted to 25 and older.

# Percentage of the population aged 12 and older who report currently smoking cigarettes, daily or occasionally

## **INDICATOR DESCRIPTION**

### **Description**

This indicator measures the proportion of the population aged 12 or older who report currently smoking cigarettes (daily or occasionally). A lower rate 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**

The number of respondents who reported current daily or occasional smoking of cigarettes.

#### *Inclusions:*

- If derived variable SMKDSTY equals 1, 2, 3

Codes for SMKDSTY variable

1 = Daily

2 = Occasional smoker (former daily smoker)

3 = Occasional smoker (never a daily smoker or has smoked less than 100 cigarettes in lifetime)

4 = Former daily smoker (non-smoker now)

5 = Former occasional smoker (at least 1 whole cigarette, non-smoker now)

6 = Never smoked (a whole cigarette))

### **Denominator**

Number of respondents aged 12 or above.

### **Adjustment (risk, age/sex standardization)**

Direct age -adjusted using 2011 Canada population 12 and older

Age groups are 12-17, 18-29, 30-39, 40-49, 50-59, 60-69, and 70+

### **Data Source**

Canadian Community Health Survey (CCHS)

### **Data provided to HQO by**

Institute for Clinical Evaluative Sciences (ICES)

### **Reported Levels of comparability**

Time

Education

Region

Province

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

As this indicator relies on self-reported data, the true rate might in fact be higher or lower.

In addition, this survey excludes individuals living on Indian Reserves and on Crown Lands, institutional residents, full-time members of the Canadian Forces, and residents of certain remote regions, which will affect the representativeness of the sample and underestimation of the true rates. Altogether, these exclusions represent <3% of the target population.

### **Comments Summary**

Based on CCHS variable SMKDSTY which indicates the type of smoker the respondent is, based on their smoking habits:  
Sampling weights are used for calculating all estimates. Education stratification analysis is restricted to 25 and older.

# Percentage of the population aged 12 and older who report being physically inactive

## **INDICATOR DESCRIPTION**

### **Description**

This indicator measures the proportion of the population aged 12 or older who report being physically inactive. A lower rate 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 number of respondents categorized as “inactive”.

### **Inclusions:**

- if PACDPAI equals 3

Codes for PACDPAI variable:

1 = ACTIVE

2 = MODERATE ACTIVE

3 = INACTIVE

### **Denominator**

Total number of respondents aged 12 or older

### **Adjustment (risk, age/sex standardization)**

Direct age -adjusted using 2011 Canada population 12 and older

Age groups are 12-17, 18-29, 30-39, 40-49, 50-59, 60-69, and 70+

### **Data Source**

Canadian Community Health Survey (CCHS)

### **Data provided to HQO by**

Institute for Clinical Evaluative Sciences (ICES)

### **Reported Levels of comparability**

Time

Education

Region

Province

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

As this indicator relies on self-reported data, the true rate might in fact be higher or lower.

CCHS does not collect information regarding the intensity level of activities. As such, the energy expenditure calculated is based on low-intensity value of metabolic equivalent value, an approach adopted from the Canadian Fitness and Lifestyle Research Institute because individuals tend to overestimate the intensity, frequency and duration of their activities

In addition, this survey excludes individuals living on Indian Reserves and on Crown Lands, institutional residents, full-time members of the Canadian Forces, and residents of certain remote regions, which will affect the representativeness of the sample and underestimation of the true rates. Altogether, these exclusions represent <3% of the target population.

### **Comments Summary**

Physical inactivity is measured via the PACDPAI variable in the CCHS, which categorizes respondents as “active”, “moderately active”, or “inactive” in their leisure time based on total daily Energy Expenditure

values calculated according to responses about the nature, frequency, and duration of participation in leisure-time physical activity

Education stratification analysis is restricted to 25 and older. Sampling weights are used for calculating all estimates.

# Percentage of the population aged 18 and older who were obese based on reported weight and height

## **INDICATOR DESCRIPTION**

### **Description**

This indicator measures the proportion of the overall population 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.

### **HQO Reporting tool/product**

Public reporting

## **DEFINITION AND SOURCE INFORMATION**

### **Unit of Measurement**

Percentage

### **Calculation Methods**

Numerator divided by denominator times 100

### **Numerator**

Number of respondents with a BMI > 30.

### *Inclusions:*

If HWTDISW equals 4, 5, or 6

Codes for HWTDISW (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)

### **Denominator**

All CCHS respondents aged 18 or older

### **Adjustment (risk, age/sex standardization)**

Direct age -adjusted using 2011 Canada population 18 and older

Age groups are 18-29, 30-39, 40-49, 50-59, 60-69, 70+

### **Data Source**

Canadian Community Health Survey (CCHS)

### **Data provided to HQO by**

Institute for Clinical Evaluative Sciences (ICES)

### **Reported Levels of comparability**

Time

Education

Region

Province

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

As this indicator relies on self-reported data, the true rate might in fact be higher or lower.

This indicator has limitations with both, its use of the BMI to assess obesity, as well with how the data are collected. As this indicator relies on self-reported data (height and weight) the true rate might in fact be higher or lower.

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. Therefore, this indicator does not capture the true rate of obesity, rather a close approximation of it.

#### **Comments Summary**

BMI is defined as weight in kilograms divided by height in meters squared.

CCHS variable HWTDISW: 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. This variable excludes female respondents aged 18 to 49 who were pregnant or did not answer the pregnancy question (i.e. MAM\_037 = don't know, refusal, not stated).

Education stratification analysis is restricted to 25 and older. Sampling weights are used for calculating all estimates.



# Percentage of the population aged 12 or older reporting excellent/very good, good, or fair/poor health

## **INDICATOR DESCRIPTION**

### **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(s)**

Number of respondents who rated their health as:

- Excellent/Very good if GENDHDI equals 3, 4
- Good if GENDHDI equals 2; or
- Fair/Poor if GENDHDI equals 0, 1

Codes for GENDHDI variable

0 = POOR

1 = FAIR

2 = GOOD

3 = VERY GOOD

4 = EXCELLENT

### **Denominator**

Number of respondents aged 12 or above.

### **Adjustment (risk, age/sex standardization)**

Direct age -adjusted using 2011 Canada population 12 and older

Age groups are 12-17, 18-29, 30-39, 40-49, 50-59, 60-69, and 70+

### **Data Source**

Canadian Community Health Survey (CCHS)

### **Data provided to HQO by**

Institute for Clinical Evaluative Sciences (ICES)

### **Reported Levels of comparability**

Education

Region

Province

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

As this indicator relies on self-reported data, the true rate might in fact be higher or lower.

### **Comments Summary**

Education stratification analysis is restricted to 25 and older.

Sampling weights are used for calculating all estimates.

Some research points to concerns regarding the comparability of self-rated health status between ethnic groups, and or across other socio-economic and demographic variables. Therefore, such comparisons should be interpreted with caution

## Percentage of the population aged 12 and older who report having 1 chronic condition and 2 or more chronic conditions

### **INDICATOR DESCRIPTION**

#### **Description**

This indicator measures the percentage of people aged 12 and older who reported having 1 or 2 or more chronic conditions including anxiety disorder, arthritis, asthma, COPD, diabetes, heart disease, hypertension and mood disorder.

#### **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 respondents who reported having 1 or 2 or more of the listed conditions:

Survey questions used for this indicator:

- CCC\_Q290: Do you have an anxiety disorder such as a phobia, obsessive-compulsive disorder or a panic disorder?
- CCC\_Q051 Do you have arthritis, excluding fibromyalgia?
- CCC\_Q031 Do you have asthma?
- CCC\_Q091 Do you have chronic bronchitis, emphysema or chronic obstructive pulmonary disease or COPD?
- CCC\_Q101 Do you have diabetes?
- CCC\_Q121 Do you have heart disease?
- CCC\_Q071 Do you have high blood pressure?
- CCC\_Q280 Do you have a mood disorder such as depression, bipolar disorder, mania or dysthymia?

Response options:

- **Yes**
- No;
- Not applicable
- don't know;
- RF;
- DK

#### **Denominator**

Number of respondents who responded to the survey questions on chronic conditions.

#### **Adjustment (risk, age/sex standardization)**

Direct age-adjusted to 2011 Canada Census population aged 12 and older.

Age groups are: 12-17, 18-29, 30-39, 40-49, 50-59, 60-69, 70+

#### **Data Source**

Canadian Community Health Survey (CCHS)

#### **Data provided to HQO by**

Institute for Clinical Evaluative Sciences (ICES)

#### **Reported Levels of comparability**

Region

Education

Province

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

The chronic conditions included in this indicator are not an exhaustive list; therefore, the rate of chronic conditions reported in this indicator may be an underestimation of the true prevalence of chronic conditions in the population. The list was developed in consultation with three physicians in an effort to identify conditions that are amenable to care and may indicate equity issues

In addition, this survey excludes individuals living on Indian Reserves and on Crown Lands, institutional residents, full-time members of the Canadian Forces, and residents of certain remote regions, which will affect the representativeness of the sample and underestimation of the true rates. Altogether, these exclusions represent <3% of the target population.

### **Comments Summary**

Education stratification analysis is restricted to 25 and older. Sampling weights are used for calculating all estimates.

## Infant mortality

### **INDICATOR DESCRIPTION**

#### **Description**

This indicator measures the number of infants who die in the first year of life, expressed as a rate per 1,000 live births. A lower rate is better.

#### **HQO Reporting tool/product**

Public reporting

### **DEFINITION AND SOURCE INFORMATION**

#### **Unit of Measurement**

Rate per 1,000 live births

#### **Calculation Methods**

This indicator is calculated by dividing the total number of deaths for live born infants (364 days or younger) by total number of live births (per 1000 live births) for the same year, regardless of birth weight.

