

# Measuring Up 2018

## Technical Appendix

**Health Quality  
Ontario**

*Let's make our health system healthier*

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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. The technical appendix provides detailed specifications for each of the indicators presented in the report and in the technical supplement. It also includes general information on the indicator selection process, analytical methods, data sources and external review process. This technical appendix accompanies the *Measuring Up* 2018 report and the technical supplement.

## Indicator selection

*Measuring Up* is based on a set of indicators selected in partnership with health experts and health system partners, as well as patients and their families and caregivers. The report reflects the key priorities of patients and health care providers where performance merited presentation either because of trends over time, regional variation or equity considerations. It provides an overview of the quality of health care people in Ontario are receiving, painting a picture of what's working well and where there is room for improvement.

The set of indicators has been evolving since its inception and changes are made annually based on indicator relevance, data availability and data quality. The set is expected to continue to evolve in line with HQO's public reporting and system priorities to provide a focus set of indicator to assess the health system performance and guide quality improvement.

Each chapter of *Measuring Up* (and the accompanying technical specifications) represents an area of the health system, namely: Our Health, Primary Care, Mental Health and Addictions, Home Care, Hospital Care, Long-Term Care, Palliative Care, Transitions, and Health Spending.

Health Quality Ontario monitors a larger number of indicators than are included in the main report, to understand key trends and to highlight the most salient findings. This technical supplement provides additional data (regional, interprovincial, international and other stratifications) for the indicators included in *Measuring Up* 2018, as well as the results of additional indicators to support the overall understanding of each area of the health system.

## 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. For some indicators, we also note the provincial targets, along with the most recent performance of the corresponding indicator.

### Comparisons within Ontario

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

supplement the values are highlighted when the confidence interval of the region does not overlap with the confidence intervals of the Ontario value.

In addition, where data are available we present the indicator results at the 76 sub-regional levels and by different stratifications in Ontario; sex, age groups, income, education and immigration levels, as well as urban and rural settings. The report states a difference, increase/decrease or higher/lower result only when the 95% confidence intervals of the compared results do not overlap (i.e., when the differences in the results are statistically significant). In the technical data table the values are highlighted when the confidence intervals of the results do not overlap with the confidence intervals of the reference points (see the details of the reference points for each stratification in the “Read me” tab of the technical supplement).

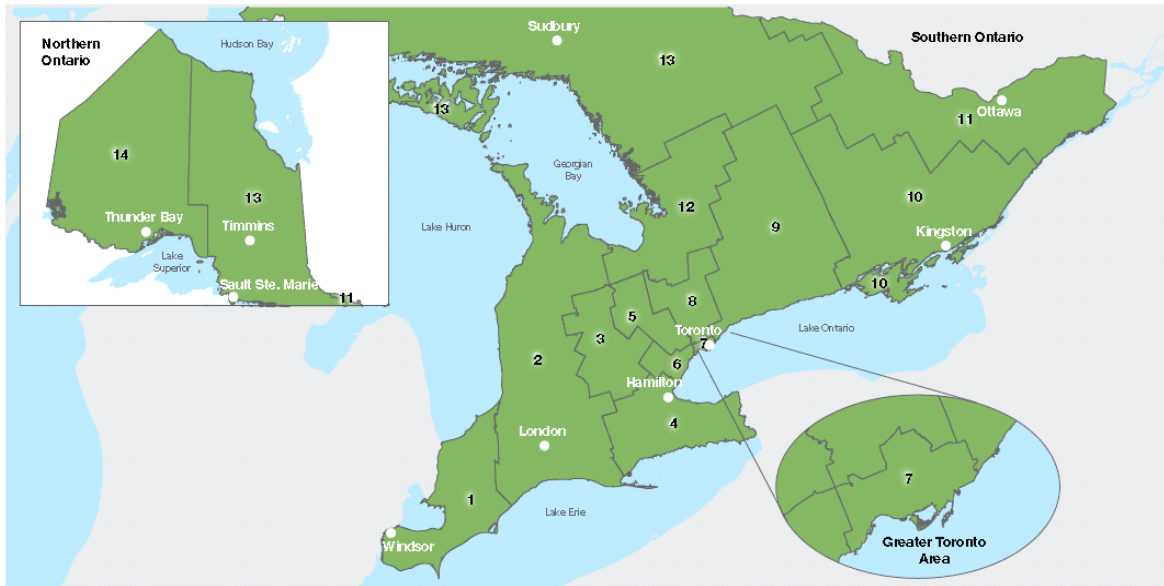
## How Ontario performs compared to others

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

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

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

Figure 1.1: Map of the geographic regions in Ontario



**Ontario LHINs**

- |                       |                                    |                |                         |
|-----------------------|------------------------------------|----------------|-------------------------|
| 1 Erie St. Clair      | 4 Hamilton Niagara Haldimand Brant | 8 Central      | 12 North Simcoe Muskoka |
| 2 South West          | 5 Central West                     | 9 Central East | 13 North East           |
| 3 Waterloo Wellington | 6 Mississauga Halton               | 10 South East  | 14 North West           |
|                       | 7 Toronto Central                  | 11 Champlain   |                         |

**Details of stratification**

Stratification	Definitions	Categories
Age groups	Age of a person (or the age range of groups) on the date (or period) relevant to the point of measurement. It is determined based on demographic information available in the existing administrative databases or information provided by the survey respondent.	Categories vary by indicator
Sex	Sex of a person - male or female - is determined based on demographic information available in the existing databases or information entered by the interviewer during the survey. In almost all cases, sex is collected as a binary male/female variable, which is not inclusive of intersex people. When sex is derived from administrative data, this is most often sex assigned at birth. However, note that people are able to change their sex designation with OHIP. Caution is also needed when interpreting sex	Male Female



	<p>data collected from surveys. “Sex” may be the gender the interviewer ascribes to the person based on name or appearance; it may be the person’s self-reported gender, or it may in fact be their sex.</p>	
Average neighbourhood income	<p>Average neighbourhood income (quintiles) is a proxy measure of personal or household income level, calculated by Statistics Canada when new census data become available. Average income estimates are first calculated for small geographic areas that have a population of 400–700 people. Based on these estimates, Ontario neighbourhoods are classified into five equal-sized groups, or quintiles, from poorest (Q1) to wealthiest (Q5). The postal code of a person’s place of residence is used to assign them to one of the small geographic areas and then into one of the income quintiles.</p>	<ul style="list-style-type: none"> <li>• Quintile 1 (lowest)</li> <li>• Quintile 2</li> <li>• Quintile 3</li> <li>• Quintile 4</li> <li>• Quintile 5 (highest)</li> </ul>
Household income	<p>Household income categories are defined based on household income information provided by survey respondents. Income is usually reported in categories or in quintiles. Income categories provide information on a household’s absolute income.</p> <p>Income quintiles are calculated using annual household income information provided by the survey respondents. It is calculated by Statistics Canada based on the value of the adjusted ratio of respondent’s total household income to the low income cut-off corresponding to their household and community size, which provides, for each respondent, a relative measure of their household income to the household incomes of all other respondents. Based on these values respondents are grouped into deciles (ten categories including approximately the same percentage of residents for each province). The deciles are combined to form the quintiles.</p>	<p>Health Care Experience Survey</p> <ul style="list-style-type: none"> <li>• Less than 20,000</li> <li>• Between 20,000 and 39,000</li> <li>• Between 40,000 and 59,000</li> <li>• Between 60,000 and 79,000</li> <li>• 80,000 and more</li> </ul> <p>Canadian Community Health Survey</p> <ul style="list-style-type: none"> <li>• Quintile 1 (lowest)</li> <li>• Quintile 2</li> <li>• Quintile 3</li> <li>• Quintile 4</li> <li>• Quintile 5 (highest)</li> </ul>

Material deprivation quintiles	Material deprivation quintiles from the Ontario Marginalization Index (ON-MARG) was used as a proxy measure for socioeconomic status. The ON-MARG was developed using 2001 and 2006 Canadian census data, so nearest-census data were used for all other years: 2001 data were applied to deaths between 1992 and 2003, and 2006 data for deaths 2004 –2015. Individuals were excluded from this analysis if they were missing material deprivation data from their ON-MARG record. Please note that the ON-MARG quintiles are based on the Ontario-wide distribution of material deprivation.	Material deprivation quintiles <ul style="list-style-type: none"> <li>• Quintile 1 (least deprived)</li> <li>• Quintile 2</li> <li>• Quintile 3</li> <li>• Quintile 4</li> <li>• Quintile 5 (most deprived)</li> </ul>
Level of educational attainment	The level of educational attainment is assigned based on the education information provided by survey respondents. The variable indicates the highest level of education acquired by the respondent. This analysis is available only for survey-based indicators and includes respondents aged 25 and older.	Health Care Experience Survey <ul style="list-style-type: none"> <li>• Less than high school</li> <li>• High school</li> <li>• College/university</li> <li>• Postgraduate/professional degree</li> </ul> Canadian Community Health Survey <ul style="list-style-type: none"> <li>• Less than secondary school graduation</li> <li>• Secondary school graduation, no post-secondary education</li> <li>• Post-secondary certificate diploma or university degree</li> </ul>
Rural/urban geography	Postal codes of the patient's residence or location of the service/hospital are used to assign to rural or urban residence. A few different methods are used in the report to assign the urban/rural residence: <ul style="list-style-type: none"> <li>• Rural residence is a measure of community size and is assigned based on the postal code of a person's residence. Communities with a population of less than 10,000 people are defined as rural; larger communities are defined as urban.</li> </ul>	Urban Rural Canadian Community Health Survey <ul style="list-style-type: none"> <li>• Population centre</li> <li>• Rural area</li> </ul> RIO score: <ul style="list-style-type: none"> <li>• 0-9</li> <li>• 10-39</li> <li>• 40 and higher</li> </ul> Other (population centre method): <ul style="list-style-type: none"> <li>• Urban: core population of 10,000 or more and 50+% of the population commute to a CMA/CA.</li> </ul>

	<ul style="list-style-type: none"> <li>Rurality Index for Ontario (RIO) score that is calculated using: community population and density; time to basic healthcare; and time to tertiary care. The RIO is a continuous scale, and three groups are used in Measuring Up with rural regions defined as having a RIO score of <math>\geq 40</math>.</li> <li>Rural or urban residence assignment which takes into account population size, distance and commuting flow between rural and small towns and larger centres.</li> </ul>	<ul style="list-style-type: none"> <li>Rural: core population of <math>&lt; 10,000</math> and 30-49% of the population commute to an urban area</li> <li>Rural-Remote: Areas with a core population of <math>&lt; 10,000</math> and 5-29% of the population commute to an urban area</li> <li>Rural-Very Remote: Areas with a core population of <math>&lt; 10,000</math> and 0-4% of the population commute to an urban area.</li> </ul>
Immigration status	<p>Immigration status is determined based on information provided by survey respondents. This variable indicates the length of time in years since the respondent became a landed immigrants.</p> <p>For some indicators (i.e. cancer screening indicators) the immigration stratification shows neighbourhood proportion of immigrants. This indicator divides dissemination areas into three categories according to the percentage of immigrants: low immigrant (<math>\leq 27\%</math> immigrant population), moderate immigrant (27.1-51.8% immigrant population), and high immigrant (<math>\geq 51.9\%</math> immigrant population). This is based on the immigrant (foreign-born) tercile (IMMTER) variable which divides the immigrant (and non-permanent resident) population (from the 2006 census) into three approximately equal parts.</p>	<p>Health Care Experience Survey</p> <ul style="list-style-type: none"> <li>Canada born</li> <li>Established immigrant (10+years)</li> <li>Recent immigrant (<math>&lt; 10</math> years)</li> </ul> <p>Canadian Community Health Survey</p> <ul style="list-style-type: none"> <li>Non-immigrant</li> <li>Immigrant: 10 or more years</li> <li>Immigrant: 0 to 9 years</li> </ul>
Geographic regions	<p>The 14 geographic regions are geographic areas where regional health authorities are responsible for administering public health care services.</p> <p>Individual postal codes were first mapped to census geography and then to a region.</p>	<ol style="list-style-type: none"> <li>Erie St. Clair</li> <li>South West</li> <li>Waterloo Wellington</li> <li>Hamilton-Niagara Haldimand Brant</li> <li>Central West</li> <li>Mississauga Halton</li> <li>Toronto Central</li> <li>Central</li> </ol>

		9. Central East 10. South East 11. Champlain 12. North Simcoe Muskoka 13. North East 14. North West
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## Adjustments (for age, sex and risk)

Where appropriate, indicators are age-adjusted or age- and sex-adjusted to a common population, for example the 2011 Canadian Census population, which is a commonly used standard population. In some cases, indicators are risk-adjusted for other factors (such as comorbidity) 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 technical specifications.

## Data providers and Data Sources

HQO does not hold data that include 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:

- Better Outcomes Registry & Network (BORN) Information System
- Canadian Institute for Health Information (CIHI)
- Cancer Care Ontario (CCO)
- Health Shared Services Ontario (HSSO) (formally known as the Ontario Association of Community Care Access Centres)
- Institute for Clinical Evaluative Sciences (ICES)
- Ministry of Health and Long-Term Care (MOHLTC)
- Ontario Hospital Association (OHA)
- Organisation for Economic Co-operation and Development (OECD)
- Population Health Analytics Lab
- Public Health Ontario (PHO)
- Statistics Canada
- The Commonwealth Fund

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. These data sources may be available through more than one data provider.

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

The Better Outcomes Registry & Network (BORN) is Ontario's prescribed maternal, newborn and child Registry. BORN was established in 2009 to collect, interpret, share and rigorously protect critical data about pregnancy, birth and childhood for all babies born in the province of Ontario in order to facilitate and improve health care. The BORN Information System (BIS) enables the collection of, and access to, clinical data from fertility clinics, prenatal and newborn screening labs, specialized antenatal clinics, hospitals that provide obstetrical services, birth centres, midwifery practice groups, prenatal and newborn screening follow-up clinics, primary care settings, and more. BORN is a trusted source of accurate and timely data, reports, and audit & feedback tools that support organizations and health care providers to provide the best possible care to moms, newborns and children across Ontario.

## Canadian Community Health Survey (CCHS)

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

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

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

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

## Client and Caregiver Experience Evaluation (CCEE) Survey – National Research Corporation Health (NRC Health) – Health Shared Services Ontario (HSSO)

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

## Client Profile Database (CPRO)

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

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

The 2016 Commonwealth Fund International Health Policy Survey of the General Public reflects the perceptions of a random sample of the general public (aged 18 and older) in 11 countries: Australia, Canada, France, Germany, Netherlands, New Zealand, Norway, Sweden, Switzerland, United Kingdom and United States. In *Measuring Up 2018* we compare Ontario data to the 2016 CMWF IHP Survey results where possible. Participants were interviewed by telephone (land line or cellphone) between March 1 and June 22, 2016. In Canada, 4,547 respondents were surveyed; the Ontario sample was 1500 respondents. It was

oversampled to be able to calculate provincial estimates from the survey. HQO partners with the Commonwealth Fund to support the survey and support oversampling of the Ontario population so that the survey results can be used to reliably compare Ontario with other provinces and countries.

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

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

## **Continuing Care Reporting System (CCRS)**

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

## **Corporate Provider Database**

The Corporate Provider Database (CPDB) is a repository of healthcare provider data. The CPDB contains information on the providers' reported specialties and postal code of practice. The Ministry of Health and Long-Term Care maintains the CPDB, with the College of Physicians and Surgeons of Ontario providing regular updates on provider credentials.

## **Digital Health Immunization Repository (DHIR)**

The Digital Health Immunization Repository (DHIR) is a centralized repository of standardized electronic immunization data and its goal is to improve health outcomes by making comprehensive immunization information accessible in real time to support health care providers in clinical practice and to engage the public as active partners in managing their health. The DHIR primarily supports data sharing for public health purposes; Ontario's 36 public health units access the repository through Panorama. However, the public is also able to access and update their immunization records through a web-based tool called Immunization Connect Ontario/Digital Yellow Card (ICON/DYC)

## **Discharge Abstract Database (DAD)**

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

## Health Care Experience Survey (HCES)

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)

The HCD is a clinical, patient-centred database that captures all home care services provided or coordinated by Ontario's health regions, including government-funded home and community services. The HCD is managed by Health Shared Services Ontario (HSSO). It includes patient, intake, assessment, and admission/discharge information as well as information on home care wait times. 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)

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

## Laboratory Reporting Tool (LRT)

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

## National Ambulatory Care Reporting System (NACRS)

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

## National Health Expenditure Database (NHEX)

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).

## **Narcotics Monitoring System (NMS)**

The Narcotics Monitoring System collects dispensing data on opioids, controlled substances, and other monitored drugs from pharmacies and other dispensaries across Ontario. The information collected in the NMS includes prescriber identification, patient identification, pharmacy and pharmacist identification, date the drug was dispensed, drug identification number and the amount of drug dispensed. The NMS does not include information about monitored drugs dispensed to an in-patient of a public hospital or to prisoners or inmates (i.e., prescriptions written for people confined to correctional institutions, penitentiaries, prisons or youth custody facilities). The Ministry of Health and Long-Term Care maintains the NMS, which began collecting data in April 2012.

## **OECD Health Statistics**

The OECD is a unique forum where governments work together to address the economic, social and environmental challenges of globalisation. The OECD is also at the forefront of efforts to understand and to help governments respond to new developments and concerns, such as corporate governance, the information economy and the challenges of an ageing population. The Organisation provides a setting where governments can compare policy experiences, seek answers to common problems, identify good practice and work to coordinate domestic and international policies. OECD Publishing disseminates widely the results of the Organisation's statistics gathering and research on economic, social and environmental issues, as well as the conventions, guidelines and standards agreed by its members.