#### **Numerator**

Total number of deaths of live born infants 364 days or younger

#### **Denominator**

Total number of live births

#### **Exclusions:**

- Live births to mothers not resident in Canada
- Live births to mothers resident in Canada, but where province or territory of residence unknown
- Deaths of infants not resident in Canada;
- Deaths of infants resident in Canada, but where province or territory of residence unknown.

#### **Adjustment (risk, age/sex standardization)**

None

#### **Data Source**

Canadian Birth Database (CBDB)

Canadian Mortality Database (CMDDB)

Vital Statistics, Birth and Death Databases

#### **Data provided to HQO by**

Public Health Agency of Canada (PHAC)

Statistics Canada

#### **Reported Levels of comparability /stratifications (defined)**

Time

Education

### **OTHER RELEVANT INFORMATION**

#### **Caveats and Limitations**

Vital Statistic data are typically two or three years behind the current calendar year. Given the small number infant deaths, infant mortality rates may fluctuate from year to year. It may be of beneficial to group years when reporting infant mortality and/or calculate a three-year moving average. Infant mortality data are based on births that are registered.

#### **Comments Summary**

Variations in infant mortality may be due to differences in reporting deaths of infants born at the borderline of viability, therefore mortality rates for infants with a birth weight  $\geq 500$  g are also calculated in addition to mortality rates for infants of all birth weights (crude infant mortality).

## Life expectancy, at birth

### INDICATOR DESCRIPTION

#### 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:

- Births to mothers who are not residents of Canada
- Births to mothers who are residents of Canada whose province or territory of residence was unknown
- Deaths of non-residents of Canada
- Deaths of residents of Canada whose province or territory of residence was unknown
- Deaths for which age or sex of the decedent was unknown

#### Adjustment (risk, age/sex standardization)

None

#### Data Source

Canadian Mortality Database (CMDB)

Vital Statistics, Birth and Death Databases

#### Data provided to HQO by

Public Health Agency of Canada (PHAC)

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

NA

## Potential years of life lost per 100,000 people

### **INDICATOR DESCRIPTION**

#### **Description**

This indicator measures the potential years of life lost prematurely, 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

#### **Numerator**

The sum of differences between age 75 and age of death from avoidable and unavoidable causes (further details on avoidable causes can be found below)

#### **Denominator**

Total mid-year population younger than age 75

#### **Adjustment (risk, age/sex standardization)**

Age-standardized using the 2011 Canadian population

#### **Data Source**

Canadian Mortality Database (CMDDB)

#### **Data provided to HQO by**

Public Health Agency of Canada (PHAC)

#### **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**

Mortality due to avoidable causes fall into two categories: preventable causes and treatable causes.

Avoidable mortality from preventable causes is a subset of avoidable mortality that includes deaths which could be avoided by preventing disease from developing or injury from occurring. These include deaths from those conditions considerably linked to modifiable factors, such as smoking (for example, lung cancer) or excessive alcohol consumption (for example, liver cirrhosis), as well as those related to public health interventions such as vaccinations or traffic safety legislation (for example, speed limits, seat belts, motorcycle helmets).

Avoidable mortality from treatable causes is a subset of avoidable mortality that includes deaths which could be averted or significantly delayed by screening, early detection and appropriate treatment (for example, breast cancer, appendicitis).



### 3. Primary Care

## Percentage of people aged 16 and older who have a family doctor or other primary care provider

### INDICATOR DESCRIPTION

#### 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

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

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

Time

Immigration

Rurality

Region

Province

International Comparison

### 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. After the LHIN and community weighting is applied. The data source for international and provincial comparisons is Commonwealth Fund International Health Policy Survey 2013. The results are based on the following survey questions in CMWF IHP are:

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 survey population is adults aged 18 and older.

# 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

## INDICATOR DESCRIPTION

### Description

Percentage of people in Ontario aged 16 and older who reported that in the last 12 months they are able to see their primary care provider 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. 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 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

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?

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**

Time  
Region  
Province  
International  
Rurality

## **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. 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.

Data source for international and provincial comparisons is Commonwealth Fund International Health Policy Survey 2013, 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 survey population is adults aged 18 and older.

## 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

### **INDICATOR DESCRIPTION**

#### **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.

#### **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 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**

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**

Region

Province

International

Rurality

### **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 after the LHIN and community weighting is applied. The data source for International and provincial comparisons is Commonwealth Fund International Health Policy Survey 2013. 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 16 or older who report that their primary care provider always, or often, involved them in decisions about their care

## **INDICATOR DESCRIPTION**

### **Description**

The percentage of people in Ontario aged 16 and older who reported that their primary care provider 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

Quality Improvement (QIP and QIRAP)

## **DEFINITION AND SOURCE INFORMATION**

### **Unit of Measurement**

Percentage

### **Calculation Methods**

Numerator divided by the denominator times 100

### **Numerator**

Total 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

### **Denominator**

Total 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

### **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**

Immigration

Time

Rurality

Region

Province

International

## **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 after 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. The data source for international and provincial comparisons is Commonwealth Fund International Health Policy Survey 2013.

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 survey population is adults aged 18 and older.

# Percentage of people aged 50-74 overdue for colorectal cancer screening

## **INDICATOR DESCRIPTION**

### **Description**

The percentage of Ontario screen-eligible individuals, 50-74 years old, who were overdue for colorectal screening by the end of the calendar year. 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 FOBTs were identified in Laboratory Reporting Tool
- Non-program FOBTs were identified using fee codes in OHIP:
  - G004 Lab.med.in office - Occult blood
  - L179 ColonCancerCheck Fecal Occult Blood Testing
  - L181 Lab Med - Biochem - Occult Blood

#### **Colonoscopy in the last 10 years**

- Identified using fee codes Z555, Z491A- Z499A in OHIP

#### **Flexible sigmoidoscopy in the last 5 years**

- Identified using fee code Z580 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 S169, S170, S172.

### **Adjustment (risk, age/sex standardization)**

Age-adjusted

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  
Region

## **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 analyzed in hospital labs could not be captured - Only FOBT as a primary screening test could be assessed; FOBT is recommended for those at average risk of colorectal cancer, while those at increased risk (1st degree relative with colorectal cancer) were not assessed as they could not be accurately identified - A small proportion of FOBTs performed as diagnostic tests could not be excluded from the analysis - OHIP data may include (CCC program) rejected kits. This indicator does not capture tests performed as part of the Registered Nurse Flexible Sigmoidoscopy Project (. However the numbers are small. From the start of the Registered Nurse Flexible Sigmoidoscopy project in 2006 to October 2012 a total of 7,192 flexible sigmoidoscopies were performed. However the annual numbers are increasing and there were around 2200 flexible sigmoidoscopies performed in 2012.

### **Comments Summary**

Multiple claims with the same Health Insurance Number (HIN) 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 expected for the next year population) Similar indicator is reported in QIP but with the opposite directionality and with some differences in methodology.

# Percentage of people aged 20 and older with diabetes who had a diabetes eye exam

## **INDICATOR DESCRIPTION**

### **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: <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

Region

## **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.

## 4. Mental Illness and Addictions

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

#### INDICATOR DESCRIPTION

##### 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

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) from 2006/07 to 2013/14

- 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
- 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
- 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
- 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
- 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.
- Age range to include: 15 - 120 years

#### *Exclusions:*

- Patients without a valid health insurance number
- Patients without an Ontario residence
- Gender not recorded as male or female
- Invalid date of birth, admission date/time, discharge date/time
- Discharge where the patient signed him/herself out or the patient died
- 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 Canadian census population by:

- Age (15-19, 20-44, 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**

Income

Region

Time

## **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 within 30 days of discharge after hospitalization for mental illness or addiction

## **INDICATOR DESCRIPTION**

### **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 readmissions to an acute care hospital within 30 days of discharge following index hospitalization for a most responsible diagnoses of a Mental Health and Addictions condition

### **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 dxtypes = 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 30 days for follow up) from 2006/07 to 2013/14

- 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
- 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
- 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
- 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
- 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.
- Age range to include: 15 - 120 years

### **Exclusions:**

- Patients without a valid health insurance number
- Patients without an Ontario residence
- Gender not recorded as male or female or invalid date of birth
- Death before admission date/time, discharge date/time
- Age < 15 or > 120 yrs
- Discharge where the patient signed him/herself (CIHI: dischdisp = '06')

- Patient died in index hospitalization
- Discharge date does not allow for full 7 or 30 day follow up until the end of the fiscal year

Note: if OMHRS or CIHI-DAD records occur 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)**

The rates are risk-adjusted to the following factors:

- Sex
- Age 15-19, 20-44, 45-64, 65-79, and 80+.
- Multiple previous admissions for a selected mental illness\* (two and more) during the past 12 months

\*Selected mental illnesses: Substance abuse related disorder, Schizophrenia, Anxiety disorder, Personality disorder

#### **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**

NA

## Suicides per 100,000 people

### INDICATOR DESCRIPTION

#### Description

This indicator measures the suicide rate per 100,000 population. 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, multiplied by 100,000

#### Numerator

Total number of deaths resulting from intentional self-harm

*Includes:*

ICD-10 codes:

- X60-X84, Y87.0

#### Denominator

Total Ontario population - LHIN level population estimates

#### Adjustment (risk, age/sex standardization)

None

#### Data Source

Canadian Mortality Database (CMDB)

Vital Statistics, Birth and Death Databases

#### Data provided to HQO by

Public Health Agency of Canada (PHAC)

Statistics Canada

#### Reported Levels of comparability

Time

Income

Sex

### OTHER RELEVANT INFORMATION

#### Caveats and Limitations

There is an underestimation of suicide rates. The actual number of deaths from suicide may be greater because information regarding the nature of the death may only become available after the original death certificate is complete. In some situations, assessing whether the death was intentional may be difficult. A death can only be certified as a suicide when the victim's intent is clear. Deaths by suicide only reflect a small portion of suicide attempts. Some estimate that for every completed suicide there are as many as 20 suicide attempts. While males are far more likely to die from suicide, females are roughly three to four times more likely to attempt suicide and are hospitalized 1.5 times more than males for attempted suicide. This difference may occur as females tend to use less violent methods such as poisoning, while males tend to use more violent methods such as hanging and firearms. Given these facts, the reported suicide rate is not a reflection of suicide attempts and does not provide a complete picture of the problem of intentional self-harm.



## Comments Summary

NA

# Percentage of patients in mental health designated beds who were physically restrained

## **INDICATOR DESCRIPTION**

### **Description**

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

### **HQO Reporting tool/product**

Public reporting

Quality improvement (QIP)

## **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 a mechanical 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:*

- Patients with records in OMHRS
- Assessments with variables M1A, M1B and M1C
- Valid OHIP number

### **Adjustment (risk, age/sex standardization)**

Direct standardized using the 2011 Canadian census population by:

- Age groups (<20, 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

# Percentage of long-term care home residents who suffered increased symptoms of depression

## **INDICATOR DESCRIPTION**

### **Description**

This indicator measures the percentage of long-term care home residents whose mood from symptoms of depression worsened 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. 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 a higher Depression Rating Scale (DRS) score on their target Resident Assessment Instrument - Minimum Data Set 2.0 (RAI-MDS) assessment than on their previous assessment

*Inclusions:*

$DRS_{cc} - Prev\_DRS_{cc} > 0$

Where,

$DRS_{cc}$  = DRS score at target assessment

$Prev\_DRS_{cc}$  = DRS score at prior assessment

The DRS scale is a measure of a resident's depressive symptoms, with higher values indicating the resident has more numerous and/or frequent symptoms [0,1,2,...,14]. Depressive symptoms are based on the following variables:

- Resident makes negative statements (E1a)
- Persistent anger with self/others (E1d)
- Expression of unrealistic fears (E1f)
- Repetitive health complaints (E1h)
- Repetitive anxious complaints/concerns (E1i)
- Sad/pained/worried facial expressions (E1l)
- Crying/tearfulness (E1m)

Where,

Each variable is scored according to the symptom frequency in last 30 days:

0 = Not exhibited in last 30 days

1 = Exhibited up to 5 days a week

2 = Exhibited daily or almost daily (6 or 7 days)

### **Denominator**

Number of LTC home residents in a fiscal quarter with 2 valid RAI-MDS assessments whose depression symptoms could worsen (i.e., excludes residents who had a maximum DRS score 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:*

- Residents whose depression symptoms could not worsen (i.e., had a maximum DRS score of 14 on prior assessment (Prev\_DRS\_cc = 14))
- Residents who were comatose (B1 = 1)

#### **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

##### *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**

Time

Region

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

Includes only long-stay beds. Rolling 4 quarter averages stabilize the rates from quarter-to-quarter variations, especially for smaller facilities, but make it more difficult to detect quarterly changes. General limitations when using RAI-MDS data, including random error, coding errors, and missing values. The Depression Rating Scale (DRS) has low correlation with the Geriatric Depression Scale (GDS) as well as with other instruments. [1,2] DRS is limited by a larger floor effect than the Geriatric Depression Scale (GDS). [3] In a 2013 study, the DRS was shown to be poor at distinguishing between older adults with and without a medical diagnosis of depression or between older adults who were or were not prescribed antidepressant medications. [4]

### **Comments Summary**

[1] Anderson, RL, Buckwalter, KC, Buchanan, RJ, Maas ML and Imhof, SL. (2003). Validity and reliability of the Minimum Data Set Depression Rating Scale (MDSDRS) for older adults in nursing homes. *Age Ageing* 32(4):435-8.

[2] Hendrix CC, Sakauye KM, Karabatsos G, Daigle D. (2003). The use of the Minimum Data Set to identify depression in the elderly. *J Am Med Dir Assoc*.4:308–312

- [3] Koehler M, Rabinowitz T, Hirdes J, Stones M, Carpenter GI, Fries BE, Morris JN, and Jones RN. (2005). Measuring depression in nursing home residents with the MDS and GDS: an observational psychometric study. *BMC Geriatr* 5:1.
- [4] Byma, EA, Given, CW, and Given, BA. (2013). Associations Among Indicators of Depression in Medicaid-Eligible Community-Dwelling Older Adults. *The Gerontologist* 53 (4): 608-617

## 5. Home Care

### Percentage of home care patients aged 19 and older who received their first nursing visit within five days of authorization

#### **INDICATOR DESCRIPTION**

##### **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 Community Care Access Centre (CCAC) in-home nursing. A greater percentage is better.

##### **HQO Reporting tool/product**

Public reporting

Quality improvement (QIP and QIRAP)

#### **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 CCAC. 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

Three patient populations are included:

- New patients
- Existing patients who now require a new service
- Existing patients who are receiving services after a break in service

##### **Inclusions:**

- Home care patients who requested in-home program at the time of referral (Request program=1)
- Home care patients who received in-home service (SRC = 91 to 95)
- Home care patients who received nursing services (Service Type = 1, 17, 18)
- Home care patients whose age at service authorization date is greater than 18

##### **Exclusions:**

- Shift nursing (Service type = 2)
- Mental health and addiction nursing service, which is a service delivered in school setting for children (Service type = 16)
- Children receiving nursing service (Age < 19)
- Service delivered in school setting (Care site = 12, 24, 25)
- 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**

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 CCACs can impact the indicator results.

**Comments Summary**

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 authorization

## **INDICATOR DESCRIPTION**

### **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 Community Care Access Centre (CCAC) in-home personal support. A higher percentage is better.

### **HQO Reporting tool/product**

Public reporting

Quality improvement (QIP and QIRAP)

## **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 CCAC. 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

Three patient populations are included:

New patients

Existing patients who now require a new service

Existing patients who are receiving services after a break in service

#### *Inclusions:*

- Home care patients with complex needs (Authorization Client Care Model Population = 1)
- Home care patients who requested in-home program at the time of referral (Request program=1)
- Home care patients who received in-home service (SRC = 91 to 95)
- Home care patients who received personal support services (Service Type = 11, 12, 13, 15)
- Home care patients whose age at service authorization date is greater than 18

#### *Exclusions:*

- Children receiving personal support service (Age < 19)
- Service delivered in school setting (Care site = 12, 24, 25)
- 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**

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 CCACs can impact the indicator results.

**Comments Summary**

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.

## Patient experience with care coordinators and service providers

### INDICATOR DESCRIPTION

#### Description

This indicator provides information on the overall experience of home care patients. It reports the percentage of home care patients who were satisfied with the services provided by their Community Care Access Centre (CCAC), with the handling of their care by their CCAC care coordinator and with the services provided by their service provider organization. It is the percentage of home care patients who responded "good", "very good", or "excellent" on a five-point scale to three survey questions about their experiences. A higher percentage is better.

#### HQO Reporting tool/product

Public reporting

Quality improvement (QIP and QIRAP)

### DEFINITION AND SOURCE INFORMATION

#### Unit of Measurement

Percentage

#### Calculation Methods

Numerator divided by denominator times 100

#### Numerator

The sum of the number of positive responses ("good", "very good", or "excellent") registered for each of the three questions that form the KPI 1 Score for the overall experience rating:

**Question 4:** Overall how would you rate the services that you received from your CCAC and any of the individuals who provided care to you?

**Question 24:** Overall, how would you rate the management and handling of your care by your case manager?

**Question 39:** Overall how would you rate the x service provided by y (where x is any of: nursing, personal support, physiotherapy, occupational therapy, nutrition/dietetics, speech and language, or social work and y is the name of the service provider)?

The sum of the weighted responses are used. Post-sample weighting is applied to adjust for disproportionate sampling and to ensure that the reported survey results are representative of the actual population served by the CCAC

Possible responses for all 3 questions: poor, fair, good, very good, or excellent

#### Denominator

Number of total responses to the three questions comprising KPI 1 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 discharge 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:

- Excludes patients who received in-school service only
- Nursing clinic services

- Respite services
- Medical supplies and equipment
- End-of-life patients (SRC 95)
- Clients not yet categorized (SRC 99)
- In-home patients classified as out of region
- 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)**

Results are weighted to reflect the population of home care patients eligible to be surveyed within each CCAC (i.e., sampled home care patients are standardized to CCAC-specific population).

#### **Data Source**

Client and Caregiver Experience Evaluation (CCEE) Survey

#### **Data provided to HQO by**

Ontario Association of Community Care Access Centres (OACCAC)

#### **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

### **Comments Summary**

This is a QIP priority indicator for 2016/17. To access your organization's data for the reporting period, refer to Health Quality Ontario's QIP Navigator. Data will be available in February. Alternatively, to access your organization's data for this indicator, refer to the NRC Canada eReports website.

## **Percentage of long-stay home care patients with a primary unpaid caregiver whose caregiver is unable to continue in caring activities or expresses feelings of distress, anger or depression**

### **INDICATOR DESCRIPTION**

#### **Description**

This indicator describes the percentage of long-stay home care patients whose primary informal caregiver is unable to continue in caring activities and/or expresses feelings of distress, anger or depression in patients who had at least one unpaid caregiver. 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**

All clients with a primary caregiver who is unable to continue in caring activities AND/OR All clients with a primary caregiver who expresses feelings of distress, anger or depression.

The following data elements are used: G2a A caregiver is unable to continue in caring activities— e.g. decline in the health of the caregiver makes it difficult to continue G2c Primary caregiver expresses feelings of distress, anger, or depression.