## **Patient Experience Survey - National Research Corporation Health (NRC Health)**

NRC Health Patient Experience Surveys have been implemented in many Ontario hospitals since 2002. Surveys are conducted to assess experience with emergency department care. The Ontario Hospital Association (OHA) works closely with NRC Health to report and improve patient and family experience with their care at emergency department.

## **Ontario Diabetes Database (ODD) – Institute for Clinical Evaluative Sciences (ICES)**

The ODD is an ICES derived cohort that employs a validated algorithm to identify people with diabetes using data on hospitalizations and physician visits. Hospital discharge abstracts data, 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) Claims Database**

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)**

The OMHRS, housed at CIHI, collects information about individuals admitted to designated adult mental health beds in Ontario. OMHRS includes information on admissions and discharges as well as clinical information. Clinical data are collected using the Resident Assessment Instrument for Mental Health (RAI-MH), a standardized assessment instrument for inpatient mental health care. It includes information about mental and physical health, social support and service use. Data are collected on clients from participating hospitals in Ontario at admission, discharge and every three months for patients with extended stays. Data are available from October 1, 2005 onward. The number of active OMHRS sites has varied between 65 and 74 since the start of OMHRS in 2005–2006. In the early years of OMHRS, between 90% and 98% of active sites submitted at least some data every quarter. This rate has increased to 100% for all 4 quarters of 2014–2015. As of May 15 2017, there were 84 participating facilities that have submitted data at least once to the OMHRS database since the implementation of OMHRS in October 2005.

## **Ontario Marginalization Index (ON-Marg)**

The Ontario Marginalization Index (ON-MARG) is a census-derived index and measures levels of marginalization across Ontario at the dissemination area level. It was developed using 2001 and 2006 Canadian census data, so nearest-census data were used for all other years: 2001 data were applied to deaths between 1992 and 2003, and 2006 data for deaths 2004–2015. The material deprivation quintiles were used, which describe the likelihood that an individual is unable to afford or attain necessary good and services.

## **Ontario Opioid-Related Death Database**

The Ontario Opioid-Related Death Database (OORDD) is a database maintained by the Ontario Drug Policy Research Network that contains detailed information from the Office of the Chief Coroner for Ontario (OCCO) on all opioid-related deaths occurring in Ontario between January 1991 and April 2017. In Ontario, all deaths that are sudden and unexpected, or unnatural are investigated by the OCCO to ascertain cause and manner of death. Opioid-related deaths were defined by the coroner as those deaths in which post-mortem toxicological analyses revealed opioid concentrations sufficiently high to cause death, or if a combination of drugs (including at least one opioid at clinically significant levels) contributed to death. This database has been abstracted from the OCCO at several points in time with funding from the Canadian Institutes for Health Research (CIHR). In May of 2017 this database was replaced with an in-house electronic data collection system implemented by the OCCO.

## **Registered Persons Data Base (RPDB)**

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. At Institute for Clinical Evaluative Sciences (ICES), data from the RPDB are enhanced with available information through other administrative data sources; 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)

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.

## Vital Statistics, Birth Database

This is an administrative survey that collects demographic information annually from all provincial and territorial vital statistics registries on all live births in Canada

## Vital Statistics, Death Database

This is an administrative survey that collects demographic and medical (cause of death) information annually from all provincial and territorial vital statistics registries on all deaths in Canada.

## Wait Time Information System (WTIS)

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

## External review

We obtained external peer reviews of each chapter in *Measuring Up*. Subject matter experts, stakeholders and data providers were sent preliminary drafts of the chapters, which included the full set of indicators considered for the chapter and findings. 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.

## 2. Our Health

### Life expectancy at birth

#### Description

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

#### HQO reporting tool/product

Public reporting

### DEFINITION AND SOURCE INFORMATION

#### Unit of Measurement

Years

#### Calculation Methods

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

#### Numerator

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

#### Denominator

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

#### Exclusions:

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

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

None

#### Data Source

Vital Statistics, Birth and Death Databases

#### Data provided to HQO by

Statistics Canada

#### Reported Levels of comparability

International comparison, Time, Region, Sex

### 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

1 Life expectancy and other elements of the life table, Canada, all provinces except Prince Edward Island, three-year average, Statistic Canada Table 13-10-0114-01 2 Life expectancy and other elements of the life table, Prince Edward Island and the territories, three-year average, Statistic Canada Table 13-10-0140-01 3. Life expectancy, at birth and at age 65, by sex, three-year average, Canada, provinces, territories, health regions and peer groups, Statistic Canada Table: 13-10-0063-01 (formerly CANSIM 102-4308) 4. For international comparisons, data is provided from OECD (2018), Life expectancy at birth (indicator). doi: 10.1787/27e0fc9d-en (Accessed on 22 March 2018)

## Potential years of life lost prematurely due to all causes per 100,000 people

### 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 population

#### Numerator

- The sum of differences between age 75 and age of death

#### Denominator

Total mid-year population younger than age 75

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

Age-standardized using the 2011 Canadian population

#### Data Source

Vital Statistics, Birth and Death Databases

#### Data provided to HQO by

Statistics Canada

#### Reported Levels of comparability

Province, Time, Region, Sex

### OTHER RELEVANT INFORMATION

#### Caveats and Limitations

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

#### Comments Summary

Potential years of life lost prematurely is sourced from: (1) Statistics Canada, Table: 13-10-0743-01 (formerly CANSIM 102-4315), Premature and potentially avoidable mortality, three-year average, Canada, provinces, territories, health regions and peer groups. (2) Statistics Canada, Table 13-10-0744-01 (formerly CANSIM 102-4316), Premature and potentially avoidable mortality, Canada, provinces and territories.

# Percentage of people aged 12 and older who self-reported daily or occasionally cigarettes smoking

## Description

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

## HQO reporting tool/product

Public reporting

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

Numerator divided by denominator times 100

### Numerator

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

Inclusions:

1. If variable SMK\_005 equals 1, 2,

Question Text: At the present time, do you smoke cigarettes every day, occasionally or not at all?

1 = Daily

2 = Occasionally

3 = Not at all

7 = Don't know

8 = Refusal

9 = Don't know

### Denominator

The weighted number of respondents aged 12 or older that responded to the survey question.

Exclusions:

Don't know, not stated and refusal are not included in the analysis.

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

Direct age-adjusted using 2011 Canada population

### Data Source

Canadian Community Health Survey (CCHS)

### Data provided to HQO by

Statistics Canada

### Reported Levels of comparability

Province, Time, Immigration, Age, Income, Education, Rurality, Region, Sex

## OTHER RELEVANT INFORMATION

### Caveats and Limitations

Because of the significant changes to the survey methodology, Statistics Canada does not recommend making comparisons of the redesigned 2015 cycle of the CCHS with past cycles. As this indicator relies on self-reported data, the true rate might in fact be higher or lower. In addition, the survey coverage excludes: persons living on reserves and other Aboriginal settlements in the provinces; full-time members of the Canadian Forces; the institutionalized population, children aged 12-17 that are living in foster care, and persons living in

the Quebec health regions of Région du Nunavik and Région des Terres-Cries-de-la-Baie-James. Altogether, these exclusions represent less than 3% of the Canadian population aged 12 and over.

### **Comments Summary**

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

## Percentage of people aged 18 and older who were obese based on adjusted self-reported weight and height

### Description

This indicator measures the percentage of people who are classified as being obese based on adjusted self-reported weight and height. Obesity is measured using body mass index (BMI), based on adjusted 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

Weighted number of respondents aged 18 and older with an adjusted BMI > 30.

Inclusions:

If HWTDVCOR equals 4, 5, or 6

Codes for HWTDVCOR (BMI adjusted):

1 = Underweight: Adjusted BMI < 18.50 = underweight

2 = Normal weight: 18.50 <= Adjusted BMI < 25 = normal

3 = Overweight: 25<= Adjusted BMI < 30 = overweight

4 = Obese – class 1: 30 <= Adjusted BMI < 35 = obese (class I)

5 = Obese – class 2: 35 <= Adjusted BMI < 40 = obese (class II)

6 = Obese – class 3: 40 <= Adjusted BMI = obese (class III)

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

#### Denominator

Weighted number of respondents aged 18 or older that responded to survey question.

Exclusions:

Don't know, not stated and refusal are not included in the analysis.

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

Direct age -adjusted using 2011 Canada population

#### Data Source

Canadian Community Health Survey (CCHS)

#### Data provided to HQO by

Statistics Canada

#### Reported Levels of comparability

Province, Time, Immigration, Age, Income, Education, Rurality, Region, Sex



## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

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

### **Comments Summary**

BMI is not calculated for pregnant women. Although calculation of BMI is not recommended for lactating women, the index provided here is calculated for women who report that they are breastfeeding. A systematic review of the literature concluded that the use of self-reported data among adults underestimates weight and overestimates height, resulting in lower estimates of obesity than those obtained from measured data. Using data from the 2005 Canadian Community Health Survey (CCHS) subsample, where both measured and self-reported values were collected, correction equations have been developed (Connor Gorber et al. 2008). These correction equations have been successfully applied to both 2005 and 2008 self-reported CCHS data to produce more accurate estimates of obesity (Connor Gorber et al. 2008; Shields et al. 2011). 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. A major redesign project that was completed and implemented for the 2015 cycle. The objectives of the redesign were to review the sampling methodology, adopt a new sample frame, modernize the content and review the target population. As a result of the redesign, the 2015 CCHS has a new collection strategy, is drawing the sample from two different frames and has undergone major content revisions. With all these factors taken together, caution should be taken when comparing data from previous cycles to data released for the 2015 cycle onwards. Education stratification analysis is restricted to 25 and older. Proportions and ratios are obtained by summing the final weights of records having the characteristic of the numerator and the denominator, and then dividing the first estimate by the second.

# Percentage of people aged 18 and older who reported being physically inactive

## Description

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

## HQO reporting tool/product

Public reporting

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

Numerator divided by denominator times 100

### Numerator

Total weighted number of respondents categorized as "inactive".

Inclusions:

The variable used is PAADVAC2.

When PAADVAC2 is equal to 4 (Sedentary) considered the respondent inactive.

- 1. PAADVMVA => 150 Active
- 2. 75 <= PAADVMVA < 150 Moderately active
- 3. 0 < PAADVMVA < 75 Somewhat active
- 4. PAADVMVA = 0 Sedentary

PAADVAC2 -This derived variable represents an alternate classification of physical activity for adults, based on the number of minutes of moderate to vigorous activity done in a week. It breaks down those who were not above the threshold of 150 minutes per week into subcategories of their activity level. Derived based on another variable PAADVMVA

• PAADVMVA is based on PAA\_005, PAA\_015, PAA\_020, PAA\_030, PAA\_035, PAA\_045, PAA\_050, PAA\_060, PAA\_065, PAA\_075, PAA\_080

This derived variable represents the total number of minutes a respondent engaged in active transportation and moderate to vigorous recreational and other physical activities. This derived variable indicates whether a respondent is physically active according to the Canadian Physical Activity Guidelines (CPAG).

Physically active is defined by the Canadian Physical Activity Guidelines as having at least 150 minutes of moderate- to vigorous-intensity aerobic physical activity per week, in bouts of 10 minutes or more.

### Denominator

Total weighted number of respondents aged 18 and older that responded to the survey question.

Exclusions:

Don't know, not stated and refusal are not included in the analysis.

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

Direct age-adjusted using 2011 Canada population

### Data Source

Canadian Community Health Survey (CCHS)

### Data provided to HQO by

Statistics Canada

### **Reported Levels of comparability**

Province, Time, Immigration, Age, Income, Education, Rurality, Region, Sex

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

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

### **Comments Summary**

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

## Percentage of people aged 12 and older who were heavy drinkers

### Description

This indicator measures the percentage of people aged 12 and older who were heavy drinkers. 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

The weighted number of respondents who were heavy drinkers. For males, heavy drinking refers to having consumed five or more drinks, per occasion, at least once a month during the past year. For females, heavy drinking refers to having consumed four or more drinks, per occasion, at least once a month during the past year.

Inclusions:

If variable ALC\_020 equals 3, 4, 5 and 6.

Question Text: How often in the past 12 months have you had [5/4] or more drinks on one occasion?

Codes for ALC\_020 variable:

- 1 = Never
- 2 = Less than once a month
- 3 = Once a month
- 4 = 2 to 3 times a month
- 5 = Once a week
- 6 = More than once a week
- 8 = Refusal
- 9 = Don't know

Based on the Canadian Community Health Survey (CCHS) survey, a 'drink' refers to:

- a bottle or small can of beer, cider or cooler with 5% alcohol content, or a small draft;
- a glass of wine with 12% alcohol content;
- a glass or cocktail containing 1 oz. of a spirit with 40% alcohol content.

#### Denominator

The weighted number of respondents aged 12 or older that responded to the two survey questions. If respondents answered ALC\_010 as not having had an alcoholic drink in the last year, then they were not asked ALC\_020, and were marked as a "valid skip" for ALC\_020. The denominator includes the 'valid skip' for ALC\_20.

Inclusions:

If variable ALC\_010 equals 1 and 2.

Question Text: During the past 12 months, that is, from [CURRENTDATE-1] to yesterday, have you had a drink of beer, wine, liquor or any other alcoholic beverage?

Codes for ALC\_010 variable:

- 1 = Yes
- 2 = No
- 8 = Refusal
- 9 = Don't know

Exclusions:

Don't know, not stated and refusal are not included in the analysis.

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

Direct age-adjusted using 2011 Canada population

**Data Source**

Canadian Community Health Survey (CCHS)

**Data provided to HQO by**

Statistics Canada

**Reported Levels of comparability**

Province, Time, Immigration, Age, Income, Education, Rurality, Region, Sex

**OTHER RELEVANT INFORMATION**

**Caveats and Limitations**

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

**Comments Summary**

None

## Opioid-poisoning deaths

### Description

This indicator measures the rate of deaths for opioid poisonings, per 100,000 people. It includes all deaths where opioid poisoning was considered as contributing to the cause of death. 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 times 100,000

#### Numerator

Number of deaths from opioid poisonings

Inclusions:

- All deaths where opioid poisoning was considered as contributing to the cause of death

#### Denominator

Total population

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

None

#### Data Source

Office of the Chief Coroner for Ontario, Ontario Opioid-Related Death Database  
Population Estimates, 2003–2016, Ontario Ministry of Health and Long-Term Care, IntelliHealth ONTARIO  
Population Projections, 2017–2018, Ontario Ministry of Health and Long-Term Care, IntelliHealth ONTARIO,

#### Data provided to HQO by

Public Health Ontario (PHO)

#### Reported Levels of comparability

Time, Age, Region, Sex

### OTHER RELEVANT INFORMATION

#### Caveats and Limitations

Data for Ontario residents who die outside of the province are not included

#### Comments Summary

None

## Emergency department visits for opioid poisonings

### Description

This indicator measures the rate of emergency department (ED) visits for opioid poisonings, per 100,000 people. It includes unscheduled ED visits for opioid poisoning. 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 times 100,000

### Numerator

Number of emergency department (ED) visits for opioid poisonings

Inclusions:

- Includes unscheduled ED visits for opioid poisoning (all diagnosis types)
- Includes ICD-10-CA codes T40.0 (poisoning by opium), T40.1 (poisoning by heroin), T40.2 (poisoning by other opioids), T40.3 (poisoning by methadone), T40.4 (poisoning by othersynthetic narcotics), T40.6 (poisoning by other and unspecified narcotics)

Exclusions:

- Cases with a query/suspected diagnosis (diagnosis prefix = Q)

### Denominator

Total population

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

None

### Data Source

National Ambulatory Care Reporting System (NACRS)

Population Estimates, 2003–2016, Ontario Ministry of Health and Long-Term Care, IntelliHealth ONTARIO

Population Projections, 2017–2018, Ontario Ministry of Health and Long-Term Care, IntelliHealth ONTARIO,

### Data provided to HQO by

Public Health Ontario (PHO)

### Reported Levels of comparability

Time, Age, Region, Sex

## OTHER RELEVANT INFORMATION

### Caveats and Limitations

None

### Comments Summary

Limitations: (1) Data from ED visits only capture those who visit the ED and may not reflect the total burden in the population (2) Data for Ontario residents who visit an ED outside of the province are not included.

## Hospitalizations for opioid poisonings

### Description

This indicator measures the rate of hospitalizations for opioid poisonings, per 100,000 people. It includes hospitalizations for opioid poisoning (all diagnosis type). 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 times 100,000

### Numerator

Number of hospitalizations for opioid poisonings

Inclusions:

- Includes hospitalizations for opioid poisoning (all diagnosis types)
- Includes ICD-10-CA codes T40.0 (poisoning by opium), T40.1 (poisoning by heroin), T40.2 (poisoning by other opioids), T40.3 (poisoning by methadone), T40.4 (poisoning by other synthetic narcotics), T40.6 (poisoning by other and unspecified narcotics)

Exclusions:

- Cases with a query/suspected diagnosis (diagnosis prefix = Q)

### Denominator

Total population

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

None

### Data Source

Discharge Abstract Database (DAD)

Population Estimates, 2003–2016, Ontario Ministry of Health and Long-Term Care, IntelliHealth ONTARIO  
Population Projections, 2017–2018, Ontario Ministry of Health and Long-Term Care, IntelliHealth ONTARIO,

### Data provided to HQO by

Public Health Ontario (PHO)

### Reported Levels of comparability

Time, Age, Region, Sex

## OTHER RELEVANT INFORMATION

### Caveats and Limitations

- Data from hospitalizations only capture those who are hospitalized and may not reflect the total burden in the population
- Data for Ontario residents who visit a hospital outside of the province are not included

### Comments Summary

None



## New starts of opioids prescriptions filled in Ontario

### Description

This indicator measures the rate of prescriptions for opioids filled for people who have not filled a prescription for opioids in the past six months and who are not identified as receiving palliative care services in the year prior, per 10,000 population.

### HQO reporting tool/product

Public reporting

### DEFINITION AND SOURCE INFORMATION

#### Unit of Measurement

Rate

#### Calculation Methods

Numerator divided by denominator times 10,000

#### Numerator

Number of opioid prescriptions filled in the reporting period that are considered “new starts”

For a person to be considered as newly started on an opioid, they had to have not been prescribed an opioid to manage pain in the six months prior to the prescription.

Exclusions:

1. Excludes people who received a palliative care service in the year prior;
2. Excludes prescriptions for opioids for cough, antidiarrheals and opioid agonist therapy

Drug type:

For all new starts, the type of drug prescribed was identified using the DIN (Drug identification number) in the NMS. The opioid types included were:

- Codeine
- Codeine combinations
- Fentanyl patches and tablets
- Hydromorphone
- Meperidine
- Morphine
- Oxycodone
- Oxycodone compounds
- Tramadol
- Methadone for pain
- Other

#### Denominator

The Ontario population for the year

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

None

#### Data Source

Narcotics Monitoring System (NMS)

#### Data provided to HQO by

Institute for Clinical Evaluative Sciences (ICES)

#### Reported Levels of comparability

Time, Region

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

None

### **Comments Summary**

We used Ontario population estimates for 2017 from CANSIM table 051-0001, Statistics Canada and LHIN population projections for 2017 from the Ministry of Finance(<https://www.ontario.ca/data/population-projections>)

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

## Description

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

## HQO reporting tool/product

Public reporting

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

Numerator divided by denominator times 100

### Numerator

Weighted number of respondents who rated their health as:

- Excellent/Very good if GEN\_005 equals 1 and 2
- Good if GEN\_005 equals 3;
- Fair/Poor if GEN\_005 equals 4 and 5

Codes for GEN\_005 variable:

- 1 = Excellent
- 2 = Very good
- 3 = Good
- 4 = Fair
- 5 = Poor
- 8 = Refusal
- 9 = Don't know

### Denominator

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

Exclusions:

Don't know, not stated and refusal are not included in the analysis.

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

Direct age -adjusted using 2011 Canada population 12 and older

### Data Source

Canadian Community Health Survey (CCHS)

### Data provided to HQO by

Statistics Canada

### Reported Levels of comparability

Province, Time, Immigration, Age, Income, Education, Rurality, Region, Sex

## OTHER RELEVANT INFORMATION

### Caveats and Limitations

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

### **Comments Summary**

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

# Percentage of 1-dose quadrivalent meningococcal conjugate vaccine coverage among 12-year-olds

## Description

This indicator provides an estimate of the percentage of 12-year-olds who have received one valid dose of the quadrivalent meningococcal conjugate vaccine (MCV4) as part of Ontario's school-based vaccination program delivered in grade 7, at the conclusion of the school year (August 31st). Valid dose refers to one dose of MCV4 administered within five years prior to August 31, 2017 and administered on the same day or at least 168 days after any previous meningococcal polysaccharide dose. For the 2016-17 school year, valid MCV4 doses must be administered on or after September 1, 2012.

A higher percentage is better.

## HQO reporting tool/product

Public reporting

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

Numerator divided by the denominator times 100

### Numerator

The number of students who have received one valid dose of MCV4-containing vaccine by August 31, 2017 for the 2016-17 school year.

### Denominator

The number of 12-year-old students with an active client record in the Digital Health Immunization Repository (DHIR) and with at least one school record during the 2016-17 school year. The 12-year-old birth cohort is defined as those students in DHIR who have turned 12 years of age by December 31, 2016 .

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

NA

### Data Source

MOHLTC, Digital Health Immunization Repository

### Data provided to HQO by

Public Health Ontario (PHO)

### Reported Levels of comparability

Public health units, Public health regions, Province, Time

## OTHER RELEVANT INFORMATION

### Caveats and Limitations

Immunization coverage may be under-estimated if immunizations received by Ontario students are not reported to Ontario public health units for subsequent data capture within the DHIR. However, most doses of this vaccine program, in the age group assessed, are delivered by public health units and are directly entered into the DHIR.

### Comments Summary

Public health unit and region-specific estimates can be compared across the 2013-14 to 2016-17 school years. Due to the change in the immunization information system (from IRIS to Panorama) and the change in

methodology used to assess immunization coverage starting in the 2013-14 school year, coverage estimates prior to the 2013-14 school year cannot be directly compared to assessments of immunization coverage. Inter-provincial comparisons are possible, where immunization coverage is publicly-reported, up-to-date coverage methodology is used and the MCV4 product is also used. International comparisons are limited by variations in the IMD immunization strategy (target age group, and vaccine product used).

## Percentage of 2- dose measles coverage among 7-year-olds, in Ontario, school year

### Description

This indicator measures the percentage of 7-year-olds who have received two valid doses of measles-containing vaccine or have documented evidence of immunity against measles at the conclusion of the school year (August 31st). Valid doses refer to doses of measles-containing vaccine that were given in accordance with the following criteria:

First valid dose administered on or after the first birthday and received on the same day or at least 28 days after any preceding live virus vaccine. Second valid dose administered at least 28 days after any preceding measles-containing vaccine (or any other live virus vaccine).

A higher percentage is better.

### HQO reporting tool/product

Public reporting

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

Numerator divided by the denominator times 100

### Numerator

The number of students who have received two valid doses of measles-containing vaccine or have a documented exemption on the basis of evidence of immunity against measles by August 31, 2017 for the 2016-17 school year.

### Denominator

The number of 7-year-old students with an active client record in the Digital Health Immunization Repository (DHIR) and with at least one school record during the 2016-17 school year. The 7-year-old birth cohort is defined as those students in DHIR who have turned 7 years of age by December 31, 2016.

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

NA

### Data Source

MOHLTC, Digital Health Immunization Repository

### Data provided to HQO by

Public Health Ontario (PHO)

### Reported Levels of comparability

Public health units, Public health regions, Province, Time

## OTHER RELEVANT INFORMATION

### Caveats and Limitations

Immunization coverage may be under-estimated if immunizations received by Ontario students are not reported to Ontario public health units for subsequent data capture within the DHIR.

### Comments Summary

Public health unit and region -specific estimates can be compared across the 2013-14 to 2016-17 school years. Due to the change in the immunization information system (from IRIS to Panorama) and the change in methodology used to assess immunization coverage starting in the 2013-14 school year, coverage estimates prior to the 2013-14 school year cannot be directly compared to assessments of immunization coverage. Inter-provincial comparisons are possible, where immunization coverage is publicly-reported and up -to-date coverage methodology is used. International comparisons are also possible, although the methodology for coverage assessment (i.e. survey, registry, administrative billing data) will vary.



## Adult premature mortality by material deprivation quintile

### Description

This indicator measures the premature mortality rates of people aged 18 to 74 (deaths per 1,000 people), in Ontario, by material deprivation quintile. Premature mortality is defined as deaths before 75 years of age. The material deprivation quintiles are derived from the Ontario Marginalization Index (ON-MARG) and describe the likelihood that an individual is unable to afford or attain essential goods and services. A lower rate is better.

### HQO reporting tool/product

Public reporting

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Death per 1,000 people

### Calculation Methods

This indicator is calculated as: number of premature deaths (numerator) divided by the population at risk of dying prematurely (denominator) and multiplying that ratio by 1,000 population

### Numerator

Number of deaths between age 18 to 74, regardless of cause of death, stratified by material deprivation quintiles.

The material deprivation scores is one dimension derived from the Ontario Marginalization Index (ON-MARG) and describe the likelihood that an individual is unable to afford or attain essential goods and services. The material deprivation scores are assigned to individuals based on the dissemination area in which they live, using a number of census indicators such as education, income, receipt of government transfer payments and unemployment for that dissemination area.

Premature mortality rates are reported as deaths per 1000 for both annual and era rates (2008 to 2015).

### Denominator

Number of Ontario residents age 18 to 74.

Please note that for the era rates, the population denominator year is the median year of 2008 to 2015, which is 2012.

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

None

### Data Source

Ontario Marginalization Index (ON-Marg), Vital Statistics, Birth and Death Databases, Registered Persons Database (RPDB)

### Data provided to HQO by

Population Health Analytics Lab

### Reported Levels of comparability

Time, Region

## OTHER RELEVANT INFORMATION

### Caveats and Limitations

None

### Comments Summary

Material deprivation quintiles from the Ontario Marginalization Index (ON-MARG) was used as a proxy measure for socioeconomic status. The ON-MARG was developed using 2001 and 2006 Canadian census data, so nearest-census data were used for all other years: 2001 data were applied to deaths between 1992 and 2003, and 2006 data for deaths 004 –2015. Individuals were excluded from this analysis if they were missing material deprivation data from their ON-MARG record. Please note that the ON-MARG quintiles are based on the Ontario-wide distribution of material deprivation.

## 3. Transitions in Care

### Alternate Level of Care Rate

#### Description

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

#### HQO reporting tool/product

Public reporting, Quality Improvement Plans (QIPs)

#### DEFINITION AND SOURCE INFORMATION

#### Unit of Measurement

Rate per 100 inpatient days

#### Calculation Methods

This indicator is calculated as the numerator divided by the denominator times 100

Note that only those facilities (acute & post-acute) submitting both alternate level of care (ALC) data (to the Wait Time Information System (WTIS)) and Bed Census Summary (BCS) data (through the Health Database Web Portal) are included in the 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

The total number of inpatient days designated as alternate level of care (ALC) in a given time period (i.e., monthly, quarterly, yearly). Inpatient service type is identified in the Wait Time Information System (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 for that period 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 Bed Census Summary (BCS))

#### Denominator

The total number of inpatient days in a given time period (i.e., monthly, quarterly, 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 and 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:

1. 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**

Region, Time

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

The alternate level of care (ALC) rate indicator excludes facilities that are currently not reporting ALC data to the Wait Time Information System (WTIS). WTIS-ALC data are only available beginning in July 2011. The Bed Census Summary (BCS) has a three month reporting lag. Validation is required to ensure that specific bed types (in the 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 (ALC). meaning they did not require the type of care for which the bed was designated. Patients designated ALC 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. This is a Quality Improvement Plan (QIP) priority indicator for 2018/19. QIP current performance: Reporting period July 2016-September 2016. For more information about this indicator, visit the Ministry of Health and Long-Term Care's (MOHLTC) Resource for Indicator Standards website. To access your organization's data for the reporting period, refer to Health Quality Ontario's (HQO) QIP Navigator. Alternatively, hospitals can access ALC reports via Access to Care Site at <https://share.cancercare.on.ca>. Those not registered can contact Access To Care at [ATC@cancercare.on.ca](mailto:ATC@cancercare.on.ca).

# Percentage of people aged 18 and older who needed to see a specialist in the previous 2 years and reported seeing a specialist within 30 days, 30 to 89 days, or 90 or more days of referral

## Description

The percentages of people 16 and older who reported in a survey that they needed to see a specialist and that they saw a specialist in: less than 30 days, 30 to 89 days, or 90 or more days, after referral by a primary care provider.

## HQO reporting tool/product

Public Reports (annual report, bulletins and theme reports)

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

Numerator divided by the denominator times 100

### Numerator

Weighted number of survey respondents who reported that they saw a specialist in: less than 30 days, 30 to 89 days, or 90 or more days, after referral by a primary care provider.

Survey Question: "After you were advised to see a specialist, how many days, weeks or months did you have to wait for an appointment?"

### Denominator

Weighted total number of survey respondents who needed to see a specialist in the previous 2 years

Exclusion:

Those who selected "9997 never got an appointment/still waiting/etc."; "9998 don't know"; "9999 refused" to the 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

None

## 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. In addition, people who had not yet seen a specialist (i.e., still waiting) or who never got an appointment are not included.

### Comments Summary

Weighted to account for the design characteristics of the survey and post-stratified by age and sex to reflect the Ontario population. In addition, the LHIN and community weighting is applied. The data source for international and provincial comparisons is Commonwealth Fund International Health Policy Survey 2016 . The survey population is adults aged 18 and older. The education stratification analysis is done among those aged 25 and older. Urban/rural status is defined using Statistics Canada's Statistical Area Classification. Household income analysis does not consider the household composition.

# Percentage of people aged 16 and older who reported that their provider did not seem informed and up-to-date about the care they received from their specialist

## Description

The percentage of people 16 and older who reported in a survey that their primary care provider seemed informed and up-to-date about the care they received from their specialist, among those who had a regular primary care provider and who had seen a specialist in the previous 12 months

## HQO reporting tool/product

Public Reports (annual report, bulletins and theme reports)

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

Numerator divided by the denominator times 100

### Numerator

Number of people who answered "yes" to the question "After you saw the specialist, did your provider seem informed and up-to-date about the care you got from the specialist?"

Response options:

1 yes

5 no

7 did not see provider since seeing specialist

8 don't know

9 refused

### Denominator

Weighted total number of survey respondents who had a regular primary care provider and who had seen a specialist in the previous 12 months

Exclusion:

Those who selected "7 did not see provider since seeing specialist"; "8 don't know" "9 refused" to the 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

## OTHER RELEVANT INFORMATION

### Caveats and Limitations

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

(physically or mentally) to complete the interview were not surveyed. Inability to distinguish if people consider Telehealth to be access to primary care after hours

### **Comments Summary**

Weighted to account for the design characteristics of the survey and post-stratified by age and sex to reflect the Ontario population. In addition, the LHIN and community weighting is applied. The data source for international and provincial comparisons is Commonwealth Fund International Health Policy Survey 2016. The survey population is adults aged 18 and older. The education stratification analysis is done among those aged 25 and older. Urban/rural status is defined using Statistics Canada's Statistical Area Classification. Household income analysis does not consider the household composition.



# Percentage of people aged 16 and older who reported that their provider was not up-to-date following their discharge from hospital

## Description

The percentage of people 16 and older who reported in a survey that their primary care provider seemed up-to-date about their hospitalization, among those who had a primary care provider and were admitted to hospital in the previous 12 months

## HQO reporting tool/product

Public Reports (annual report, bulletins and theme reports)

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

Numerator divided by the denominator times 100

### Numerator

Weighted number of people who answered "yes" to the question "After you were discharged from hospital, did your provider seem informed and up-to-date about the care you received in the hospital?" Response options:

1 yes

5 no

6 have not seen provider since discharged from hospital

7 did not receive care for medical problem/no tests in last 12 months/not applicable

8 don't know

9 refused

### Denominator

Weighted total number of survey respondent who had a primary care provider and were admitted to hospital in the previous 12 months

those who responded "yes" to the Question: "In the last 12 months, have you been hospitalized overnight?" (response options: "1 yes"; "5 no"; "8 don't know"; "9 refused")

Exclusion:

Those who selected "6 have not seen provider since discharged from hospital"; "7 did not receive care for medical problem/no tests in last 12 months/not applicable"; "8 don't know"; "9 refused" to the 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

None

## 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**

Weighted to account for the design characteristics of the survey and post-stratified by age and sex to reflect the Ontario population. In addition, the LHIN and community weighting is applied. The data source for international and provincial comparisons is Commonwealth Fund International Health Policy Survey 2016. The survey population is adults aged 18 and older. The education stratification analysis is done among those aged 25 and older. Urban/rural status is defined using Statistics Canada's Statistical Area Classification. Household income analysis does not consider the household composition.

# Percentage of people aged 16 and older who reported that test results were not available at the time of a scheduled appointment with their provider within the past 12 months

## Description

The percentage of people 16 and older who reported in a survey that test results were not available at the time of a scheduled appointment with their primary care provider with-in the previous 12 months, among those who had a regular primary care provider and who had a test within the previous 12 months

## HQO reporting tool/product

Public Reports (annual report, bulletins and theme reports)

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

Numerator divided by the denominator times 100

### Numerator

Number of people who answered "yes" to the question "In the last 12 months, when receiving care for a medical problem, was there ever a time when test results were not available at the time of a scheduled appointment with your provider?"

Response options:

1 yes

5 no

7 did not receive care for medical problem/no tests in last 12 months/not applicable

8 don't know

9 refused

### Denominator

Weighted total number of survey respondents who had a regular primary care provider and who had a test within the previous 12 months.

Exclusion:

Those who selected "7 did not receive care for medical problem/no tests in last 12 months/not applicable" "8 don't know" "9 refused" to the 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

None

## OTHER RELEVANT INFORMATION

### **Caveats and Limitations**

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

### **Comments Summary**

Weighted to account for the design characteristics of the survey and post-stratified by age and sex to reflect the Ontario population. In addition, the LHIN and community weighting is applied. The data source for international and provincial comparisons is Commonwealth Fund International Health Policy Survey 2016. The survey population is adults aged 18 and older. The education stratification analysis is done among those aged 25 and older. Urban/rural status is defined using Statistics Canada's Statistical Area Classification. Household income analysis does not consider the household composition.

# Percentage of patients who saw a family doctor or specialist within 7 days of discharge after hospitalization for congestive heart failure (CHF)

## Description

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

## HQO reporting tool/product

Public reporting

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

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

### Numerator

The number of patients in the denominator discharged from acute care hospitals after an admission for congestive heart failure (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:

1. Ontario physician visits taking place in office, home or long-term care (includes most of the follow-up (planned) emergency department visits).
2. 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 day 0, otherwise the visit was not counted on the same day as it is impossible to distinguish if the visit happened before or after the discharge.