#### **Denominator**

All clients with a completed RAI-HC assessment who have a primary 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.

#### **Adjustment (risk, age/sex standardization)**

None

#### **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**

The results are derived from RAI-HC assessment information in the HCRS database. Therefore, the results are representative of long-stay home care patients receiving publicly funded home care (i.e., home care patients who require care for more than 60 days represent approximately half of publicly

funded home care patients. The remaining population are short-stay home care patients who require short-term care while they recover from injury or surgery.) Distress, anger, or depression and ability to continue providing care are subjective measures. Results may underestimate true rates of distress if some informal caregivers do not want to admit that they feel burdened by having to care for a friend or family member or if they do not exhibit obvious signs of distress. Similarly, cultural differences exist that can affect one's perception of distress caused by caring for a friend or family member since it is simply accepted as something that should be done, regardless of the stress it may cause. Data are not risk adjusted for factors associated with rates of distress, such as cognitive impairment in the patient, hours of informal care provided by the caregiver, or hours of formal care provided to the patient. Includes patients of varying levels of complexity, including palliative patients.

### **Comments Summary**

This indicator was jointly developed by interRAI and the Canadian Institute for Health Information (CIHI). The caregiver may live with the patient or the caregiver may visit the patient regularly or respond to needs that the patient has. A home care patient may have more than one person providing unpaid support. The primary informal caregiver is the person who is most helpful to the patient and the person who the patient can rely most upon. The questions in the RAI-HC asking about the caregiver status are meant to assess the reserve of the informal caregiver support system. The questions are posed to the home care patient and informal caregiver separately. The current situation and the projected future needs are both considered. G2a. A caregiver is unable to continue in caring activities The caregiver, client, or assessor believes that a caregiver(s) is not able to continue in caring activities. This can be for any reason, for example: lack of desire to continue, geographically inaccessible, other competing requirements (child care, work requirements), and personal health issues. G2c. Primary caregiver expresses feeling of distress Primary caregiver expresses, by any means, that he/she is distressed, angry, depressed, or in conflict because of caring for the client.

## Percentage of people with low to moderate care needs who entered a long-term care home

### INDICATOR DESCRIPTION

#### Description

This indicator reports the percentage of people placed in long-term care (LTC) homes with a Method for Assigning Priority Levels (MAPLe) score that is less than high or very high.

#### HQO Reporting tool/product

Public reporting

### DEFINITION AND SOURCE INFORMATION

#### Unit of Measurement

Percentage

#### Calculation Methods

Numerator divided by denominator times 100

#### Numerator

Number of people placed in a long-term care home who had a MAPLe score that is less than high or very high (i.e. moderate, mild, or low) in their most recent Resident Assessment Instrument for Home Care (RAI-HC) assessment prior to placement.

#### Denominator

Number of people placed in a long-term care home in the time period for whom a RAI-HC assessment could be identified.

*Exclusions:* Transfers from one LTC home to another

#### Data Source

Resident Assessment Instrument-Home Care (RAI-HC) via Long Stay Assessment Software (LSAS)  
Community Care Access Centre (CCAC) Client Management System  
Client Profile Database (CPRO)

#### Data provided to HQO by

Ontario Association of Community Care Access Centres (OACCAC)

#### Reported Levels of comparability

Time

Region

### OTHER RELEVANT INFORMATION

#### Caveats and Limitations

There are circumstances under which it could be more appropriate for such patients to live in long-term care homes. Factors that might be taken into consideration include the availability of family caregivers, sufficiency of financial resources, caregivers' and patients' ability to cope, and patients' own personal choices.

#### Comments Summary

The MAPLe categorizes home care patients into five priority levels based on their risk of adverse outcomes (i.e., urgency for service). The algorithm for categorizing patients is made up of clinical, functional and behavioural factors, such as having fallen, presence of pressure ulcers, cognitive functioning, dependence on others to perform activities of daily living, and presence of difficult behaviours. The priority levels have been shown to be predictors of caregiver distress, admission to LTC, and family/patient feelings that they would be better off elsewhere.

## 6. Hospital Care

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

#### **INDICATOR DESCRIPTION**

##### **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

Quality improvement (QIP and QIRAP)

#### **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**

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**

NA



## Percentage of survey respondents who would definitely recommend this hospital to family and friends

### **INDICATOR DESCRIPTION**

#### **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

Quality improvement (QIP and QIRAP)

### **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

### **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**

# Maximum amount of time 5 of 10 patients spent in the emergency department by acuity level

## INDICATOR DESCRIPTION

### Description

This indicator measures the maximum amount of time (in hours) in which 5 of 10 patients have completed their emergency department visits to go home or be admitted to hospital as an inpatient (by acuity level).

High acuity patients are all admitted patients plus non\_admitted patients with CTAS Level in ('1','2','3')

Low acuity patients are all non\_admitted patients with CTAS Level in ('4','5')

A lower number of hours is better.

### HQO Reporting tool/product

Public reporting

Quality improvement (QIP and QIRAP)

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Hours

### Calculation Methods

The median is calculated as the maximum length of time 50% of patients spend from registration or triage (whichever occurs first and valid) until the time patients leave the emergency department, less any time spent in a Clinical Decision Unit (CDU).

*Exclusions:*

#### **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)

#### **FY 2010-2011**

- Cases where Patient Left ED Date/Time and Disposition Date/Time are both 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 Patient left ED date/time is unknown or blank and the Disposition Code is 06-09, 12, 14 (admitted and transferred patients)
- 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)

#### **FY 2009-2010**

- Cases where Patient Left ED Date/Time and Disposition Date/Time are both 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 pertaining to Psychiatric assessment units reported in functional centre 7131076 - evaluated and approved by CCO's ED Information Program
- Cases where the Scheduled visit Indicator flag is = 'Y'
- Cases where ED LOS are negative &bull; Cases where Date/Time patient left ED missing and the Disposition Code is 06-09 (admitted patients and transferred patients)
- Cases where patient has left without being seen by a physician during his/her visit (Disposition Code 02 & 03)

#### **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

Acuity Level

### **OTHER RELEVANT INFORMATION**

#### **Caveats and Limitations**

This definition is not aligned with other reporting at HQO such as online reporting and specialized report.

#### **Comments Summary**

NA

## Maximum amount of time 9 of 10 patients spent in the emergency department by acuity level

### INDICATOR DESCRIPTION

#### Description

This indicator measures the maximum amount of time (in hours) in which 9 of 10 patients have completed their emergency department visits to go home or be admitted to hospital as an inpatient (by acuity level). High acuity patients are all admitted patients plus non\_admitted patients with CTAS Level in ('1','2','3') Low acuity patients are all non\_admitted patients with CTAS Level in ('4','5') A lower number of hours is better.

#### HQO Reporting tool/product

Public reporting

Quality improvement (QIP and QIRAP)

### DEFINITION AND SOURCE INFORMATION

#### Unit of Measurement

Hours

#### Calculation Methods

The maximum length of time 90% of patients spend from registration or triage (whichever occurs first and valid) until the time patients leave the emergency department, less any time spent in a Clinical Decision Unit (CDU).

*Exclusions:*

#### **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)

#### **FY 2010-2011**

- Cases where Patient Left ED Date/Time and Disposition Date/Time are both 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 Patient left ED date/time is unknown or blank and the Disposition Code is 06-09, 12, 14 (admitted and transferred patients)
- 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)

#### **FY 2009-2010**

- Cases where Patient Left ED Date/Time and Disposition Date/Time are both 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 pertaining to Psychiatric assessment units reported in functional centre 7131076 - evaluated and approved by CCO's ED Information Program
- Cases where the Scheduled visit Indicator flag is = 'Y'
- Cases where ED LOS are negative &bull; Cases where Date/Time patient left ED missing and the Disposition Code is 06-09 (admitted patients and transferred patients)
- Cases where patient has left without being seen by a physician during his/her visit (Disposition Code 02 & 03)

#### **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

Acuity Level

### **OTHER RELEVANT INFORMATION**

#### **Caveats and Limitations**

This definition is not aligned with other reporting at HQO such as online reporting and specialized report.

#### **Comments Summary**

For QIPs, the current reporting period is the calendar year.

## Percentage of hip replacements completed within target time by priority level

### **INDICATOR DESCRIPTION**

#### **Description**

This indicator measures the percentage of patients who met the access targets from when a patient and surgeon decide to proceed with hip replacement procedure (decision-to-treat) until when the actual procedure is completed. 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 whose hip replacement surgery wait time is within the access targets.

#### **Denominator**

All hip replacement (i.e. primary/revision, total/partial) surgeries meeting the inclusion/exclusion criteria below.

#### *Inclusions:*

- All closed wait list entries with procedure dates within date range;
- Patient was 18 years or older on the day the procedure was completed.

#### *Exclusions:*

- Procedures no longer required.
- Procedures assigned as Priority 1 level.
- Wait list entries identified by hospitals as data entry errors.

#### **Note:**

If patient unavailable dates fall outside the Decision to Treat Date up to Procedure Date, the patient unavailable dates are not deducted from the patient's wait days. These are considered 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**

Time

Region

### **OTHER RELEVANT INFORMATION**

#### **Caveats and Limitations**

There are factors that affect wait times that do not relate to a hospital's efficiency, to a particular doctor or the availability of resources. They include:

- o Patient Choice – a patient with a non-life-threatening condition may decide to delay treatment for personal or family reasons to a more convenient time.

- o Patient Condition – a patient's condition may need to improve before the surgery or exam takes place.
- o 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.
- o 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**

NA

# Percentage of knee replacements completed within target time by priority level

## **INDICATOR DESCRIPTION**

### **Description**

This indicator measures the percentage of patients who met the access targets from when a patient and surgeon decided to proceed with knee replacement procedure (decision-to-treat) until when the actual procedure is completed. 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 whose knee replacement surgery wait times is within the access targets

### **Denominator**

All knee replacement (i.e. primary/revision, total/partial) surgeries meeting the inclusion/exclusion criteria below.

#### *Inclusions:*

- All closed wait list entries with procedure dates within date range;
- Patient was 18 years or older on the day the procedure was completed.

#### *Exclusions:*

- Procedures no longer required.
- Procedures assigned as Priority 1 level.
- 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**

Time

Region

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

There are factors that affect wait times that do not relate to a hospital's efficiency, to a particular doctor or the availability of resources. They include:

- Patient Choice – a patient with a non-life-threatening condition may decide to delay treatment for personal or family reasons to a more convenient time.
- Patient Condition – a patient's condition may need to improve before the surgery or exam takes place.
- 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.
- 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 Decision to Treat Date up to Procedure Date, the patient unavailable dates are not deducted from the patient's wait days. These are considered data entry errors.

# Percentage of urgent diagnostic cardiac catheterization completed within access target

## INDICATOR DESCRIPTION

### Description

This indicator measures the percentage of patients that require urgent diagnostic cardiac catheterization and receive it within the recommended maximum wait time target. Wait times were calculated from the day the patient and doctor decided to go ahead with the procedure, to the day it was performed. 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 denominator times 100

### Numerator

Number of urgent (P2) diagnostic cardiac catheterization procedures completed within recommended maximum wait time

### Denominator

All adult urgent diagnostic cardiac catheterization procedures that are done within Ontario's 18 advanced cardiac service hospitals

### Inclusions:

- Static (month-end) Data
- 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).
- Ontario patients with valid OHIP
- Takes into account up to one DART\* per patient. If a patient has two DARTs, the second one will not be counted. \*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.

### Exclusions:

- Patients who die before they receive their procedures

### Adjustment (risk, age/sex standardization)

None

### Data Source

Wait Time Information System (WTIS)

### Data provided to HQO by

Cardiac Care Network (CCN)

### Reported Levels of comparability

Time

## OTHER RELEVANT INFORMATION

### Caveats and Limitations

### Comments Summary

# Percentage of urgent percutaneous coronary interventions (PCI) completed within access target

## INDICATOR DESCRIPTION

### Description

This indicator measures the percentage of patients that require urgent percutaneous coronary interventions (PCI) and receive it within the recommended maximum wait time target. Wait times were calculated from the day the patient and doctor decided to go ahead with the procedure, to the day it was performed. 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 urgent (P2) PCI completed within recommended maximum wait time

### Denominator

All adult urgent PCI that are done within Ontario's 18 advanced cardiac service hospitals.

### Inclusions:

- Static (month-end) Data.
- 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).
- Ontario patients with valid OHIP.
- Takes into account up to one DART\* per patient. If a patient has two DARTs, the second one will not be counted. \*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.

### Exclusions:

- Patients who die before they receive their procedures

### Adjustment (risk, age/sex standardization)

None

### Data Source

Wait Time Information System (WTIS)

### Data provided to HQO by

Cardiac Care Network (CCN)

### Reported Levels of comparability

Time

## OTHER RELEVANT INFORMATION

### Caveats and Limitations

Patients who are scheduled for a diagnostic cardiac catheterization but proceed to have a PCI are not included in the PCI wait times.

### Comments Summary

NA

# Percentage of urgent coronary artery bypass graft (CABG) completed within access target

## INDICATOR DESCRIPTION

### Description

This indicator measures the percentage of patients that require urgent coronary artery bypass graft (CABG) surgery and receive it within the recommended maximum wait time target for this procedure. Wait times were calculated from the day the patient and doctor decided to go ahead with the procedure, to the day it was performed. 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 urgent (P2) CABG surgeries completed within recommended maximum wait time

### Denominator

All adult urgent CABG surgeries that are done within Ontario's 18 advance cardiac service hospitals

#### Inclusions:

- Static (month-end) Data
- 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).
- Ontario patients with valid OHIP
- Takes into account up to one DART\* per patient. If a patient has two DARTs, the second one will not be counted. \*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.

#### Exclusions:

- Patients who die before they receive their procedures

### Adjustment (risk, age/sex standardization)

None

### Data Source

Wait Time Information System (WTIS)

### Data provided to HQO by

Cardiac Care Network (CCN)

### Reported Levels of comparability

Time

## OTHER RELEVANT INFORMATION

### Caveats and Limitations

### Comments Summary

NA

## Percentage of cancer surgeries completed within target time by priority level

### INDICATOR DESCRIPTION

#### Description

This indicator measures the percentage of patients who met the access targets from when a patient and surgeon decide to proceed with cancer surgery until when the actual procedure is completed. 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 whose cancer surgery wait times is within the access targets.

The wait time is calculated for each patient who received treatment within the most current time period, for a particular service area and hospital.

#### Denominator

All cancer surgeries meeting the inclusion/exclusion criteria below.

##### *Inclusions:*

- All closed wait list entries with cancer procedure dates within date range.
- Patients that are 18 years and older on the day the procedure was completed.
- Treatment Cancer procedures only. Procedures classified as "NA" are currently included.

##### *Exclusions:*

- Diagnostic, Palliative and Reconstructive cancer procedures.
- Procedures on Skin - Carcinoma, Skin-Melanoma, and Lymphomas.
- Procedures no longer required.
- Procedures assigned as Priority 1 level.
- Wait list entries identified by hospitals as data entry errors.
- Diagnostic imaging cases classified as specified date procedures (SDP) or timed procedures. SDP cases are excluded from MRI and CT wait time information as of January 1, 2008.

#### 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

Time

Region

### OTHER RELEVANT INFORMATION

#### Caveats and Limitations

The intent of the data collection is to have the wait time for a patient undergoing an operation where cancer is a real possibility. In some cases, it is only after surgery that a negative result is known. Some reported wait time data for cancer surgery includes data for surgeries where there are benign or non-cancerous tumours.

The Ministry of Health and Long-Term Care is working with the surgical community to have more accurate reporting of surgical treatment data involving “intentional” and “patient unavailable” wait times either by:

- Subtracting the "patient unavailable dates" from the overall wait time.
- Entering the “decision to treat date” as the date when the patient is first recovered from treatment.

Many cancer surgery procedures are the same as the procedures for benign (non-cancerous) conditions, and the same doctors perform both cancer surgery and non-cancer surgery. As a result, almost every hospital in Ontario performs at least a few cancer surgeries every year. However, the hospitals with smaller numbers of cancer procedures may not have a formal cancer program or specialize in cancer surgery. A number of these smaller hospitals do not report their wait time data to WTIS. This makes it difficult to collect comprehensive information.

#### **Comments Summary**

If patient unavailable dates fall outside the Decision to Treat Date up to Procedure Date, the patient unavailable dates are not deducted from the patient's wait days. These are considered data entry errors.

## Rate of hospital-acquired *C. difficile* infection

### INDICATOR DESCRIPTION

#### Description

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

#### HQO Reporting tool/product

Public reporting

### DEFINITION AND SOURCE INFORMATION

#### Unit of Measurement

Rate per 1,000 patient-days

#### Calculation Methods

Numerator divided by the denominator times 1,000

#### Numerator

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

##### Inclusions:

- Cases in all publicly funded hospitals.
- Inpatient beds.
- 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).
- 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 CDI in the past 8 weeks.

##### Exclusion:

Patients less than 1 year of age

#### Denominator

Total number of inpatient days

##### Inclusions:

- Patient days in all publicly funded hospitals.
- Inpatient beds.

Exclusions: Patients less than 1 year of age.

#### Adjustment (risk, age/sex standardization)

None

#### Data Source

Self-Reporting Initiative (SRI)

#### 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

Data are self-reported by hospitals. Results include only hospital-acquired infections.

#### Comments Summary

This indicator was reported via QIP from 2013-2017 but as of 2017/18 this indicator has been retired from QIP.



## Percentage of deliveries by delivery type

### **INDICATOR DESCRIPTION**

#### **Description**

This indicator measures the proportion of deliveries among 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**

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 stillbirths

#### *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 2016 report.

#### **Comments Summary**

Maternal neighbourhood income quintile was assigned based on a mother's postal code.

## Percentage of low-risk deliveries by delivery type

### **INDICATOR DESCRIPTION**

#### **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 delivery
- Vaginal delivery

#### **Denominator**

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

*Inclusions* (low-risk deliveries):

- Robson criteria 1 to 4:
- Robson 1: Nullipara (first time mothers) who had singleton, full-term (gestational age  $\geq 37$  weeks), and cephalic (head first) delivery with spontaneous labour
- Robson 2: Nullipara (first time mothers) who had singleton, full-term (gestational age  $\geq 37$  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  $\geq 37$  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  $\geq 37$  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 extracted from the BORN Information System (BIS). Maternal neighbourhood 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 2016 report

## 7. Long-Term Care

### Median number of days waited to move into a long-term care home

#### **INDICATOR DESCRIPTION**

##### **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., all placements, placed from hospital (acute care), and placed from community) as well as by priority category (e.g., all placements, urgent placements, and non-urgent placements).

The median is calculated for each of the following placements:

##### 1) All placements

###### *Inclusion:*

- All clients placed from locations other than long-term care homes. Includes clients placed from hospitals (acute, rehab, complex continuing care (CCC), etc.), supportive housing and retirement homes, home, or other.

###### *Exclusion:*

- Clients for whom "Admitted from" and/or "Prior Location Code" is unknown.

##### 2) Placed from acute care

###### *Inclusion:*

- All clients placed from acute care hospitals (includes priority category 3A, 3B, 4A, 4B). Does not include clients placed from rehab, CCC, etc.