Exclusions:

3. Negated OHIP claims, duplicate claims and lab claims.
4. Records with missing or invalid data on discharge/admission date, health number, age and gender.

### Denominator

The number of patients aged 40 and older discharged from hospital after an admission for congestive heart failure (CHF).

Inclusions:

- Discharges from acute care hospitals with discharge date in the reporting period
- Admission for congestive heart failure (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 sex
- Transfers to hospital or other care settings (palliative care/hospice, addiction treatment centre...) as defined by discharge disposition '01', '03'

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

Direct age and sex adjusted using 2011 Canadian census population

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

**Data Source**

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

**Data provided to HQO by**

Institute for Clinical Evaluative Sciences (ICES)

**Reported Levels of comparability**

Time, Region

**OTHER RELEVANT INFORMATION****Caveats and Limitations**

The indicator captures a visit with a doctor for any reason and may not necessarily have the same reason as the hospitalization. Follow up by non-physician providers (i.e., nurse practitioners in family health teams) or providers that do not provide billing or shadow billing will not be captured. It is 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 (one patient can have more than one admission during the fiscal year).

# Percentage of patients who saw a family doctor or specialist within 7 days of discharge after hospitalization for chronic obstructive pulmonary disease (COPD)

## Description

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

## HQO reporting tool/product

Public reporting

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

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

### Numerator

The number of patients in the denominator discharged from acute care hospitals after an admission for chronic obstructive pulmonary disease (COPD) who had at least one doctor visit within 7 days after discharge.

The follow-up data are received in the following sub-categories:

- By any health care provider
- By primary care physician (GP/FP)
- By specialist (respiratory specialist)

Inclusions:

1. Ontario physician visits taking place in office, home or long-term care (would capture most of the follow-up (planned) visits in emergency department).

2. Physician visits occurring between days 0 to 7 post-discharge (i.e., includes date of discharge).\*

\*If a patient's discharge time was before 8am, the OHIP visit was counted on day 0, otherwise the visit was not counted on the same day as it is impossible to distinguish if the visit happened before or after discharge.

Exclusions:

3. Negated OHIP claims, duplicate claims and lab claims.
4. Records with missing or invalid data on discharge/admission date, health number, age and gender.

### Denominator

The number of patients aged 40 and older discharged from hospital after an admission for chronic obstructive pulmonary disease (COPD).

Inclusions:

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

Exclusions:

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

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

Direct age- and sex-adjusted using 2011 Canadian census population

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

**Data Source**

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

**Data provided to HQO by**

Institute for Clinical Evaluative Sciences (ICES)

**Reported Levels of comparability**

Time, Region

**OTHER RELEVANT INFORMATION****Caveats and Limitations**

The indicator captures a visit with a doctor for any reason and may not necessarily have the same reason as the hospitalization. Follow up by non-physician providers (i.e., nurse practitioners in family health teams) or providers that do not provide billing or shadow billing will not be captured. It is 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 (e.g., one patient can have more than one admission during the fiscal year).



# Hospital readmission rate within 30 days of leaving hospital for adults aged 19 and older receiving obstetrical, surgical or medical episodes of care and for patients aged 19 and younger

## Description

This indicator measures the risk-adjusted rate of non-elective readmissions within 30 days of discharge for episodes of care for the following patient groups: patients age 19 and younger, or patients older than 19 years who received obstetric, surgical or medical care. 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 numerator divided by the denominator per 100 patient discharges

### Numerator

Obstetric, patients age 19 and younger, surgical and medical episodes of care discharged between April 1 and March 1 of the fiscal year with an urgent readmission within 30 days of previous discharge

Inclusions:

1. Emergent or urgent (non-elective) readmission to an acute care hospital (it does not have to be the same facility as the index hospitalization).
2. When the time between the admission date on readmission record and the discharge date on the last record of the index episode of care is less than or equal to 30 days.

Exclusions:

Presence of at least one record in the episode with one of the following:

3. Chemotherapy for neoplasm (ICD-10-CA: Z51.1) as MRDx.
4. Admission for mental illness (MCC = 17).
5. Admission for palliative care (ICD-10-CA: Z51.5) coded as MRDx.
6. Records with an invalid admission date.

### Denominator

The number of episodes of care discharged between April 1 and March 1 of the fiscal year

- Surgical Group MCC Partition Code = I (intervention)
- Medical Group MCC Partition Code = D (diagnosis) (not an intervention)
- Obstetric Group MCC Partition Code = 13 (Pregnancy and Childbirth)
- Youth: Age younger than 20 years at admission

Inclusions:

1. Episodes involving inpatient care. An episode may start or end in a day surgery setting. Episodes that both start and end in day surgery settings are not included.
2. Discharges between April 1 and March 1 of the following year (period of case selection ends on March 1 of the following year to allow for 30 days of follow-up).
3. Sex recorded as male or female.
4. Ontario resident.
5. Age 20 and older.

## Exclusions:

6. Records with an invalid health card number.
7. Records with an invalid date of birth.
8. Records with an invalid admission date or time.
9. Records with an invalid discharge date or time.
10. Records with an admission category of still birth or cadaveric donor.
11. Episodes with a discharge of death or self sign-out.
12. Presence of at least one record in the episode with MCC 17 (Mental Diseases and Disorders).
13. Presence of at least one record in the episode with palliative care (ICD-10-CA: Z51.5) coded as most responsible diagnosis (MRDx).
14. Chemotherapy for neoplasm (ICD-10-CA: Z51.1) as MRDx

## Obstetric- specific 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)

## 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

Urgent readmissions to acute care facilities have been widely used to measure institutional or regional quality of care and care coordination. Readmission rates can be influenced by a variety of factors, including the quality of inpatient and outpatient care, the effectiveness of the care transition and coordination, and the availability and use of effective disease management community-based programs. While not all unplanned readmissions are avoidable, interventions during and after a hospitalization can be effective in reducing readmission rates. Sometimes patients have to be hospitalized again shortly after being discharged from a previous hospitalization. Such an event is still referred to as a readmission and is not always avoidable.

### Comments Summary

The readmission can occur in any acute care facility, it does not necessarily have to be the same location as the index hospitalization.

## Hospitalization rate for conditions that can be managed outside hospital

### Description

This indicator measures the rate of hospitalization, per 100,000 people aged 0 to 74 years, 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

The number of inpatient records from acute care hospitals during each fiscal year with any ambulatory care sensitive condition (ACSC) as the most responsible diagnosis.

Inclusions:

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:

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

#### Denominator

The number of people in Ontario aged 0 to 74 years.

Exclusions:

1. Birthdate after April 1st of given fiscal year.
2. Death date before April 1st of given fiscal year.
3. Missing sex.

4. Non-Ontario resident (April 1st of given fiscal year).
5. Age less than 0 or greater than 74 (April 1st of given fiscal year).
6. Not eligible for OHIP (April 1st of given fiscal year).

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

Direct age-sex standardized rate using the 2011 Canadian population

**Data Source**

Registered Persons Database (RPDB), Discharge Abstract Database (DAD)

**Data provided to HQO by**

Institute for Clinical Evaluative Sciences (ICES)

**Reported Levels of comparability**

Time, Institution, Income, Rurality, Region

**OTHER RELEVANT INFORMATION**

**Caveats and Limitations**

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

**Comments Summary**

## 4. Hospital Care

### Percentage of patients who had their surgery completed within the target wait time

#### Description

This indicator measures the percentage of patients whose surgery was completed within the access target for the surgical service area/surgery being reported. This wait time represents the time, in days, from when the patient and surgeon decides to proceed with surgery to having the surgery completed. In this case, the higher the percentage completed the better. The surgical service area/surgery reported in Measuring Up includes general surgeries, cancer surgeries, hip and knee replacement surgeries.

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

#### HQO reporting tool/product

Public reporting

#### DEFINITION AND SOURCE INFORMATION

#### Unit of Measurement

Percentage

#### Calculation Methods

Numerator divided by the denominator times 100

#### Numerator

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

#### Denominator

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

Inclusions:

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

Exclusions:

- Diagnostic, Palliative and Reconstructive cancer procedures.
- Procedures on Skin - Carcinoma, Skin-Melanoma, and Lymphomas.

- Procedures no longer required cases
- Patients assigned as Priority Level 1 for surgery (Wait 2)
- Wait list entries identified by hospitals as data entry errors.

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

None

### **Data Source**

Wait Time Information System (WTIS)

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

Cancer Care Ontario (CCO)

### **Reported Levels of comparability**

Corporation, Province, Priority level, Time

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

1. This indicator is collected for patients who have undergone their surgery. That is, patients who are still waiting are not included in the calculation. 2. This indicator is reported not at the surgeon level but rather at the level of the facility where the procedure took place. 3. Ninety among 114 surgical facilities in Ontario report surgical wait times to the WTIS; the remaining 24 facilities do not receive wait time funding for reporting and so do not report wait times. 4. Hospitals with small volumes will be more severely impacted by extreme waits. For example, an unusually long or short wait time for a single patient in a reporting period for hospitals that do not treat a lot of patients (e.g., a small hospital performing cataract surgery) will have a greater impact on the percentage of patients who underwent surgery within the target time. 5. Since Wait Time data is reported at the hospital corporation or facility level, facilities with multiple sites will be reported together even though data is collected at each site. Wait Times may also vary by surgeon which will not be apparent in this data as it is reported at the institution level rather than individual surgeon. 6. There are other factors that affect wait times for a surgical procedure or diagnostic exam that do not relate to a hospital's efficiency, to a particular doctor or the availability of resources. They include: a. Patient Choice – a patient with a non-life-threatening condition may choose a non-surgical treatment or may decide to delay treatment for personal or family reasons to a more convenient time. b. Patient Condition – a patient's condition may need to improve before the surgery or exam takes place. c. Follow-up Care – a patient who has an existing condition may be pre-booked for a follow-up treatment or exam a long time in advance. d. Treatment Complexity – a patient with special requirements may need specific equipment or a certain kind of facility and there is a delay until these can be scheduled.

### **Comments Summary**

None

# Percentage of patients who had their first surgical appointment within a target time following a referral

## Description

This time represents the percentage of patients whose appointment was completed within the access target for the surgical service area being reported. In this case, the higher the percentage completed, the better.

Priority levels and access targets are the recommended maximum wait times for wait time to see a surgeon and wait time to surgery.

Priority levels and access targets were created by a Provincial Clinical Expert Panel (Physicians, Clinicians and Healthcare Administrators) based on clinical evidence and are designed to help guide decision making; and, prioritize, manage and improve patient access to services.

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

## HQO reporting tool/product

Public reporting

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

Numerator divided by the denominator times 100

### Numerator

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

### Denominator

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

Inclusions:

1. All closed wait list entries with procedure dates within the reporting period.
2. For adult surgical procedures, patients that are 18 years and older on the day the procedure was completed.
3. For paediatric surgical procedures, patients that are younger than 23 years on the day the procedure was completed.
4. Treatment Cancer procedures only.
5. Patients who were referred for consult as new referrals and re-referrals with referral dates and consult dates
6. Patients assigned as Priority Level 2 - 4 for specialist consult (Wait 1)

Exclusions:

7. Diagnostic, Palliative and Reconstructive cancer procedures.
8. Procedures on Skin - Carcinoma, Skin-Melanoma, and Lymphomas.

9. Procedures no longer required cases
10. Patients assigned as Priority Level 1 for specialist consult (Wait 1)
11. Wait list entries identified by hospitals as data entry errors.

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

None

### **Data Source**

Wait Time Information System (WTIS)

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

Cancer Care Ontario (CCO)

### **Reported Levels of comparability**

Corporation, Province, Priority level, Time

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

1. This indicator is only collected for patients who have completed their surgery. That is, for patients who do not proceed to surgery or for those who have not yet completed their surgery, this indicator is not available. 2. This indicator is reported not at the surgeon level but rather at the level of the facility where the procedure took place. 3. Ninety among 114 surgical facilities in Ontario report surgical wait times to the WTIS; the remaining 24 facilities do not receive wait time funding for reporting and so do not report wait times. 4. Hospitals with small volumes will be more severely impacted by extreme waits. For example, an unusually long or short wait time for a single patient in a reporting period for hospitals that do not treat a lot of patients (e.g., a small hospital performing cataract surgery) will have a greater impact on the percentage of patients who were seen within target time. 5. Since Wait Time data is reported at the hospital corporation or facility level, facilities with multiple sites will be reported together even though data is collected at each site. Wait Times may also vary by surgeon which will not be apparent in this data as it is reported at the institution level rather than individual surgeon. 6. There are other factors that affect wait times for a surgical procedure or diagnostic exam that do not relate to a hospital's efficiency, to a particular doctor or the availability of resources. They include: a. Patient Choice – a patient with a non-life-threatening condition may choose a non-surgical treatment or may decide to delay treatment for personal or family reasons to a more convenient time. b. Patient Condition – a patient's condition may need to improve before the surgery or exam takes place. c. Follow-up Care – a patient who has an existing condition may be pre-booked for a follow-up treatment or exam a long time in advance. d. Treatment Complexity – a patient with special requirements may need specific equipment or a certain kind of facility and there is a delay until these can be scheduled.

### **Comments Summary**

If patient unavailable dates fall outside the referral date up until the date of the appointment, the patient unavailable dates are not deducted from the patient's wait days. These are considered data entry errors.



## Average length of stay for patients in emergency department

### Description

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

### HQO reporting tool/product

Public reporting

### DEFINITION AND SOURCE INFORMATION

#### Unit of Measurement

Hours

#### Calculation Methods

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

Inclusion Criteria:

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

Exclusion Criteria:

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

From July 2015 onwards:

- Cases where Registration date/time and Triage date/time are both blank/unknown (9999)
  - Cases where the MIS functional centre not under General Emergency Department ('713102000' '723102000' '733102000') or Urgent Care Centre ('713102500' '723102500' '733102500') - as of January 2015 data
  - Duplicate cases within the same functional centre where all ED data elements have the same values except for Abstract ID number
  - Cases where ED visit indicator is = "0" (i.e. scheduled ED visit)
  - 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 or 03)
  - Cases where EDLOS is greater than or equal to 100,000 minutes (1,666 hours)
- April 2013 to June 2015:
- Cases where Registration date/time and Triage date/time are both blank/unknown (9999)

- Cases where the MIS functional centre not under General Emergency Department ('713102000' '723102000' '733102000') or Urgent Care Centre ('713102500' '723102500' '733102500') - as of January 2015 data
- Duplicate cases within the same functional centre where all ED data elements have the same values except for Abstract ID number
- Cases where ED visit indicator is = "0" (i.e. scheduled ED visit)
- 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 or 03)
- Cases where EDLOS is greater than or equal to 100,000 minutes (1,666 hours)  
From FY 11/12 to FY 12/13:
- 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 Scheduled Visit Indicator flag is = "Y" (i.e. scheduled ED visit)
- 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 or 03)
- Cases where EDLOS is greater than or equal to 100,000 minutes (1,666 hours)

#### **Numerator**

NA

#### **Denominator**

NA

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

None

#### **Data Source**

National Ambulatory Care Reporting System (NACRS)

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

Cancer Care Ontario (CCO)

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

Province, Time, Institution, Acuity Level

### **OTHER RELEVANT INFORMATION**

#### **Caveats and Limitations**

1. Only Emergency Room National Ambulatory Initiative (ERNI) participating hospitals are included. 2. Scheduled visits to the ED are excluded from this analysis. 3. Patients who registered in ED but left without being seen or triaged are not included in the analysis. 4. For non-admitted patients, patients who left without seen or treatment and who left after triage and initiation of treatment are included in the analysis. 5. This indicator can also be calculated with percentiles, such as the 50th or 90th percentile. 6. Many factors can influence the indicator results, including triage level, patient population and hospital resources. 7. Depending on the acuity of the case or hospital procedures, triage may occur before registration or vice versa. Therefore, the earlier of these 2 events is used as the starting point for calculation of this indicator.

## Comments Summary

None

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

### Description

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

### HQO reporting tool/product

Public reporting

### DEFINITION AND SOURCE INFORMATION

#### Unit of Measurement

Percentage

#### Calculation Methods

Numerator divided by the denominator times 100

#### Numerator

Number of survey respondents who answered "yes, definitely" to the following survey question: "Would you recommend this emergency department to family and friends?"

- Yes, definitely
- Yes, probably
- No

#### Denominator

Number of survey respondents to the above mentioned question

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

None

#### Data Source

Emergency Department Patient Experiences of Care (EDPEC)

#### Data provided to HQO by

Ontario Hospital Association (OHA)

#### Reported Levels of comparability

Province, 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

None

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

## Description

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

## HQO reporting tool/product

Public reporting

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

Numerator divided by denominator times 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

Canadian Patient Experiences Survey-Inpatient Care (CPES-IC)

### Data provided to HQO by

Canadian Institute for Health Information (CIHI)

### Reported Levels of comparability

Province, Time, Region

## 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

The data are from Canadian Patient Experiences Survey – Inpatient Care (CPES-IC) starting 2015/16 provided by CIHI

# Rate of hospital-acquired *C. difficile* infection per 1,000 inpatient days

## Description

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

## HQO reporting tool/product

Public reporting

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Rate per 1,000 inpatient days

### Calculation Methods

Numerator divided by the denominator times 1,000

### Numerator

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

Inclusions:

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

Exclusions:

Patients less than 1 year of age

Outbreak Classification:

CDI outbreak definitions incorporate the concept of notification thresholds that optimally trigger action and dialogue between the local public health unit and the facility to determine if an outbreak is occurring. Facilities should use the following CDI notification thresholds to assist them in determining the need for consultation with their local public health unit. Facilities with limited experience in managing CDI should consult with the local public health unit and/or with the local regional infection control network. These thresholds were developed by the Ministry of Health Long-Term Care (the 'Ministry') and can also be found in the Provincial Infectious Diseases Advisory Committee's Annex C: Testing, Surveillance and Management of *Clostridium difficile* in All Health Care Settings.