##### 3) Placed from community

###### *Inclusion:*

- All clients placed from the home, retirement homes, and supportive housing only.

The median is also calculated for each of the following priority categories:

##### 1) All placements

*Inclusion:* All placements with priority category 1, 2, 3A, 3B, 4A, 4B and Veterans.

##### 2) Urgent placements

*Inclusion:* All placements with priority category 1 only.

##### 3) Non-urgent placements

*Inclusion:* All clients with priority category 3A, 3B, 4A, and 4B only.

##### **Adjustment (risk, age/sex standardization)**

None

**Data Source**

Client Profile Database (CPRO)

**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. In 2010, with the proclamation of the Long-Term Care Homes Act, 2007 (LTCHA), the eligibility criteria was changed from prior legislation. The priority categories for non-urgent patients changed from 1B, 2 and 3 to 3A, 3B, 4A and 4B. As a result of these changes, comparing long-term care home admissions that occurred prior to July 1, 2010 to admissions that occurred on or after July 1, 2010 should only be done with this caveat in mind. Although priority categories are assigned based on a provincially standardized process, variations exist between Community Care Access Centres' processes for prioritizing individuals within priority categories.

**Comments Summary**

NA

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

## **INDICATOR DESCRIPTION**

### **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, or experienced hallucinations or delusions. The indicator is calculated as a rolling 4 quarter average. This indicator was jointly developed by interRAI and the Canadian Institute for Health Information. A lower percentage is better.

### **HQO Reporting tool/product**

Audit/Feedback (practice reports)

Public reporting

Quality improvement (QIP and QIRAP)

## **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:*

- Residents who are end-stage disease (J5c = 1) or receiving hospice care (P1ao = 1)
- 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**

Time

Province

Region

### **OTHER RELEVANT INFORMATION**

#### **Caveats and Limitations**

Includes only long-stay beds. Rolling 4 quarter averages stabilize the rates from quarter-to-quarter variations, especially for smaller facilities, but make it more difficult to detect quarterly changes. 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 experienced moderate pain daily or any severe pain

## **INDICATOR DESCRIPTION**

### **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. 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:*

$(J2a = 2 \text{ AND } J2b = 2) \text{ OR } J2b = 3$

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:*

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**

Time

Region

Province

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

Pain is subjective in nature and can be difficult to measure. Includes only long-stay beds. Rolling 4 quarter averages stabilize the rates from quarter-to-quarter variations, especially for smaller facilities, but make it more difficult to detect quarterly changes. General limitations when using RAI-MDS data, including random error, coding errors, and missing values.

### **Comments Summary**

NA

# Percentage of long-term care home residents who were physically restrained on a daily basis

## **INDICATOR DESCRIPTION**

### **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. A lower percentage is better.

### **HQO Reporting tool/product**

Public reporting

Quality improvement (QIP)

## **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:*

- Residents who were comatose (B1 = 1)
- Residents who were quadriplegic (I1bb = 1)

### **Adjustment (risk, age/sex standardization)**

This indicator 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**

Time

Province

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. Rolling 4 quarter averages stabilize the rates from quarter-to-quarter variations, especially for smaller facilities, but make it more difficult to detect quarterly changes. 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. 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 a priority indicator in Quality Improvement Plans (QIPs).

## Percentage of long-term care home residents who fell

### **INDICATOR DESCRIPTION**

#### **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. A lower percentage is better.

#### **HQO Reporting tool/product**

Public reporting

Quality improvement (QIP)

### **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 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**

Time

Province

Region

**OTHER RELEVANT INFORMATION**

**Caveats and Limitations**

Includes only long-stay beds. Rolling 4 quarter averages stabilize the rates from quarter-to-quarter variations, especially for smaller facilities, but make it more difficult to detect quarterly changes. General limitations when using RAI-MDS data, including random error, coding errors, and missing values.

**Comments Summary**

## 8. Palliative Care

### Percentage of palliative care patients who received home care (any or palliative-specific) in their last 30 days of life

#### INDICATOR DESCRIPTION

##### Description

This indicator measures the percentage of (community-dwelling) palliative care patients who received at least one home care service within their last 30 days of life, reported as:

- Any home care
- Palliative home care

##### 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 (community-dwelling) palliative care patients who received at least one home care service within their last 30 days of life, reported as:

##### **Any home care**

##### *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

## 2. Palliative home care

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 in 2014/15 in Ontario, who had at least one palliative care service code or end of life designation in their medical records in the last 12 months of life.

*Exclusions:*

Palliative care patients who spent their last month in the hospital, LTC/CCC or NRS.

Note:

See the details of denominator population methodology in "[Palliative HYPERLINK](#)

["http://www.hqontario.ca/Portals/0/Documents/system-performance/technical-supplement-palliative-care-report-en.pdf"](http://www.hqontario.ca/Portals/0/Documents/system-performance/technical-supplement-palliative-care-report-en.pdf) care at the end of life report" [HYPERLINK](#)

["http://www.hqontario.ca/Portals/0/Documents/system-performance/technical-supplement-palliative-care-report-en.pdf"](http://www.hqontario.ca/Portals/0/Documents/system-performance/technical-supplement-palliative-care-report-en.pdf) technical appendix

### 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 palliative care patients that 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 for palliative care patients to which this could be compared.
- The data do not show if palliative care patients had any other support or a caregiver.

### Comments Summary

The palliative care patient population for this report was defined as:

People who died in 2014/15 in Ontario, who received any palliative care services or were designated as end of life in their medical records in the last 12 months of life. Deaths in 2014/15 in Ontario were identified from RPDB

Using the ICES Key Number (IKN), death records identified from RPDB were linked to the CCRS, DAD, HCD, NACRS, and OHIP to select records that had at least one palliative care service code or EoL

designation in the last 12 months of life. Note: This population serves as the DENOMINATOR for the indicators.



## Percentage of palliative care patients who had at least one home visit by a doctor in their last 30 days of life

### **INDICATOR DESCRIPTION**

#### **Description**

This indicator measures percentage of (community-dwelling) palliative care patients who received a home visit by a doctor within 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 (community-dwelling) palliative care patients who received a home visit by a doctor 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 in 2014/15 in Ontario, who had at least one palliative care service code or end of life designation in their medical records in the last 12 months of life.

#### **Exclusions:**

Palliative care patients who spent their last month in the hospital, LTC/CCC or NRS.

Note: See the details of denominator population methodology in ["Palliative care at the end of life report"](#) technical appendix

#### **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

Income

## **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 palliative care patients that 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 providers

### **Comments Summary**

The palliative care patient population for this report was defined as:

- People who died in 2014/15 in Ontario, who received any palliative care services or were designated as end of life in their medical records in the last 12 months of life. Deaths in 2014/15 in Ontario were identified from RPDB
- Using the ICES Key Number (IKN), death records identified from RPDB were linked to the CCRS, DAD, HCD, NACRS, and OHIP to select records that had at least one palliative care service code or EoL designation in the last 12 months of life. Note: This population serves as the DENOMINATOR for the indicators.

# Percentage of palliative care patients who had at least one unplanned emergency department visit in their last 30 days of life

## **INDICATOR DESCRIPTION**

### **Description**

This indicator measures the percentage of palliative care patients who had at least one unplanned emergency department (ED) 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 palliative care patients 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 who died in 2014/15 in Ontario, who had at least one palliative care service code or end of life designation in their medical records in the last 12 months of life.

#### *Exclusions:*

Palliative care patients who spent their last month in the hospital, LTC/CCC or NRS

See the details of denominator population methodology in [“Palliative care at the end of life report”](#) technical appendix

### **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**

- Missing 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**

The palliative care patient population for this report was defined as:

- People who died in 2014/15 in Ontario, who received any palliative care services or were designated as end of life in their medical records in the last 12 months of life. Deaths in 2014/15 in Ontario were identified from RPDB
  - Using the ICES Key Number (IKN), death records identified from RPDB were linked to the CCRS, DAD, HCD, NACRS, and OHIP to select records that had at least one palliative care service code or EoL designation in the last 12 months of life. Note: This population serves as the DENOMINATOR for the indicators.

## Percentage of palliative care patients' deaths by location

### **INDICATOR DESCRIPTION**

#### **Description**

This indicator measures the proportion of palliative care patients deaths in:

- Hospital (inpatient, ED, 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**

The number of palliative care patients 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 who died in 2014/15 in Ontario, who had at least one palliative care service code or end of life designation in their medical records in the last 12 months of life.

See the details of denominator population methodology in [“Palliative care at the end of life report”](#) technical appendix

#### **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**

- The palliative care patient population for this report was defined as pPeople who died in 2014/15 in Ontario, who received any palliative care services or were designated as end of life in their medical records in the last 12 months of life.
- Deaths in 2014/15 in Ontario were identified from RPDB
- Using the ICES Key Number (IKN), death records identified from RPDB were linked to the CCRS, DAD, HCD, NACRS, and OHIP to select records that had at least one palliative care service code or EoL designation in the last 12 months of life.
- This population serves as the DENOMINATOR for the palliative care indicators.
  - 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.

## 9. System Integration

### Percentage of patients who saw a family doctor or specialist within seven days of discharge after hospitalization for heart failure

#### INDICATOR DESCRIPTION

##### Description

Percentage of follow up visits with a doctor within 7 days of discharge after hospitalization for congenital heart failure (CHF) among patients aged 40 and older.