Notification thresholds are defined as:

1. For wards/units with  $\geq 20$  beds, three (3) new cases of nosocomial CDI identified on one ward/unit within a seven day period OR five (5) new cases of nosocomial CDI within a four-week period; OR
- 2.. For wards/units with  $< 20$  beds, two (2) new cases of nosocomial CDI identified on one ward/unit within a seven day period or four (4) new cases of nosocomial CDI within a four-week period; OR
3. Facilities that have a facility nosocomial CDI rate that exceeds their annual nosocomial baseline rate for a period of two consecutive months. NOTE: this is not valid for a small community hospitals with a single case of nosocomial CDI which artificially elevates the facility rate.

It should be noted that exceeding a threshold does not necessarily imply that an outbreak will be declared.

Following consultation between the facility and the local public health unit, decisions on the declaration of an outbreak will be made based on the following criteria:

- There has been a significant\* (as determined by the facility and the local public health unit) increase in CDI numbers or rate compared to own baseline and/or that of comparator institutions
- Recognized control measures are in place and are being used.
- There is epidemiologic evidence of ongoing nosocomial transmission within the ward/unit or facility

\*Significance may be determined by reviewing:

- number of new nosocomial cases associated with the reporting ward/unit or facility;
- historic level of CDI activity of the ward/unit or facility;
- current trend in ward/unit CDI activity or facility rate;
- location of current cases and possible epidemiologic links between cases;

### **Denominator**

Total number of inpatient days

Inclusions:

- 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**

Province, Time, Institution

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

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

### **Comments Summary**

Self-Reporting Initiative (SRI) (July 2012 to present) and Web Enabled Reporting System (WERS) (April 2010-June 2011), Ministry of Health and Long-Term Care; Operating Room Benchmarking Collaborative (ORBC), Cancer Care Ontario

## Rate of obstetric trauma with instrument

### Description

This indicator measures the rate of obstetric trauma (lacerations that are third degree or greater in severity) for instrument-assisted vaginal deliveries in a reporting period.

### HQO reporting tool/product

Public reporting

### DEFINITION AND SOURCE INFORMATION

#### Unit of Measurement

Rate per 100 instrument-assisted vaginal deliveries

#### Calculation Methods

Observed cases divided by expected cases times Canadian average

Logistic regression for risk-adjustment.

#### Numerator

Cases within the denominator with at least one obstetric trauma :

1. Third-degree perineal laceration during delivery, delivered, with or without mention of antepartum condition (ICD-10-CA: O70.201)
2. Fourth-degree perineal laceration during delivery, delivered, with or without mention of antepartum condition (ICD-10-CA: O70.301)
3. Obstetric laceration of cervix, delivered, with or without mention of antepartum condition (ICD-10-CA: O71.301)
4. Obstetric high vaginal laceration alone, delivered, with or without mention of antepartum condition (ICD-10-CA: O71.401)
5. Other obstetric injury to pelvic organs, delivered, with or without mention of antepartum condition (ICD-10-CA: O71.501)
6. Other rupture of uterus during labour, delivered, with or without mention of antepartum condition (ICD-10-CA: O71.181)
7. Obstetric damage to pelvic joints and ligaments, delivered, with or without mention of antepartum condition (ICD-10-CA: O71.601)
8. Surgical repair, postpartum, of obstetric laceration:
  - Of corpus uteri (CCI code: 5.PC.80.JH)
  - Of current obstetric laceration of cervix occurring at vaginal delivery (CCI code: 5.PC.80.JJ)
  - Of current obstetric laceration of bladder and urethra (CCI code: 5.PC.80.JR)
  - Of current obstetric laceration of rectum and sphincter ani (CCI code: 5.PC.80.JQ)
  - Of current obstetric high vaginal laceration (CCI code: 5.PC.80.JU)
  - Of current obstetric laceration of broad ligament(s) of uterus (CCI code: 5.PC.80.JL)

#### Denominator

Vaginal delivery discharges with instrument-assisted delivery:

Inclusions:

1. Admission to an acute care institution (Facility Type Code = 1)
2. Delivery code (ICD-10-CA: O10–O16, O21–O26, O28–O37, O40–O46, O48, O60–O75, O85–O92, O95 or O98–O99 with a sixth digit of 1 or 2 OR Z37 coded in any position)



3. Instrument-assisted vaginal delivery (CCI code: 5.MD.53<sup>^^</sup>, 5.MD.54<sup>^^</sup>, 5.MD.55<sup>^^</sup>, 5.MD.56.NN, 5.MD.56.PC, 5.MD.56.NR, 5.MD.56.PF, 5.MD.56.NW or 5.MD.56.PJ)

Exclusions:

- 1.. Newborn, stillbirth or cadaveric donor records (Admission Category = N, R or S)
- 2.. Records with invalid discharge date
- 3.. Records with invalid age
- 4.. Records with unknown or invalid (>45 completed weeks) gestational age
- 5.. Caesarean sections (CCI code: 5.MD.60<sup>^^</sup>)
6. . Delivery in which an abortive procedure was recorded (code may be recorded in any position; procedures not coded as "abandoned after onset" [Intervention Status Attribute = A]):

CCI: 5.CA.20<sup>^^</sup>, 5.CA.24<sup>^^</sup>, 5.CA.88<sup>^^</sup>, 5.CA.89<sup>^^</sup>, or 5.CA.93<sup>^^</sup>

OR

ICD-10-CA: O04

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

Maternal Age; Malposition/malpresentation of the fetus; Gestational age at delivery greater than 41 weeks; Diabetes (pre-existing/gestational); Fetal heart rate anomaly/asphyxia during labour and delivery; Shoulder dystocia; Prolonged second-stage labour; Large fetus

### **Data Source**

Discharge Abstract Database (DAD)

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

Canadian Institute for Health Information (CIHI)

### **Reported Levels of comparability**

Time, Region

### **OTHER RELEVANT INFORMATION**

#### **Caveats and Limitations**

None

#### **Comments Summary**

None

## Percentage of deliveries by delivery type

### Description

This indicator measures the proportion of deliveries among women who gave birth in Ontario hospitals by delivery type:

- Caesarean section
- Vaginal delivery

### 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 stillbirth

Exclusions:

Deliveries occurring outside of Ontario hospital

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

None

### Data Source

BORN Information System (BIS)

### Data provided to HQO by

Ontario Better Outcomes Registry & Network (BORN)

### Reported Levels of comparability

Time, Region

## OTHER RELEVANT INFORMATION

### Caveats and Limitations

Data can only be reported for hospitals who submit and acknowledge their own data. Data from FY2012/13 onwards extracted from the BORN Information System (BIS)

### Comments Summary

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

## Percentage of low-risk deliveries by delivery type

### Description

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

- caesarean section
- vaginal delivery

### HQO reporting tool/product

Public reporting

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

Numerator divided by the denominator times 100

### Numerator

Number of cases within denominator resulting in:

- caesarean section
- vaginal delivery

### Denominator

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

Inclusions:

- Robson criteria 1 to 4:
- Robson 1: Nullipara (first time mothers) who had singleton, full-term (gestational age  $\geq$ 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 are extracted from the BORN Information System (BIS). Maternal neighborhood income quintile was assigned using the Postal Code Conversion File Plus (PCCF+) based on a mother's postal code. The national neighbourhood income quintile was included in the applicable tables. Missing data on this variable represents records where either a valid postal code was not entered or the PCCF+ program was unable to assign a neighbourhood income quintile

### **Comments Summary**

Similar external indicators which do not align: • CIHI: Low-Risk Caesarean Section Rate among singleton term cephalic pregnancies for women without placenta previa or previous C-Section.

# Percentage of patients who completed their visit to emergency within Ontario's target time

## Description

This indicator measures the percentage of patients whose emergency department (ED) visit was completed within Ontario's target time. A higher percentage is better. The ED length of stay (LOS) is calculated as the average time interval between the earlier of triage date/time or registration date/time and the date/time when a patient is admitted to the hospital or discharged, transferred, or leaves the ED (non-admitted patients). Provincial targets have been set for the maximum amount of time patients should spend in the ED, waiting and being treated, before being discharged or admitted to the hospital, based on clinical evidence.

## HQO reporting tool/product

Public reporting

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

Numerator divided by the denominator times 100

### Numerator

Number of patients whose emergency department visits were completed within the provincial target.

### Denominator

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

Inclusion Criteria:

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

Exclusion Criteria:

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

From July 2015 onwards:

Cases where Registration date/time and Triage date/time are both blank/unknown (9999)

Cases where the MIS functional centre not under General Emergency Department ('713102000' '723102000' '733102000') or Urgent Care Centre ('713102500' '723102500' '733102500') - as of January 2015 data

Duplicate cases within the same functional centre where all ED data elements have the same values except for Abstract ID number Cases where ED visit indicator is = "0" (i.e. scheduled ED visit)

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 or 03)

Cases where EDLOS is greater than or equal to 100,000 minutes (1,666 hours)

April 2013 to June 2015:

Cases where Registration date/time and Triage date/time are both blank/unknown (9999)  
Cases where the MIS functional centre not under General Emergency Department ('713102000' '723102000' '733102000') or Urgent Care Centre ('713102500' '723102500' '733102500') - as of January 2015 data  
Duplicate cases within the same functional centre where all ED data elements have the same values except for Abstract ID number  
Cases where ED visit indicator is = "0" (i.e. scheduled ED visit)  
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 or 03)  
Cases where EDLOS is greater than or equal to 100,000 minutes (1,666 hours)  
From FY 11/12 to FY 12/13:  
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 Scheduled Visit Indicator flag is = "Y" (i.e. scheduled ED visit)  
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 or 03)  
Cases where EDLOS is greater than or equal to 100,000 minutes (1,666 hours)

#### **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, Institution, Acuity Level

### **OTHER RELEVANT INFORMATION**

#### **Caveats and Limitations**

1. Only Emergency Room National Ambulatory Initiative (ERNI) participating hospitals are included. 2. Scheduled visits to the ED are excluded from this analysis. 3. Patients who registered in ED but left without being seen or triaged are not included in the analysis. 4. For non-admitted patients, patients who left without seen or treatment and who left after triage and initiation of treatment are included in the analysis. 5. This indicator can also be calculated with percentiles, such as the 50th or 90th percentile. 6. Many factors can influence the indicator results, including triage level, patient population and hospital resources. 7. Depending on the acuity of the case or hospital procedures, triage may occur before registration or vice versa. Therefore, the earlier of these 2 events is used as the starting point for calculation of this indicator.

#### **Comments Summary**

None

## Proportion of ED Visits by patients who are high acuity

### Description

This indicator measures the proportion of emergency department visits by patients who are high acuity.

### HQO reporting tool/product

Public Reports (annual report, bulletins and theme reports)

### DEFINITION AND SOURCE INFORMATION

#### Unit of Measurement

Percentage

#### Calculation Methods

Numerator divided by the denominator times 100

#### Numerator

The number of ED patients in the denominator who are assigned high acuity at triage

#### Denominator

The total number of patients that completed an emergency department (ED) visit

Inclusion criteria:

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

Exclusion criteria:

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

#### 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**

Acuity Level

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

1. Only Emergency Room National Ambulatory Initiative (ERNI) participating hospitals are included. 2. Scheduled visits to the ED are excluded from this indicator. 3. This indicator reflects the proportion of ED visits, which does not necessarily equal the proportion of individuals.

### **Comments Summary**

None



## Time to initial assessment in emergency

### Description

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

### HQO reporting tool/product

Public reporting

### DEFINITION AND SOURCE INFORMATION

#### Unit of Measurement

Hours

#### Calculation Methods

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

Inclusion criteria:

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

Exclusion criteria:

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

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

**Numerator**

NA

**Denominator**

NA

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

None

**Data Source**

National Ambulatory Care Reporting System (NACRS)

**Data provided to HQO by**

Cancer Care Ontario (CCO)

**Reported Levels of comparability**

Province, Time, Institution

**OTHER RELEVANT INFORMATION****Caveats and Limitations**

1. Only Emergency Room National Ambulatory Initiative (ERNI) participating hospitals are included. 2. Scheduled visits to the ED are excluded from this indicator. 3. Patients who registered in the ED but left before being seen are not included

**Comments Summary**

None

## 5. Mental Illness and Addiction

### Percentage of children and youth 0 to 24 years old who did not receive mental health care from a family doctor, paediatrician or psychiatrist in the two years preceding a visit to the emergency department for a mental illness or addiction

#### Description

This indicator measures the percentage of children and youth who did not receive mental health care from a family doctor, paediatrician or psychiatrist over the preceding two years, among children and youth aged 0 to 24 years who visited the emergency department for a mental illness or addiction.

#### HQO reporting tool/product

Public reporting

#### DEFINITION AND SOURCE INFORMATION

##### Unit of Measurement

Percentage

##### Calculation Methods

Numerator divided by the denominator times 100

##### Numerator

Number of children and youth (0 to 24 years) without any mental health and addictions (MHA)- related service contact in a 2 year look back period; includes only those who did not have an MHA-related outpatient visit to a psychiatrist, paediatrician or a general practitioner/family physician or an MHA-related emergency department (ED) visit (scheduled or unscheduled) or an MHA-related hospitalization in the 2 years preceding the index ED visit

Exclusions: (apply to both numerator and denominator):

1. Invalid IKN
2. Missing sex
3. Non-Ontario resident
4. Planned or scheduled ED visits

##### Denominator

Number of children and youth with an incident (first in a calendar year) unscheduled emergency department visit for MHA

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

Age- and sex-standardized to the 2006 Ontario census population

##### Data Source

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

##### Data provided to HQO by

Institute for Clinical Evaluative Sciences (ICES)

**Reported Levels of comparability**

Age, Income, Rurality, Region, Sex

**OTHER RELEVANT INFORMATION****Caveats and Limitations**

Limitations include potential coding errors and a lack of clinical detail. The data does not capture MHA-related care provided in the community by non-physicians (e.g., nurse practitioners, psychologists, and social workers).

**Comments Summary**

None

# Percentage of patients aged 16 and older who were seen by a general practitioner/family physician or psychiatrist within seven days of discharge after being hospitalized for a mental illness or addiction

## Description

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

## HQO reporting tool/product

Public reporting

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

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

### Numerator

The number of patients who within 7 days of discharge following index hospitalization had at least one psychiatrist or primary care physician visit.

All-cause follow-up: Any visit to a primary care provider (IPDB mainspecialty = 'GP/FP' or 'F.P./Emergency medicine') or a psychiatrist (IPDB mainspecialty = 'psychiatry') taking place in office, home, or long-term care (OHIP - location = 'O' or 'H' or 'L')

### Denominator

Number of acute care discharges from episode of care in which a Mental Health and Addiction condition is diagnosed and is coded as most responsible diagnosis (CIHI - ICD-10 with dxtype = M, OMHRS - DSM-IV in Q2A/Q2D or provisional dx Q1D/Q1E/Q1F/Q1G/Q1O/Q1P = 1) in the first hospitalization of the episode within each fiscal year (minus last 7 days for follow up)

1. Substance-related disorders-ICD-10-CA: F55, F10 to F19; DSM-IV: 291.x (0, 1, 2, 3, 5, 81, 89, 9), 292.0, 292.11, 292.12, 292.81, 292.82, 292.83, 292.84, 292.89, 292.9, 303.xx (00, 90), 304.xx (00, 10, 20, 30, 40, 50, 60, 80, 90), 305.xx (00, 10 to 90 excluding 80); Provisional diagnosis\*\*: (d) substance-related disorder; or

2. Schizophrenia, delusional and non-organic psychotic disorders-ICD-10-CA: F20 (excluding F20.4), F22, F23, F24, F25, F28, F29, F53.1; DSM-IV: 295.xx (10, 20, 30, 40, 60, 70, , 90), 297.1, 297.3, 298.8, 298.9; Provisional diagnosis\*\*: (e) schizophrenia disorder; or

3. Mood/affective disorders-Mood/affective disorders-ICD-10-CA: F30, F31, F32, F33, F34, F38, F39, F53.0; DSM-IV: 296 .0x, 296.2x, 296.3x, 296.4x, 296.5x, 296.6x, 296.7, 296.80, 296.89, 296.90, 300.4, 301.13; Provisional diagnosis\*\*: (f) mood disorders; or

4. Anxiety disorders-ICD-10-CA: F40, F41, F42, F43, F48.8, F48.9,; DSM-IV: 300.xx (00, 01, 02, 21, 22, 23, 29), 300.3, 308.3, 309.x (0, 3, 4, 9), 309.24, 309.28, 309.81; Provisional diagnosis\*\*: (g) anxiety disorders or (o) adjustment disorders or

5. Selected disorders of adult personality and behaviour-Selected disorders of adult personality and behaviour-ICD-10-CA: F60, F61, F62, F69, F21; DSM-IV: 301.0, 301.20, 301.22, 301.4, 301.50, 301.6, 301.7, 301.81, 301.82, 301.83, 301.9 Provisional diagnosis\*\*: (p) personality disorders.

6. Age range to include: 16-105 years

Exclude:

7. Patients without a valid health insurance number

8. Patients without an Ontario residence

9. Gender not recorded as male or female

10. Invalid date of birth, admission date/time, discharge date/time

11. Discharge where the patient signed him/herself out or the patient died

12. Patients who die or had Hospitalizations with a subsequent readmission (any cause) to acute care (CIHI or OMHRS) within 7 days of index hospitalization discharge date

Note: if OMHRS records occurs within 24 hours of discharge/admission from institution then this should be considered as part of the same episode of care. \*\*For provisional diagnoses: only for data extracted from the Ontario Mental Health Reporting System (OMHRS) with no DSM-IV code recorded.

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

Age- and sex-standardized to the 2006 Ontario census population

- Age (16-24, 25-44, 45-64, 65-84, 85-105)
- Sex (Male and Female)

#### **Data Source**

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

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

Institute for Clinical Evaluative Sciences (ICES)

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

Time, Age, Income, Rurality, Region, Sex

#### **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). Limitations also include potential coding errors and a lack of clinical detail.

#### **Comments Summary**

None

# Percentage of patients 16 and older hospitalized for a mental illness or addiction who were readmitted to hospital for a mental illness or addiction within 30 days of discharge

## Description

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

## 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 individuals with any mental health or addictions hospital readmissions\* within (&le;) 30 days following the incident hospital discharge

Notes:

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

Exclusions (apply to both numerator and denominator):

5. Invalid IKN
6. Non-Ontario resident (1st two characters of PRCDDA ne '35')
7. Missing sex
8. Age > 105
9. Adults who die within 30 days of discharge (based on RPDB)

### Denominator

Total number of incident mental health and addiction hospital discharges between calendar years of interest

Incident = 1st event in a calendar period without any look-back for past events (If multiple hospital visits in CY, use first). Keep only one discharge per IKN per year.

Age ranges to include: >16, <=105

Exclude:

1. Patients without a valid health insurance number
2. Patients without an Ontario residence

3. Gender not recorded as male or female
4. or Age > 105
5. Invalid date of birth, admission date/time, discharge date/time
6. Individuals who die within 30 days of discharge (based on RPDB) before a follow-up or outcome occurs (i.e. a person dies before they have been readmitted or is readmitted but dies before they are discharged)

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

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

Age- and sex-standardized to the 2006 Ontario census population

#### **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, Age, Income, Rurality, Region, Sex

#### **OTHER RELEVANT INFORMATION**

#### **Caveats and Limitations**

Limitations include potential coding errors and a lack of clinical detail. Data did not capture non-physician mental health and addictions services that may have been provided in the period between hospital discharge and readmission.

#### **Comments Summary**

None



## Percentage of mental-health-bed hospitalizations in which physical restraints were used

### 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 or physical restraint in their Ontario Mental Health Reporting System record.

### HQO reporting tool/product

Public reporting

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

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

### Numerator

Patients who had the following restraint use indicated on their OMHRS records:

- Mechanical restraint use (M1A greater or equal to 1)
- Chair prevents rising (M1B greater or equal to 1)
- Physical /manual restraint by staff (M1C greater or equal to 1)

### Denominator

Total number of individuals who were discharged from a designated adult mental health bed in an Ontario hospital

Inclusions:

1. Patients with records in OMHRS
2. Assessments with variables M1A, M1B and M1C
3. Valid OHIP number

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

Direct standardized using the 2011 Canadian census population by:

- Age groups (15-19, 20-44, 45-64, 65-79, 80+)
- Sex

### Data Source

Ontario Mental Health Reporting System (OMHRS), Registered Persons Database (RPDB)

### Data provided to HQO by

Institute for Clinical Evaluative Sciences (ICES)

### Reported Levels of comparability

Time, Age, Income, Region, Sex

## 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 people aged 16 and older who did not receive mental health and addictions care from a family doctor or psychiatrist in the two years preceding a visit to the emergency department for a mental illness or addiction

## Description

This indicator measures the percentage of people who did not receive mental health care from a family doctor or psychiatrist over the preceding two years, among people aged 16 and older who visited the emergency department for a mental illness or addiction.

## HQO reporting tool/product

Public reporting

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

Numerator divided by the denominator times 100

### Numerator

Number of adults without any mental health and addictions (MHA)- related service contact in a 2 year look back period; includes only those who did not have an MHA-related outpatient visit to a psychiatrist or a general practitioner/family physician or an MHA-related emergency department (ED) visit (scheduled or unscheduled) or an MHA-related hospitalization in the 2 years preceding the index ED visit

Exclusions: (apply to both numerator and denominator):

1. Invalid IKN
2. Missing sex
3. Age: <16,>105
4. Non-Ontario resident
5. Planned or scheduled ED visits

### Denominator

Number of adults with an incident (first in a calendar year) unscheduled ED visit for MHA

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

Age- and sex-standardized to the 2006 Ontario census population

### Data Source

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

### Data provided to HQO by

Institute for Clinical Evaluative Sciences (ICES)

### Reported Levels of comparability

Time, Age, Income, Rurality, Region, Sex

## OTHER RELEVANT INFORMATION

### Caveats and Limitations

Limitations include potential coding errors and a lack of clinical detail. The data does not capture MHA-related care provided in the community by non-physicians (e.g., nurse practitioners, psychologists, and social workers).

**Comments Summary**

None

## 6. Long-Term Care

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

#### Description

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

#### HQO reporting tool/product

Public reporting

#### DEFINITION AND SOURCE INFORMATION

#### Unit of Measurement

Days

#### Calculation Methods

The median time, in days, for each included placement from the earlier of long-term care home application date or consent date to date of placement. The median is the number of days within which 50% of individuals waited from the date of application or consent to the date of placement.

The median time can be stratified by location of the individual prior to placement (e.g., placed from hospital or placed from community).

The median is calculated for each of the following placements:

##### 1) All placements

Inclusions:

- Includes residents placed from hospitals (acute, rehab, complex continuing care (CCC), etc.), supportive housing and retirement homes, home, or other.

Exclusions:

- Residents placed from another long-term care home (i.e. residents who were transferred from another long-term care home)
- Residents for whom "Admitted from" and/or "Prior Location Code" is unknown

##### 2) Placed from acute care

Inclusions:

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

##### 3) Placed from community

Inclusions:

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

#### Numerator

NA

#### Denominator

NA

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

None

#### Data Source

Modernized Client Profile Database (CPRO Modernized)

**Data provided to HQO by**

Ministry of Health and Long-Term Care (MOHLTC)

**Reported Levels of comparability**

Other, Time, Region

**OTHER RELEVANT INFORMATION****Caveats and Limitations**

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

**Comments Summary**

This is a system indicator and not an indicator of individual long-term care home performance.

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

## Description

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

## HQO reporting tool/product

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

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

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

### Numerator

Number of LTC home residents in a fiscal quarter who received antipsychotic medication on 1 or more days in the 7 days before their Resident Assessment Instrument - Minimum Data Set 2.0 (RAI-MDS) target assessment

Inclusions:

O4a = 1, 2, 3, 4, 5, 6 or 7

Where, O4A = Number of days the resident received an antipsychotic medication during the last 7 days [0-7]

### Denominator

Number of LTC home residents in a fiscal quarter with a valid RAI-MDS assessment, excluding those with schizophrenia, Huntington's chorea, hallucinations or delusions, as well as residents who are end-stage disease or receiving hospice care

Inclusions:

To be considered valid, the resident assessment must:

- Be the latest assessment in the quarter
- Be carried out more than 92 days after the admission date
- Not be an admission full assessment

Exclusions:

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

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

This indicator can be risk adjusted at the individual covariate level and through direct standardization.

Individual covariates:

- Motor agitation
- Moderate/impaired decision-making problem
- Long-term memory problem
- Cognitive Performance Scale (CPS)
- Combination Alzheimer's disease/other dementia

- Age younger than 65 years

Direct standardization:

- Case Mix Index (CMI)\*

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

### **Data Source**

Continuing Care Reporting System (CCRS)

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

Canadian Institute for Health Information (CIHI)

### **Reported Levels of comparability**

Province, Time, Institution, Rurality, Region

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

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

### **Comments Summary**

Antipsychotic use is defined as any use by a resident in the 7 days prior to the assessment date. Delusions and hallucinations are captured in the assessment if these conditions were present in the 7 days prior to the assessment date. The unadjusted indicator result is a priority indicator in Quality Improvement Plans (QIPs) and is included in LTC Practice Reports. The reporting period for current performance in QIPs is Q2 (July - September), which represents the data in Q2 as well as the previous 3 quarters.



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

### Description

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

### HQO reporting tool/product

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

### DEFINITION AND SOURCE INFORMATION

#### Unit of Measurement

Percentage

#### Calculation Methods

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

#### Numerator

Number of LTC home residents in a fiscal quarter who were recorded as having been physically restrained daily during the 7 days preceding their target Resident Assessment Instrument - Minimum Data Set 2.0 (RAI-MDS) assessment

Inclusions:

(P4c = 2) OR (P4d = 2) OR (P4e = 2)

Where,

P4c = Trunk restraint [0,1,2]

P4d = Limb restraint [0,1,2]

P4e = Chair prevents rising [0,1,2]

0 = not used

1 = used less than daily

2 = used daily

#### Denominator

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

Inclusions:

To be considered valid, the resident assessment must:

- Be the latest assessment in the quarter
- Be carried out more than 92 days after the admission date
- Not be an admission full assessment

Exclusions:

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

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

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

## **Data Source**

Continuing Care Reporting System (CCRS)

## **Data provided to HQO by**

Canadian Institute for Health Information (CIHI)

## **Reported Levels of comparability**

Province, Time, Rurality, Region

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

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

### **Comments Summary**

A physical restraint is any manual method, or any physical mechanical device, material or equipment that is attached or adjacent to the resident's body, that the resident cannot remove easily, and that restricts the resident's freedom of movement or normal access to his or her body. It is the effect the device has on the resident that classifies it into the category of restraint, not the name or label given to the device, nor the purpose or intent of the device. This definition is different from that of the definition for physical restraint used by the Ministry of Health and Long-Term Care, where intent plays an important role. The restraint use items capture restraint use in the 7 days prior to the target assessment. The unadjusted indicator result is an additional indicator in Quality Improvement Plans (QIPs). The reporting period for current performance in QIPs is Q2 (July - September), which represents the data in Q2 as well as the previous 3 quarters.

## Percentage of long-term care home residents who experienced moderate pain daily or any severe pain

### Description

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

### HQO reporting tool/product

Public reporting

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

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

### Numerator

Number of LTC home residents in a fiscal quarter with moderate pain at least daily or horrible/excruciating pain at any frequency documented on their target Resident Assessment Instrument - Minimum Data Set 2.0 (RAI-MDS) assessment

Inclusions:

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

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:

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

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

This indicator is risk adjusted at the individual covariate level and through direct standardization

Individual covariates:

- Cognitive Performance Scale (CPS)
- Long-term memory problem

- Age younger than 65 years

Direct standardization:

- Depression Rating Scale (DRS)

#### **Data Source**

Continuing Care Reporting System (CCRS)

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

Canadian Institute for Health Information (CIHI)

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

Province, Time, Rurality, Region

### **OTHER RELEVANT INFORMATION**

#### **Caveats and Limitations**

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

#### **Comments Summary**

None

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

### Description

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

### HQO reporting tool/product

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

### 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 can be risk adjusted at the individual covariate level and through direct standardization.

Individual covariates:

- Not totally dependent in transferring
- Locomotion problem
- Personal Severity Index (PSI)\*: Subset 2: Non-Diagnoses
- Any wandering
- Unsteady gait/cognitive impairment
- Age younger than 65

Direct standardization:

- Case Mix Index (CMI)\*\*

\*PSI is statistically linked to the likelihood of death within six months

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

#### Data Source

Continuing Care Reporting System (CCRS)

**Data provided to HQO by**

Canadian Institute for Health Information (CIHI)

**Reported Levels of comparability**

Province, Time, Institution, Rurality, Region

**OTHER RELEVANT INFORMATION**

**Caveats and Limitations**

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

**Comments Summary**

The unadjusted indicator result is an additional indicator in Quality Improvement Plans (QIPs) and is included in LTC Practice Reports. The reporting period for current performance in QIPs is Q2 (July - September), which represents the data in Q2 as well as the previous 3 quarters.

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

## 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 (CIHI). A lower percentage is better.

## HQO reporting tool/product

Public reporting

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

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

### Numerator

Number of LTC home residents in a fiscal quarter with 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:

1. Residents whose depression symptoms could not worsen (i.e., had a maximum DRS score of 14 on prior assessment (Prev\_DRS\_cc = 14))
2. 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

Province, Time, Rurality, 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. Risk-adjusted values are censored if the denominator is less than 30. General limitations when using RAI-MDS data, including random error, coding errors, and missing values. The indicator calculation is based on the Depression Rating Scale (DRS), and measures an increase in the number and frequency of symptoms of depression. The indicator does not measure a clinical diagnosis of depression. The 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**

None

# Percentage of long-term care home residents with new or worsening pressure ulcers

## Description

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

## HQO reporting tool/product

Public reporting, Quality Improvement Plans (QIPs)

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

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

### Numerator

Number of LTC home residents in a fiscal quarter who had a pressure ulcer at stage 2 to 4 on their target Resident Assessment Instrument - Minimum Data Set 2.0 (RAI-MDS) assessment and either they did not have a pressure ulcer on their previous assessment or the stage of pressure ulcer is greater on their target compared with their previous assessment

Inclusions:

$M2a > 1$  AND  $(M2a - \text{Prev\_M2a}) > 0$  AND  $\text{Prev\_M2a} < 4$

Where,

$M2a$  = Stage of pressure ulcer at target assessment [0-4]

$\text{Prev\_M2a}$  = Stage of pressure ulcer at prior assessment [0-4]

### Denominator

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

Inclusions:

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

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

Exclusions:

1.  $\text{Prev\_M2a} = 4$

Where,

$\text{Prev\_M2a}$  = Stage of pressure ulcer at prior assessment [0-4]

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

This indicator can be risk adjusted at the individual covariate level and through direct standardization

Individual covariates:

- Age younger than 65 years
- Resource Utilization Group (RUG)
- Late Loss Activities of Daily Living (ADL)

Direct standardization:

- Case Mix Index (CMI)\*

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

### **Data Source**

Continuing Care Reporting System (CCRS)

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

Canadian Institute for Health Information (CIHI)

### **Reported Levels of comparability**

Province, Time, Rurality, Region

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

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

### **Comments Summary**

This indicator includes residents who developed a new pressure ulcer (stage 2 to 4) and residents whose pressure ulcer worsened from their prior assessment. Pressure ulcers are coded for the highest stage in the last 7 days from 0 (no ulcer) to 4 (ulcer reaches muscle and bone). The unadjusted indicator result is an additional indicator in Quality Improvement Plans (QIPs). The reporting period for current performance in QIPs is Q2 (July - September), which represents the data in Q2 as well as the previous 3 quarters.

# 7. Home Care

## Percentage of long-stay home care clients who reported that their primary informal caregiver expressed continued feelings of distress, anger or depression over a six-month period.

### Description

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

### HQO reporting tool/product

Public reporting

### DEFINITION AND SOURCE INFORMATION

#### Unit of Measurement

Percentage

#### Calculation Methods

Numerator divided by the denominator times 100

#### Numerator

The number of clients with informal caregivers who reported distress, anger or depression in relation to their caregiving role, in two consecutive home care client assessments.

The following data elements are used:

G2c Primary caregiver expresses feelings of distress, anger or depression.

#### Denominator

The number of home care clients with at least two consecutive assessments and at least one informal caregiver.

The following data elements are used:

G1ea (primary informal caregiver) lives with client. An informal caregiver ("caregiver") may be a family member, friend or neighbour (but not a paid provider) who helps the home care client with activities of daily living, such as meal preparation, housework, transportation, bathing and dressing, or who provides advice or emotional support to the client.

General Exclusion Criteria:

To prevent capturing outcomes that result from the care received outside of the home care settings, assessments are excluded according to the following criteria:

- if case open date is missing and Reason for Assessment is "Initial Assessment"
- if the assessment took place within 60 days of when the referral was first received/case open date
- if the assessment was completed in a hospital setting

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

This indicator is risk adjusted. Adjustment factors:

- Age  $\geq$  65
- 12 Months or less between Assessments
- Cognitive Problem CPS +1
- IADL difficulty
- Difficulty with locomotion
- Decision Making Difficulty

- Sadness
- Difficulty housework
- ADL Decline
- Poor Health
- Unstable Condition
- Hospital Stays

### **Data Source**

Home Care Reporting System (HCRS)

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

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. Includes patients of varying levels of complexity, including palliative patients.

### **Comments Summary**

Data are based on information from mandatory Resident Assessment Instrument - Home Care (RAI-HC) assessments.

## Percentage of long-stay home care clients with daily pain

### Description

This indicator measures the percentage of long-stay home care clients who complained or showed evidence of daily pain, among clients who received home care services for more than 60 days. 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

The number of long-stay home care clients who complained or showed evidence of moderate or severe daily pain.

The following data elements are used:

K4a Pain frequency = daily

K4b Pain Intensity = moderate or severe

### Denominator

The number of long-stay home care clients.