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

## **INDICATOR DESCRIPTION**

### **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.

### **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:*

- Ontario doctor visits taking place in office, home, or long-term care (would capture most of the follow-up (planned) visits in ED)
- 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:*

- 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 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 for 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

# Hospital readmission rate within 30 days of leaving hospital for medical or surgical treatment

## **INDICATOR DESCRIPTION**

### **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:***

- Emergent or urgent (non-elective) readmission to an acute care hospital.
- 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:

- 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)
- Chemotherapy for neoplasm (ICD-10-CA: Z51.1) as MRDx
- Admission for mental illness (MCC = 17)
- Admission for palliative care (ICD-10-CA: Z51.5) coded as MRDx.
- 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:***

- 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.
- 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)
- Sex recorded as male or female
- Ontario resident
- Age 20 and older

#### ***Exclusions:***

- Records with an invalid health card number
- Records with an invalid date of birth
- Records with an invalid admission date or time
- Records with an invalid discharge date or time
- Records with an admission category of still birth or cadaveric donor

- Episodes with a discharge of death or self sign-out
- Presence of at least one record in the episode with MCC 17 (Mental Diseases and Disorders)
- Presence of at least one record in the episode with palliative care (ICD-10-CA: Z51.5) coded as most responsible diagnosis (MRDx).
- 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

## INDICATOR DESCRIPTION

### 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);
- Diabetes: E10.0, E10.1, E10.63, E10.64, E10.9, E11.0, E11.1, E11.63, E11.9, E13.0, E13.1, E13.63, E13.9, E14.0, E14.1, E14.63, E14.9, E11.64, E13.64, E14.64;
- 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, 1HH71, 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:

- Death before discharge
- Patients sign themselves out.
- Transfers from another acute care facility.
- Patients age 75 and older.

**Denominator**

Number of Ontario adults aged 0-74

**Exclusions:**

- Birthdate after April 1st of given fiscal year.
- Death date before April 1st of given fiscal year.
- Missing sex.
- Non-Ontario resident (April 1st of given fiscal year).
- Age less than 0 or greater than 74 (April 1st of given fiscal year).
- 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

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.

# Percentage of inpatients days that beds were occupied by patients who could have been receiving care elsewhere

## **INDICATOR DESCRIPTION**

### **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

## **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:*

- ALC cases discontinued due to 'Data Entry Error'.
- ALC cases having Inpatient Service = Discharge Destination for Post-Acute Care (\*exception: Bloorview Rehab, complex continuing care to complex continuing care).
- 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.



## 10. Health Workforce

### Number of nurses practising in Ontario per 100,000 people

#### **INDICATOR DESCRIPTION**

##### **Description**

This indicator measures the number of nurses who reported at least one employment position in nursing in Ontario per 100,000 people. It includes registered nurses, nurse practitioners and registered practical nurses working full-time, part-time and casual hours.

##### **HQO Reporting tool/product**

Public reporting

#### **DEFINITION AND SOURCE INFORMATION**

##### **Unit of Measurement**

Number per 100,000 people

##### **Calculation Methods**

This indicator is calculated by dividing the number of nurses by the number of people in Ontario, and multiplying it by 100,000 to get the number of nurses per 100,000 people

##### **Numerator**

Number of nurses who report to the College of Nurses of Ontario at least one employment position in nursing in Ontario during the membership renewal process for the next practising year

##### **Inclusions:**

- Nurses who report at least one employment position in nursing in Ontario
- Nurses employed as full-time (30 hours or more per week), nurses employed as part-time (less than 30 hours per week), or nurses employed as casual (on an as-needed basis)
- Registered Nurses in the General Class (registered nurses, RNs), Registered Nurses in the Extended Class (nurse practitioners, NPs), or Registered Practical Nurses in the General Class (practical nurses, RPNs)

##### **Exclusions:**

- Nurses not registered with the College of Nurses of Ontario
- Nurses who become new members of the College of Nurses of Ontario during the practice year
- Nurses on leave (members on maternity leave or long-term disability)
- Nurses in the Non-Practicing Class

##### **Denominator**

Estimated number of people living in Ontario

##### **Adjustment (risk, age/sex standardization)**

None

##### **Data Source**

College of Nurses of Ontario *Membership Statistics Report 2015*.

Statistics Canada. Table 051-0001: Estimates of population for July 1 (2011 Census administrative data). CANSIM database. Accessed February 26, 2015.

Fall 2014 Ministry of Finance 2011 Census-based Census Division projections (2013 base).

##### **Data provided to HQO by**

College of Nurses of Ontario (CNO)

Ministry of Health and Long-Term Care (MOHLTC)

##### **Reported Levels of comparability**

Time

#### **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

The indicator values calculated using data provided to HQO from CNO and the MOHLTC may differ from the values reported by others or the values calculated by HQO from data provided by CIHI even though the data sources are the same (annual registration forms and population estimates). The differences may be due to differences in the reference population, collection period, exclusions, and editing and processing methodologies. The nursing workforce is described by counting the number of nurses who renewed their membership with the College of Nurses of Ontario for the next practice year. In other words, this indicator provides a snap-shot of the nursing workforce. Nurses who became new members during the practice year are not included. The measure looks at the number of health care providers per 100,000 population, however it does not account for differences in scope of practice or differences in the health status/needs of the population being served in each region.

### **Comments Summary**

The indicator is described by HQO for three nursing professions in Ontario separately: registered nurses (RNs), nurse practitioners (NPs), and registered practical nurses (RPNs). Across Canada, these regulated nursing professions are referred to as registered nurses excluding NPs (RNs), nurse practitioners (NPs) and licensed practical nurses (LPNs), respectively.

# Number of nurses practising across Canada per 100,000 people

## **INDICATOR DESCRIPTION**

### **Description**

This indicator measures the number of nurses that submit an active practising registration for employment in Canada to their provincial or territorial regulatory authority per 100,000 people. It includes registered nurses, nurse practitioners and licensed practical nurses (registered practical nurses) working full-time, part-time and casual hours.

### **HQO Reporting tool/product**

Public reporting

## **DEFINITION AND SOURCE INFORMATION**

### **Unit of Measurement**

Number per 100,000 people

### **Calculation Methods**

This indicator is calculated by dividing the number of nurses by the size of the population, and multiplying by 100,000 to get the number of nurses per 100,000 people

### **Numerator**

Number of nurses who register as actively practising nursing with a Canadian provincial or territorial regulatory authority during the first 6 months of the registration year

#### *Inclusions:*

- Nurses who submit an active practising registration in a Canadian province or territory during the first 6 months of the registration year
- Nurses employed as full-time (30 hours or more per week), nurses employed as part-time (less than 30 hours per week), or nurses employed as casual (on an as-needed basis)
- Registered nurses (RNs) which includes nurse practitioners (NPs), and licensed practical nurses (LPNs)

#### *Exclusions:*

- Nurses who submit a non-practising registration
- Nurses living or practising outside Canada who have not maintained a Canadian license

### **Denominator**

Estimated number of people living in Canada or province

### **Adjustment (risk, age/sex standardization)**

None

### **Data Source**

*Regulated Nurses, 2015: RN/NP Data Tables.* Health Workforce Database

Statistics Canada. Table 051-0001: Estimates of population for July 1 (2011 Census administrative data). CANSIM database. Accessed February 18, 2016

### **Data provided to HQO by**

Canadian Institute for Health Information (CIHI)

### **Reported Levels of comparability**

Province

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

The indicator values calculated using data provided to HQO from CIHI may differ from the values reported by others or the values calculated by HQO from data provided by CNO and the MOHLTC even though the data sources are the same (annual registration forms and population estimates). The differences may be due to differences in the reference population, collection period, exclusions, and

editing and processing methodologies. The nursing workforce is described by counting the number of nurses employed in nursing at the time of annual registration. In other words, it does not include all nurses who were eligible to practice in a given year. However, nurses on temporary leave are generally considered as active practicing registrations with the intent of returning to that position when the temporary leave ends. The measure looks at the number of health care providers per 100,000 population, however it does not account for differences in scope of practice or differences in the health status/needs of the population being served in each region.

#### **Comments Summary**

The indicator is described by HQO for three nursing professions separately: registered nurses (excluding NPs), nurse practitioners, and licensed practical nurses. In Ontario, these regulated nursing professions are referred to as registered nurses (RNs), nurse practitioners (NPs) and registered practical nurses (RPNs), respectively.

# Number of family doctors and specialists practising in Ontario per 100,000 people

## **INDICATOR DESCRIPTION**

### **Description**

This indicator measures the number of licensed physicians practicing in Ontario per 100,000 people. It includes family doctors and specialists.

### **HQO Reporting tool/product**

Public reporting

## **DEFINITION AND SOURCE INFORMATION**

### **Unit of Measurement**

Number per 100,000 people

### **Calculation Methods**

This indicator is calculated by dividing the number of doctors by the number of people in Ontario or region, and multiplying it by 100,000 to get the number of doctors per 100,000 people.

### **Numerator**

Number of licensed doctors actively practicing in Ontario as of December 31 of each year, including family doctors (family medicine only, family medicine/emergency medicine) and specialists (internal medicine, pediatrics, surgery, laboratory medicine, other)

#### *Inclusions:*

- Licensed physicians practicing in Ontario, including physicians who are semi-retired and military physicians

#### *Exclusions:*

- Deceased physicians
- Postgraduate medical trainees holding a general license who had not completed training by July 31
- Physicians who reach age 85 in the reporting year
- Physicians with expired licenses
- Physicians with educational, short term or academic visitor license class

### **Denominator**

Estimated or projected number of people living in Ontario or region

### **Adjustment (risk, age/sex standardization)**

None

### **Data Source**

OPHRDC *Physicians in Ontario, 2005-2014 reports. Active Physician Registry*

Statistics Canada. Table 051-0001: Estimates of population for July 1 (2011 Census administrative data). CANSIM database. Accessed February 26, 2015.

Fall 2014 Ministry of Finance 2011 Census-based Census Division projections (2013 base).