General Exclusion Criteria:

To prevent capturing outcomes that result from the care received outside of the home care settings, assessments are excluded according to the following criteria:

- if case open date is missing and Reason for Assessment is "Initial Assessment"
- if the assessment took place within 60 days of when the referral was first received/case open date
- if the assessment was completed in a hospital setting

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

This indicator is risk adjusted. Adjustment factors:

- Age  $\geq$  65
- 12 Months or less between Assessments
- Cognitive Problem CPS +1
- IADL difficulty
- Difficulty with locomotion
- Decision Making Difficulty
- Sadness
- Difficulty housework
- ADL Decline
- Poor Health
- Unstable Condition
- Hospital Stays

### Data Source

Home Care Reporting System (HCRS)

## **Data provided to HQO by**

Canadian Institute for Health Information (CIHI)

## **Reported Levels of comparability**

Time, Region

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

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

### **Comments Summary**

Data are based on information from mandatory Resident Assessment Instrument - Home Care (RAI-HC) assessments.

## Home care clients who felt involved in developing their home care plan

### Description

This is the percentage of publicly funded home care clients, of all ages, who strongly agreed, somewhat agreed, neither agreed nor disagreed, somewhat disagreed, or strongly disagreed that they felt involved in developing their home care plan.

### HQO reporting tool/product

On-Line Public Reporting, Public Reports (annual report, bulletins and theme reports)

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

Numerator divided by the denominator times 100

### Numerator

The number of respondents who responded, given a five point Likert scale ( strongly agreed, somewhat agreed, neither agreed nor disagreed, somewhat disagreed, or strongly disagreed) to the survey question: "Thinking about the planning of your care, please tell me whether you agree or disagree with the following statements: I felt involved in developing my plan".

### Denominator

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

Inclusions:

General Survey Inclusion Criteria:

All unique active or discharged clients receiving in-home services and discharged clients 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 Inclusion Criteria:

Excludes clients who received in-school service only

1. Nursing clinic services
2. Respite services
3. Medical supplies and equipment
4. End-of-life clients (SRC 95)
5. Clients not yet categorized (SRC 99)
6. In-home clients classified as out of region
7. Convalescent care clients

Other exclusions: Home care clients with hospital or death discharges; clients on hold in hospital; clients 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)

None



## **Data Source**

Client and Caregiver Experience Evaluation (CCEE) Survey

## **Data provided to HQO by**

Health Shared Services Ontario (HSSO)

## **Reported Levels of comparability**

Time, Region

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

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

### **Comments Summary**

The survey is intended to be an ongoing evaluation tool, with four sample waves conducted annually in each region. The survey population comprises individuals who have received publicly funded home care services. Both active and discharged clients are included in the survey population.

## Median wait time for a client between application for home care services or hospital discharge and first service

### Description

This is the median number of days that new clients of publicly funded home care, who are 19 years or older, waited for home care. It is measured from a request for services to their first home visit for those who applied in the community, or from hospital discharge to their first home visit for those who applied in the hospital. A lower number of days is better. Median is the midpoint of days waited; half the clients waited shorter times, half waited longer times. Services include nursing (administering medication and changing dressings), and personal support for complex needs (such as assistance with bathing and eating).

### HQO reporting tool/product

On-Line Public Reporting, Public Reports (annual report, bulletins and theme reports)

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Days

### Calculation Methods

The wait time is calculated as the number of days between two time points.

Calculation:

1. Select service date for the time period of interest
2. Identify client eligibility for home care
3. Determine if the application was from community or hospital using the Intake Referral Source
4. Calculate the number of days between application date and first non-case management service date
5. Calculate the median number of days between the application date and the first non-case management service date

### Numerator

Wait time, in days, between application/discharge and first service

Inclusion Criteria:

1. In-Home Program includes requested programs being In-home (01); in Adult Day Care (05); or in Supportive Housing (06)
2. Eligible clients: Assessment Outcome EQUAL TO (12) Eligible client admitted to in-home services; (15) Eligible for long-term care (LTC); or (16) Eligible in-home plus other services
3. Community clients (based on Step 3 of the Calculation below)

Exclusion Criteria:

4. Community referrals (School, LTC placement and other programs)
5. Home care episodes with calculated wait time less than 0 days or more than 365 days
6. Episodes with only a case management service.

### Denominator

NA (No denominator because value will be given as a median)

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

NA

### Data Source

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

### Data provided to HQO by

Health Shared Services Ontario (HSSO), Ministry of Health and Long-Term Care (MOHLTC)

## **Reported Levels of comparability**

Province, Other, Time, Region

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

Only applies to new home care clients. There could be wait lists in place in some LHINs which would affect the performance in a specific period since the clients will not be counted until the service is delivered. Each case is reported under the fiscal year and quarter in which the client received their first home care service.

Approximately 3% of records per fiscal year are dropped due to invalid (less than 0 days) or implausible (more than 365 days) wait times.

### **Comments Summary**

The term "client" is used in public reporting to denote an individual who received home care services. Other organizations may use the term "patient". Both terms refer to the same home care recipients.

# Home care clients who had an unplanned emergency department visit in 30 days after leaving hospital

## Description

This is the percentage of new publicly funded home care clients, of all ages, who had an unplanned emergency department visit in 30 days after leaving hospital. A lower percentage of clients is better. Timely follow-up after hospital discharge can help prevent the return of home care clients to the emergency department.

## 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 unscheduled emergency department visits by home care clients newly referred to home care services within 30 days of initial hospital discharge.

Exclusions:

1. Planned or scheduled emergency department visits
2. Transfers between emergency departments

### Denominator

The number of clients referred to home care from hospital who were discharged from hospital and received their first home care service visit within the time period of interest.

The first home care service visit corresponds to the service associated with the home care referral and does not include case management, placement services, respite or other.

Exclusions:

1. Not an Ontario resident
2. Invalid age (age < 0 years or age > 120 years )
3. If age >= 65 years and date of last contact > 5 years prior to hospitalization (e.g., invalid age, invalid ICES Key Number, non-Ontarians)
4. Missing home care service date
5. First home care service date precedes home care admission date
6. Not defined as a long-stay or acute/short-stay home care client

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

None

### Data Source

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

### Data provided to HQO by

Institute for Clinical Evaluative Sciences (ICES)

### Reported Levels of comparability

Province, Region

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

The emergency department visit may occur before or after the first home care service visit.

### **Comments Summary**

1) 30 days are subtracted from the end of each fiscal year (i.e., March) to allow for 30 day follow up during the last reported quarter. This is done for results by fiscal year and by fiscal quarter, resulting in the fourth fiscal quarter having smaller counts than the other three quarters. 2) Indicator is reported for new home care clients only (i.e. numerator counts referrals and referrals only occur for clients not already receiving home care).

## 8. Primary Care

**Percentages of people aged 16 and older who reported they were able to see their primary care provider, or another provider in their office, in either less than 2 days, 2-3 days, 4-7 days or 8 or more days, when they were sick or had a health concern.**

### Description

Percentage of people in Ontario aged 16 and older who reported that in the last 12 months when they were sick or were concerned that they had a health problem they were able to see their primary care provider (i.e. a family doctor, a general practitioner or GP, or nurse practitioner) or someone else in their office the same day or the next day (in less than 2 days)

The results can be reported for 2-3 days; 4-7 days and 8 or more days.

### HQO reporting tool/product

Public reporting

### DEFINITION AND SOURCE INFORMATION

#### Unit of Measurement

Percentage

#### Calculation Methods

Numerator divided by the denominator times 100

#### Numerator

Weighted number of respondents who answered to the following question and provided the number of days that they waited to see their primary care provider :

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

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

#### Denominator

Weighted number of respondents who reported having a primary care provider and answered "yes" to the following questions:

Not counting yearly check-ups or monitoring of an ongoing health issue, in the last 12 months did you want to see your [name type of provider] because you were sick or were concerned that you had a health problem?

- Yes
- No
- Don't know
- Refused

AND

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

Did you actually see your [fill fd\_type] or someone else in their office?

- Yes saw own doctor
- Yes saw someone else in office
- Saw both [fill fd\_type] and someone else (others)
- No
- Don't know
- Refused

Exclusion

Respondents who answered "don't know" or "refused" are excluded from analyses

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

None

### **Data Source**

Health Care Experience Survey (HCES)

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

Ministry of Health and Long-Term Care (MOHLTC)

### **Reported Levels of comparability**

International comparison, Province, Immigration, Language, Age, Income, Education, Rurality, Region, Sex

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

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

### **Comments Summary**

The results are weighted to account for the design characteristics of the survey and post-stratified by age and sex to reflect the Ontario population. In addition the LHIN and community weighting is applied. References 'fill fd\_type' in the question can mean a family doctor, GP, nurse practitioner, or anyone else the respondent said they get their primary care from. International and provincial comparisons are reported in Measuring Up report. Data source for international and provincial comparisons is Commonwealth Fund International Health Policy Survey of Adults, that has a similar question: The survey question in CMWF IHP is: "Last time you were sick or needed medical attention, how quickly could you get an appointment to see a doctor or a nurse? The CMWF survey population is adults aged 18 and older. A similar indicator is included in the primary care QIP as well. The data source for it is local data collection. The question advised in the QIP guidance document is: The last time you were sick or were concerned you had a health problem, how many days did it take from when you first tried to see your doctor or nurse practitioner to when you actually SAW him/her or someone else in their office? The education stratification analysis is done among those aged 25 and older. Urban/rural status is defined using Statistics Canada's Statistical Area Classification. Household income analysis does not consider the household composition.

## Continuity of primary care

### Description

This indicator measures the percentage of people with more than 3 primary care physician visits in the past 2 years who had:

- less than 50% of their primary care visits to the same primary care physician (low continuity)
- 50% - 74% of their primary care visits to the same primary care physician (medium continuity)
- More than 75% of their primary care visits to the same primary care physician (high continuity)

### HQO reporting tool/product

Public reporting

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

The calculation of this indicator starts at the individual person level by:

- defining how many primary care physician visits each person had in the past two years,
- looking at how many physicians contributed to these visits and
- identifying the percentage of visits to their most regular (highest number of visits) provider.

Later the results are aggregated and grouped into people who had:

- <50% of their visits to the same (regular) primary care physician (the provider with the highest number of visits) in the past two years.
- 50% - 74% visits to the same (regular) primary care physician
- 75%+ visits to the same (regular) primary care physician

### Numerator

Number of people with more than 3 visits in the past 2 year who had :

- <50% of their visits to the same primary care physician (the provider with the highest number of visits)
- 50% - 74% visits to the same primary care physician
- 75%+ visits to the same primary care physician

### Denominator

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

Inclusions:

All visits to primary care physicians obtained by specialty codes= 00, 05, 26 for the 2 year period preceding the index date for the following fee codes- A001, A003, A007,A903, E075, G212, G271, G372, G373, G365, G538, G539, G590, G591, K005, K013, K017, P004, A261, K267, K269, K130, K131, K132– core Primary Care codes

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

None

### Data Source

Ontario Health Insurance Plan (OHIP) Claims History Database, Registered Persons Database (RPDB), Corporate Provider Database (CPDB)

### Data provided to HQO by

Institute for Clinical Evaluative Sciences (ICES)

### Reported Levels of comparability



Time, Age, Income, Rurality, Region, Sex

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

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

### **Comments Summary**

The data shows the continuity with the primary care doctors only.

## Percentages of people aged 16 and older who said that the amount of time they waited to an appointment with their health care provider when sick was either “about right,” “somewhat long,” or “much too long.”

### Description

Percentages of people aged 16 and older who said that the length of time they waited to an appointment with their health care provider when sick was either “about right,” “somewhat long,” or “much too long.”

### HQO reporting tool/product

Public reporting

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

Numerator divided by denominator times 100

### Numerator

Weighted number of survey respondents who reported that the length of time they waited to an appointment with their health care provider when they were sick was either “about right,” “somewhat long,” or “much too long.”

Survey question:

Would you say the length of time it took between making the appointment and the actual visit was about right, somewhat too long, or much too long?

- about right
- somewhat too long
- much too long
- other (e.g., if they felt it was too short)
- don't know
- refused

### Denominator

Weighted number of survey respondents stated that they saw their primary care provider or someone else in the office when they were sick or were concerned that had a health problem.

Did you actually see your provider or someone else in their office?

- yes saw own doctor
- yes saw someone else in office
- saw both provider and someone else (and others)
- no
- don't know
- refused

Exclusion:

Respondents who answered "don't know" or "refused" to the above survey question

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

None

### Data Source

Health Care Experience Survey (HCES)

### Data provided to HQO by

Ministry of Health and Long-Term Care (MOHLTC)

## **Reported Levels of comparability**

Immigration, Language, Age, Income, Education, Rurality, Region, Sex

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

Only people aged 16 years and older can complete the survey. People living in institutions, in households without telephones, and those with invalid/missing household addresses in the Registered Persons Database (RPDB) are excluded. Respondents who were unable to speak English or French or were not healthy enough (physically or mentally) to complete the interview were not surveyed. Respondents that were away; had non-residential numbers; out-of-service numbers were not included as well.

### **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 regional and community weighting is applied. In the Measuring Up report the international and provincial comparisons are reported as well. The education stratification analysis is done among those aged 25 and older. Urban/rural status is defined using Statistics Canada's Statistical Area Classification. Household income analysis does not consider the household composition.

# Visits to emergency for conditions people thought could have been treated by their primary care provider

## Description

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

## HQO reporting tool/product

Public reporting

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

The indicator is calculated as numerator divided by denominator times 100

### Numerator

The weighted number of survey respondents who reported that the last time they went to the emergency department, it was for a condition that they thought could have been treated by their primary care provider if that provider had been available.

The last time you went to the emergency department, was it for a condition that you think could have been treated by your provider if he or she had been available?

- yes
- no
- don't know
- refused

### Denominator

Weighted number of survey respondents who reported having a primary care provider and visited emergency department because you were sick or for a health-related problem in the last 12 months.

Have you been to an emergency department because you were sick or for a health related problem in the last 12 months?

- yes
- no
- don't know
- refused

Exclusions:

- Respondents without a regular doctor/place of care and have not used the emergency department in the last 12 months.
- Respondents who answered "don't know" or "refused" to the above survey question

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

None

### Data Source

Health Care Experience Survey (HCES)

## **Data provided to HQO by**

Ministry of Health and Long-Term Care (MOHLTC)

## **Reported Levels of comparability**

International comparison, Province, Immigration, Language, Age, Income, Education, Rurality, Region, Sex

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

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

### **Comments Summary**

The results are weighted to account for the design characteristics of the survey and post-stratified by age and sex to reflect the Ontario population. After the regional and community weighting is applied. In the Measuring Up report the international and provincial comparisons are reported as well. The education stratification analysis is done among those aged 25 and older. Urban/rural status is defined using Statistics Canada's Statistical Area Classification. Household income analysis does not consider the household composition.

## **Percentage of people aged 16 and older who reported that getting access to care on an evening or weekend, without going to the emergency department, was very difficult or somewhat difficult**

### **Description**

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

### **HQO reporting tool/product**

Public reporting

## **DEFINITION AND SOURCE INFORMATION**

### **Unit of Measurement**

Percentage

### **Calculation Methods**

Numerator divided by the denominator times 100

### **Numerator**

Weighted number of respondents who answered "very difficult" or "somewhat difficult" to the following question:

The last time when you needed medical care in the evening, on a weekend, or on a public holiday, how easy or difficult was it to get care without going to the emergency department?

- Very easy
- Somewhat easy
- Somewhat difficult
- Very difficult
- Never tried to do this/never needed care
- Don't know
- Refused

### **Denominator**

Weighted total number of survey respondents who reported having a primary care provider

Exclusion:

Those who selected "never tried to do this/never needed care", "Don't know" or "refused" response options in the above/numerator question.

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

None

### **Data Source**

Health Care Experience Survey (HCES)

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

Ministry of Health and Long-Term Care (MOHLTC)

### **Reported Levels of comparability**

International comparison, Province, Age, Income, Education, Rurality, Region, Sex

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

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

### **Comments Summary**

Weighted to account for the design characteristics of the survey and post-stratified by age and sex to reflect the Ontario population. In addition, the LHIN and community weighting is applied. The data source for international and provincial comparisons is Commonwealth Fund International Health Policy Survey 2016 . Survey question in CMWF IHP: How easy or difficult is it to get medical care in the evenings, on weekends, or holidays without going to the hospital emergency department/Accident and Emergency Department/emergency room? The survey population is adults aged 18 and older. The education stratification analysis is done among those aged 25 and older. Urban/rural status is defined using Statistics Canada's Statistical Area Classification. Household income analysis does not consider the household composition.

## Percentage of people aged 16 and older who reported that they visited a walk-in clinic when sick in the past 12 months

### Description

Percentage of people aged 16 and older who reported that they visited a walk-in clinic when sick in the past 12 months

### HQO reporting tool/product

Public reporting

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

Numerator divided by denominator times 100

### Numerator

Weighted number of survey respondents that reported that they visited a walk-in clinic when sick in the past 12 months.

Have you been to a walk in clinic because you were sick or for a health related problem in the 12 months?

yes

no

don't know

refused

### Denominator

Weighted number of survey respondents

Excludes:

Respondents who answered "don't know" or "refused"

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

### 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, Language, Age, Income, Education, Rurality, Region, Sex

## OTHER RELEVANT INFORMATION

### Caveats and Limitations

Only people aged 16 years and older can complete the survey. People living in institutions, in households without telephones, and those with invalid/missing household addresses in the Registered Persons Database (RPDB) are excluded. Respondents who were unable to speak English or French or were not healthy enough (physically or mentally) to complete the interview were not surveyed. Respondents that were away; had non-residential numbers; out-of-service numbers were not included as well. The rationale behind walk in clinic use by patients is not available in data (i.e. could be for their convenience or inavailability of primary care provider).