### **Data provided to HQO by**

Ontario Physician Human Resources Data Centre (OPHRDC)

Ministry of Health and Long-Term Care (MOHLTC)

### **Reported Levels of comparability**

Time

Region

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

The indicator values calculated using data provided to HQO from OPHRDC may differ from the values reported by others or the values calculated by HQO from data provided by CIHI. The differences may be due to differences in inclusion/exclusion criteria, timing of data collection and reference population. The measure looks at the number of health care providers per 100,000 population, however it does not account for differences in scope of practice or differences in the health status/needs of the population being served in each region. The population of one health region may receive health care in another health region, impacting the supply and type of doctors required in different regions. This is common for regions bordering larger urban areas.

### **Comments Summary**

“Specialists” includes doctors from the following specialties: internal medicine, pediatrics, surgery, laboratory medicine, and other specialties (e.g., anesthesiology, emergency medicine, psychiatry, public health and preventive medicine). “Family doctors” includes family doctors and family doctors with certification in emergency medicine.

# Number of family doctors and specialists across Canada per 100,000 people

## **INDICATOR DESCRIPTION**

### **Description**

This indicator measures the number of licensed physicians across Canada per 100,000 people. It includes family doctors and specialists.

### **HQO Reporting tool/product**

Public reporting

## **DEFINITION AND SOURCE INFORMATION**

### **Unit of Measurement**

Number per 100,000 people

### **Calculation Methods**

This indicator is calculated by dividing the number of doctors by the size of the population, and multiplying it by 100,000 to get the number of doctors per 100,000 people.

### **Numerator**

Number of active doctors in Canada or in a province, including family doctors (family medicine only, family medicine/emergency medicine) and specialists (internal medicine, pediatrics, surgery, laboratory medicine, other)

#### **Inclusions:**

- Active physician (physicians with a medical doctor degree and a valid mailing address), including doctors not engaged in any private clinical practice such as administrators and teachers
- Active physicians not registered with their provincial registrar ("non-registered physicians")
- Non-certified specialist physicians as of December 31 of the reference year (physicians licensed as specialists but are not certified by the Royal College of Physicians and Surgeons of Canada or the Collège des médecins du Québec)

#### **Exclusions:**

- Deceased physicians
- Residents
- Physicians who are retired, semi-retired, temporarily retired, on leave of absence, on sabbatical, temporarily not in practice, or not in practice
- Military physicians
- Non-registered physicians who request to be excluded from publication (non-registered physicians only)
- Physicians practising outside of Canada

### **Denominator**

Estimated number of people living in Canada or province

### **Adjustment (risk, age/sex standardization)**

None

### **Data Source**

*Supply, Distribution and Migration of Physicians in Canada, 2014: Data Tables*. Scott's Medical Database Statistics Canada. *Quarterly Demographic Estimates*. 2015;(29)1. 91-002-X

### **Data provided to HQO by**

Canadian Institute for Health Information (CIHI)

### **Reported Levels of comparability**

Province

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

The indicator values calculated using data provided to HQO from CIHI may differ from the values reported by others or the values calculated by HQO from data provided by OPHRDC. The differences may be due to differences in inclusion/exclusion criteria, timing of data collection and reference population. The measure looks at the number of health care providers per 100,000 population, however it does not account for differences in scope of practice or differences in health status/needs of the population being served in each jurisdiction. The range of services provided by a doctor is subject to jurisdictional licensure rules, medical service plan payment arrangements and individual practice choices.

### **Comments Summary**

“Specialists” include doctors certified with the College of Physicians and Surgeons of Canada or the Collège des médecins du Québec, as well as non-certified specialists. “Family doctors” includes general practitioners (doctors, excluding interns and residents, without a current medical specialty certified in Canada) and family medicine and emergency family medicine specialists certified with the College of Family Physicians Canada.



## Lost-time injury rate

### INDICATOR DESCRIPTION

#### Description

This indicator measures the number of lost-time injury claims per 100 full-time equivalent workers in the health care sector per year. A lower rate is better.

#### HQO Reporting tool/product

Public reporting

### DEFINITION AND SOURCE INFORMATION

#### Unit of Measurement

Rate per 100 full-time-equivalent workers

#### Calculation Methods

The rate is calculated by summing the total number of lost-time injuries per year and dividing by the total number of FTE workers for the same year. This rate is then multiplied by 100 to get the rate per 100 FTE workers.

#### Numerator

Total number of lost-time injuries that occurred in the injury year in the health care sector

##### *Inclusions:*

- Lost-Time Injuries (LTIs) are allowed injury/illness claims by workers who suffer a work-related injury/disease which results in being off work past the day of the accident, loss of wages/earnings, or a permanent disability/impairment.

##### *Where,*

- Total number of LTIs in the health sector = Total number of "Allowed Lost Time Claims" for rate groups 851 (homes for nursing care), 852 (homes for residential care), 853 (hospitals), 857 (nursing services), 858 (group homes), 861 (treatment clinics and specialized services), and 875 (professional offices and agencies)
- Number of LTIs in long-term care = Number of "Allowed Lost Time Claims" for rate group 851 (homes for nursing care)
- Number of LTIs in hospital = Number of "Allowed Lost Time Claims" for rate group 853 (hospital)

##### *Exclusions:*

- Fatalities

#### Denominator

Total number of full-time-equivalent (FTE) workers in the health care sector

FTE Workers is an estimate based on the average hourly wage for LTC workers and the insurable earnings for the calendar year, assuming a person works an average of 2,000 hours per year.

##### *Where,*

- Total number of FTE workers = WSIB Covered Employment for rate groups 851 (homes for nursing care), 852 (homes for residential care), 853 (hospitals), 857 (nursing services), 858 (group homes), 861 (treatment clinics and specialized services), and 875 (professional offices and agencies)
- Number of FTE workers in long-term care = WSIB Covered Employment for rate group 851 (homes for nursing care)
- Number of FTE workers in hospital = WSIB Covered Employment for rate group 853 (hospital)

#### Adjustment (risk, age/sex standardization)

None

#### Data Source

*By the Numbers: WSIB Statistical Report (Schedule 1).* WSIB-Enterprise Information Warehouse

**Data provided to HQO by**

Workplace Safety and Insurance Board (WSIB)

**Reported Levels of comparability**

Time

Health care setting

**OTHER RELEVANT INFORMATION**

**Caveats and Limitations**

The number of full-time-equivalent workers is an estimate based on data from Statistics Canada's Survey of Employment, Payrolls and Hours (SEPH). The number of injuries is based on claims by workers, so if a claim for benefits is not filed for an injury, then it would not be counted. This indicator reports the rate of injuries for worker groups but does not specify who is included within each worker group. For example, doctors who are self-employed may not be insured by WSIB and therefore not captured in this indicator, but doctors employed by hospitals or specialty clinics may be insured based on the WSIB's policy.

**Comments Summary**

NA

## 11. Health Spending

### Total health spending per person

#### INDICATOR DESCRIPTION

##### 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 are converted to a common currency (US dollar) and adjusted to take account of the different purchasing power of the national currencies.

##### Data Source

OECD Health Statistics

National Health Expenditure Database (NHEX)

##### Data provided to HQO by

Canadian Institute for Health Information (CIHI)

Organization for Economic Cooperation and Development (OECD)

##### Reported Levels of comparability

International and provincial 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 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.

Total spending on health care measures the final consumption of health goods and services (i.e. current health expenditure) plus capital investment in health care infrastructure.

# Health spending on drugs per person

## **INDICATOR DESCRIPTION**

### **Description**

This indicator measures health spending on drugs 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 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 are converted to a common currency (US dollar) and adjusted to take account of the different purchasing power of the national currencies.

### **Data Source**

OECD Health Statistics

National Health Expenditure Database (NHEX)

### **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.

# Percentage of survey respondents, aged 12 to 64, who report having prescription medication insurance

## **INDICATOR DESCRIPTION**

### **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\_Q1=1)

#### *Exclusions:*

Respondents age >=65 years

Respondents who refused to answer INS\_Q1=8

CCHS variable INS\_Q1:

Do you have insurance that covers all or part of the cost of: your prescription medications?

- Yes
- No
- RF

### **Denominator**

All respondents aged 12 to 64

### **Adjustment (risk, age/sex standardization)**

Direct adjustment (age) using 2011 Canadian Census population aged 12-64.

Age groups are 12-17, 18-29, 30-39, 40-49, 50-59, 60-64

### **Data Source**

Canadian Community Health Survey (CCHS)

### **Data provided to HQO by**

Institute for Clinical Evaluative Sciences (ICES)

### **Reported Levels of comparability**

Immigration

Age

Income

Education

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

As this indicator relies on self-reported data, the true rate might in fact be higher or lower. In addition, this survey excludes individuals living on Indian Reserves and on Crown Lands, institutional residents, full-time members of the Canadian Forces, and residents of certain remote regions, which will affect the representativeness of the sample and underestimation of the true rates. At the Canada level, the combined response rate was 65.6% (63% for Ontario) for the CCHS 2014.

### **Comments Summary**

When reporting percentage of prescription medication insurance by level of education, age is restricted to Ontarians aged 25 to 64. In total, 97,467 (33,319 in Ontario) of the selected units in the CCHS 2014 were

in-scope for the survey<sup>14</sup>. Out of these, 73,190 (24,388 in Ontario) households accepted to participate in the survey resulting in an overall household-level response rate of 75.1% (73.2% in Ontario). One individual was selected from each of these 73,190 (24,388 in Ontario) responding households, out of which a response was obtained for 63,964 individuals (21,001 in Ontario), resulting in an overall person-level response rate of 87.4% (86.1% in Ontario). At the Canada level, this yields a combined response rate of 65.6% (63% for Ontario) for the CCHS 2014. The sample for this indicator was 19,748.