## Comments Summary

The results are weighted to account for the design characteristics of the survey and post-stratified by age and sex to reflect the Ontario population. After the regional and community weighting is applied. In the Measuring Up report the international and provincial comparisons are reported as well. The education stratification analysis is done among those aged 25 and older. Urban/rural status is defined using Statistics Canada's Statistical Area Classification. Household income analysis does not consider the household composition.

# Percentage of screen-eligible Ontarians, 21-69 years old, who completed at least one Pap test in a 42-month period

## Description

Percentage of Ontario screen-eligible women, 21-69 years old, who have completed at least one Pap test in a 42 month period .

## HQO reporting tool/product

Public reporting

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

Numerator divided by the denominator times 100

### Numerator

Total number of Ontario screen-eligible women, 21-69 years old, who have completed at least one Pap test in a 42 month period

Identifying Pap tests:

- Pap tests were identified through CytoBase
- Pap tests were also identified using fee codes through OHIP:
  - E430A: add-on to a003, a004, a005, a006 when pap performed outside hospital
  - G365A: Periodic-pap smear
- E431A: When Papanicolaou smear is performed outside of hospital, to G394.
- G394A: Additional for follow-up of abnormal or inadequate smears
- L713A: Lab.med.-anat path,hist,cyt-cytol-gynaecological specimen
- L733A: Cervicovaginal specimen (monolayer cell methodology)
- L812A: Cervical vaginal specimens including all types of cellular abnormality, assessment of flora, and/or cytohormonal evaluation
  - Q678A: Gynaecology – pap smear – periodic – nurse practitioners
  - L643A: Lab Med - Microbiol - Microscopy - Smear Only, Gram/Pap Stain
  - All Pap tests in CytoBase were counted, including those with inadequate specimens
  - Each woman was counted once regardless of the number of Pap tests performed in a 42 month time frame

### Denominator

Total number of Ontario screen-eligible women, 21-69 years old in the reporting period

Exclusions

- Women diagnosed with an invasive cervical cancer prior to January 1st of the reporting period, e.g. January 1st 2014 for 2014-2016; prior diagnosis of cervical cancer was defined as: ICD-O-3 codes C53, a morphology indicative of cervical cancer, microscopically confirmed with a path report
- Women who had a colposcopy and/or treatment within 2 years prior to January 1st of the reporting period
- Colposcopy and/or treatment were identified through OHIP, using the following fee Codes:
  - Colposcopy
  - Z731 - Initial investigation of abnormal cytology of vulva and/or vagina or cervix under colposcopic technique with or without biopsy(ies) and/or endocervical curetting
  - Z787 - Follow-up colposcopy with biopsy(ies) with or without endocervical curetting
  - Z730 - Follow-up colposcopy without biopsy with or without endocervical curetting
  - Treatment
    - Z732 - Cryotherapy
    - Z724 - Electro

- Z766 - Electrosurgical Excision Procedure (LEEP)
- S744 - Cervix - cone biopsy - any technique, with or without D&C
- Z720 - Cervix Biopsy - with or without fulguration
- Z729 - Cryoconization, electroconization or CO2 laser therapy with or without curettage for premalignant lesion (dysplasia or carcinoma in-situ), out-patient procedure
- Women with a hysterectomy prior to January 1st of the reporting period
- Women with a hysterectomy were identified through OHIP, using the following fee codes:
  - E862A – When hysterectomy is performed laparoscopically, or with laparoscopic assistance
  - P042A – Obstetrics – labour – delivery – caesarean section including hysterectomy
  - Q140A – Exclusion code for enrolled female patients aged 35-70 with hysterectomy
  - S710A – Hysterectomy - with or without adnexa (unless otherwise specified) – with omentectomy for malignancy
  - S727A – Ovarian debulking for stage 2C, 3B or 4 ovarian cancer and may include hysterectomy
  - S757A – Hysterectomy – with or without adnexa (unless otherwise specified) – abdominal – total or subtotal
  - S758A – Hysterectomy - with or without adnexa (unless otherwise specified) – with anterior and posterior vaginal repair and including enterocele and/or vault prolapse repair when rendered
  - S759A - Hysterectomy - with or without adnexa (unless otherwise specified) – with anterior or posterior vaginal repair and including enterocele and/or vault prolapse repair when rendered
  - S762A - Hysterectomy - with or without adnexa (unless otherwise specified) – radical trachelectomy - excluding node dissection
  - S763A - Hysterectomy - with or without adnexa (unless otherwise specified) – radical (Wertheim or Schauta) - includes node dissection
  - S765A – Amputation of cervix
  - S766A- Cervix uteri - Exc - cervical stump – abdominal
  - S767A- Cervix uteri - exc - Cervical stump – vaginal
  - S816A - Hysterectomy - with or without adnexa (unless otherwise specified) - vaginal

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

Age-standardized rates using 2011 Canadian population

### **Data Source**

CytoBase, Ontario Health Insurance Plan (OHIP) Claims History Database, Registered Persons Database (RPDB), Ontario Cancer Registry (OCR)

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

Cancer Care Ontario (CCO)

### **Reported Levels of comparability**

Time, Immigration, Age, Income, Rurality, Region

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

• Pap test results are available in CytoBase only • CytoBase includes only Pap tests analyzed in community-based laboratories in Ontario; Pap tests analyzed in Ontario hospitals and Community Health Centres are not captured in CytoBase • It is difficult to determine whether a Pap test in CytoBase and/or OHIP was done for screening or diagnostic purposes, and therefore, some Pap tests included in these analyses may have been performed for diagnostic purposes . Income analysis is done for urban residents only

### **Comments Summary**

• Neighborhood percent immigrant was determined using PCCF+; this indicator divides DAs into three categories according to the percentage of immigrants: low immigrant ( $\leq 27\%$  immigrant population), moderate immigrant (27.1-51.8% immigrant population), and high immigrant ( $\geq 51.9\%$  immigrant population) • Neighbourhood income quintile was determined using PCCF+; this indicator was based on income quintiles

developed by Statistics Canada; income quintiles range from 1 to 5 (low to high) Rural or urban residence was determined using PCCF+. This indicator was based on whether individuals lived within a census metropolitan area (CMA), census agglomeration (CA) or Influenced Zones (MIZ) which takes into account population size, distance and commuting flow between rural and small towns and larger centres.

- o Urban: CMAs or CAs with a core population of 10,000 or more and 50+% of the population commute to a CMA/CA.
- o Rural: Areas with a core population of <10,000 and 30-49% of the population commute to an urban area (referred to as strong MIZ in Statistics Canada's classification)
- o Rural-Remote: Areas with a core population of <10,000 and 5-29% of the population commute to an urban area (referred to as Moderate MIZ in Statistics Canada's classification)
- o Rural-Very Remote: Areas with a core population of <10,000 and 0-4% of the population commute to an urban area, also includes non-urban parts of Territories (referred to as Weak MIZ, No MIZ, Territories outside CAs in Statistics Canada's classification)

## Percentage of screen-eligible Ontarians, 50–74 years old, who were overdue for screening for colorectal cancer

### Description

Percentage of Ontario screen-eligible individuals, 50-74 years old, who were overdue for colorectal screening in each calendar year. Overdue is defined as not having any of the following:

- Fecal Occult Blood Test (FOBT) in the last 2 years
- Colonoscopy in the last 10 years
- Flexible sigmoidoscopy in the last 10 years

A lower percentage is better.

### HQO reporting tool/product

Public reporting, Quality Improvement Plans (QIPs)

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

Numerator divided by the denominator times 100

### Numerator

Number of Ontario screen-eligible individuals, 50-74 years old, who were overdue for colorectal screening by the end of the calendar year as defined by not having any of the following\*:

Fecal Occult Blood Test (FOBT) in the last 2 years:

Program CCC FOBT was identified in LRT or OHIP:

- L179A ColonCancerCheck Fecal Occult Blood Testing

Non-program FOBT was identified using fee codes in OHIP

- L181A Lab Med - Biochem - Occult Blood

Colonoscopy in the last 10 years

- Identified using fee codes Z555A, Z491A- Z499A in OHIP or in CIRT

Flexible sigmoidoscopy in the last 10 years

- Identified using fee code Z580A in OHIP

Multiple claims with the same Health Insurance Number (HIN), service date and fee code were assumed to be a single claim

Each individual was counted once regardless of the number of tests performed

### Denominator

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

Inclusions:

- Ontario residents aged 50–74 at the index date (Index date was defined as Jan 1 of a given year)

Exclusions:

- Individuals with a missing or invalid regional data, date of birth, sex or postal code
- Individuals with an invasive colorectal cancer prior to Jan 1 of the calendar year of interest; prior diagnosis of colorectal cancer was defined as: ICD-O-3 codes C18.0, C18.2-C18.9, C19.9, C20.9, a morphology indicative of colorectal cancer, microscopically confirmed with a path report
- Individuals with a total colectomy prior to Jan 1 of the calendar year of interest
- Total colectomy was defined in OHIP by fee codes S169A, S170A, S172A

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

The 2011 Canadian population was used as the standard population for calculating direct age-standardized rates

### **Data Source**

Ontario Health Insurance Plan (OHIP) Claims History Database, PCCF+ version 5k6A, Registered Persons Database (RPDB), Colonoscopy Interim Reporting Tool (CIRT), Laboratory Reporting Tool (LRT), Ontario Cancer Registry (OCR)

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

Cancer Care Ontario (CCO)

### **Reported Levels of comparability**

Time, Age, Income, Rurality, Region, Sex

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

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

### **Comments Summary**

- Multiple claims with the same Health card Number and service date were assumed to be a single claim
- Each individual was counted once regardless of the number of tests performed
- Some methodology changes are made for 2015 analysis (flexible sigmoidoscopy timeframe is changed from five to ten years) Neighbourhood income quintiles for urban residents only. LHIN assignment was determined using PCCF+, version 6C; residential postal code was used to identify LHIN and individuals with unknown/missing LHINs were excluded from the analysis. This is a Quality Improvement Plan (QIP) additional indicator for 2018/19. Neighborhood percent immigrant was determined using PCCF+; this indicator divides DAs into three categories according to the percentage of immigrants: low immigrant ( $\leq 27\%$  immigrant population), moderate immigrant (27.1-51.8% immigrant population), and high immigrant ( $\geq 51.9\%$  immigrant population)
- Neighbourhood income quintile was determined using PCCF+; this indicator was based on income quintiles developed by Statistics Canada; income quintiles range from 1 to 5 (low to high) Rural or urban residence was determined using PCCF+. This indicator was based on whether individuals lived within a census metropolitan area (CMA), census agglomeration (CA) or Influenced Zones (MIZ) which takes into account population size, distance and commuting flow between rural and small towns and larger centres.
  - o Urban: CMAs or CAs with a core population of 10,000 or more and 50+% of the population commute to a CMA/CA.
  - o Rural: Areas with a core population of <10,000 and 30-49% of the population commute to an urban area (referred to as strong MIZ in Statistics Canada's classification)
  - o Rural-Remote: Areas with a core population of <10,000 and 5-29% of the population commute to an urban area (referred to as Moderate MIZ in Statistics Canada's classification)
  - o Rural-Very Remote: Areas with a core population of <10,000 and 0-4% of the population commute to an urban area, also includes non-urban parts of Territories (referred to as Weak MIZ, No MIZ, Territories outside CAs in Statistics Canada's classification)

## Percentage of people aged 16 and older who reported having a primary care provider.

### Description

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

### HQO reporting tool/product

Public reporting

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

Numerator divided by the denominator times 100

### Numerator

Weighted number of survey respondents who answered "yes" to the following questions:

1. Do you have a family doctor, a general practitioner or GP, or nurse practitioner that you see for regular check-ups, when you are sick and so on?

- Yes
- No
- Don't know
- Refused

### Denominator

Weighted number of respondents to the survey question:

Do you have a family doctor, a general practitioner or GP, or nurse practitioner that you see for regular check-ups, when you are sick and so on?

Exclusions:

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

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

None

### Data Source

Health Care Experience Survey (HCES)

### Data provided to HQO by

Ministry of Health and Long-Term Care (MOHLTC)

### Reported Levels of comparability

International comparison, Province, Immigration, Language, Age, Income, Education, Rurality, Region, Sex

## OTHER RELEVANT INFORMATION

### Caveats and Limitations

Only people aged 16 years and older can complete the survey. People living in institutions, in households without telephones, and those with invalid/missing household addresses in the Registered Persons Database

(RPDB) are excluded. Respondents who were unable to speak English or French or were not healthy enough (physically or mentally) to complete the interview were not surveyed.

### **Comments Summary**

The results are weighted to account for the design characteristics of the survey and post-stratified by age and sex to reflect the Ontario population. After the regional and community weighting is applied. In the Measuring Up report the international and provincial comparisons are reported as well. The data source for international and provincial comparisons is Commonwealth Fund International Health Policy Survey of Adults (among aged 18 and older). The results are based on the following survey questions in CMWF IHP: Is there one doctor you usually go to for your medical care? Is there one doctor's group, health center, or clinic you usually go to for most of your medical care? The education stratification analysis is done among those aged 25 and older. Urban/rural status is defined using Statistics Canada's Statistical Area Classification. Household income analysis does not consider the household composition.



## Percentage of people aged 16 or older who report that their primary care provider always or often, involved them in decisions about their care.

### Description

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

### HQO reporting tool/product

Public reporting

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

Numerator divided by the denominator times 100

### Numerator

Weighted number of respondents who answered "always" or "often" to the following question:  
When you see your [fill fd\_type] or someone else in their office, how often do they involve you as much as you want to be in decisions about your care and treatment?

- Always
- Often
- Sometimes
- Rarely
- Never
- It depends on who they see and/or what they are there for
- Not using/on any treatments/not applicable
- don't know
- refused

### Denominator

Weighted number of respondents who reported having a primary care provider

Exclusions:

- never saw family doctor or anyone in their office (from exp\_1 question)

From the question stated above:

- It depends on who they see and/or what they are there for
- Not using/on any treatments/not applicable
- don't know
- refused

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

None

### Data Source

Health Care Experience Survey (HCES)

### Data provided to HQO by

Ministry of Health and Long-Term Care (MOHLTC)

### Reported Levels of comparability

International comparison, Province, Immigration, Language, Age, Income, Education, Rurality, Region, Sex

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

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

### **Comments Summary**

Weighted to reflect the design characteristics of the study and post-stratified by age and sex to reflect the Ontario population. In addition, the LHIN and community weighting is applied. References 'fill fd\_type' in the questionnaire can mean a family doctor, GP, nurse practitioner, or anyone else the respondent said they get their primary care from. In Measuring up international and provincial comparisons are reported as well. The data source for international and provincial comparisons is Commonwealth Fund International Health Policy Survey of Adults. The survey question is "When you need care or treatment, how often does your regular doctor or medical staff you see involve you as much as you want to be in decisions about your care and treatment?". The CMWF survey population is adults aged 18 and older. A similar indicator is included in the primary care QIP as well. The data source for it is local data collection. The question advised in the QIP guidance document is: When you see your doctor or nurse practitioner, how often do they or someone else in the office involve you as much as you want to be in decisions about your care and treatment? The education stratification analysis is done among those aged 25 and older. Urban/rural status is defined using Statistics Canada's Statistical Area Classification. Household income analysis does not consider the household composition.

## 9. Palliative Care

**Percentage of people who had at least one home visit from a doctor during their last 30 days of life, among people who lived in the community during that period.**

### Description

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

### 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 specified in the denominator who had at least one physician home visit in their last 30-days of life.

- G511: Telephone services to patient receiving PC at home (max 2/week)
- B966: Travel premium for palliative care (billed with B998/B996)
- B998: Home visit for palliative care between 07:00 and 24:00 (Sat, Sun, and holidays) or
- B997: Home visit for palliative care between 24:00 and 07:00
- A901 (GP/FP house call)
- B990 Special visit to patient's home (weekday/daytime)
- B992 Special visit to patient's home (weekday/daytime), with sacrifice to office hours
- B993: Special visit to patient's home (Sat, Sun and holidays) between 07:00 - 24:00, non-elective
- B994: Special visit to patient's home, non-elective, (weekday/evenings)
- B996: Special visit to patient's home, night time, first patient of the night
- A900: Complex house call assessment (GP/FP)
- B960: Travel premium - Special visit to patient's home (weekday/daytime or elective home visit)
- B961: Travel premium - Special visit to patient's home (weekday/daytime), with sacrifice to office hours, non-elective
- B962: Travel premium - Special visit to patient's home, non-elective, (weekday/evenings)
- B963: Travel premium - Special visit to patient's home (Sat, Sun and holidays) between 07:00 - 24:00, non-elective
- B964: Travel premium - Special visit to patient's home, night time, first patient of the night
- B986: Travel premium - Geriatric home visit, weekdays with or without sacrifice to office hours, or Sat, Sun, holidays (07:00 - 24:00) and nights (00:00-07:00)
- B987: Geriatric home visit, nights (00:00-07:00)
- B988: Geriatric home visit, weekdays with or without sacrifice to office hours, or Sat, Sun, holidays (07:00 - 24:00)

The indicator can be reported for palliative specific visits as well

#### Denominator

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

#### Exclusions:

1. People who spent their last month in the hospital, LTC/CCC or NRS.
  - If the sum of the lengths of stay (considering episodes of care within acute inpatient stays) across all institutions during the last 30 days of life equals or exceeds 30 days, the patient is considered in an institution for the duration of interest, and is excluded.
  - Institution is defined as: Acute inpatient hospital, Complex Continuing care, Long term care home, Inpatient mental health, Inpatient rehab
2. DAD death records (discharge disposition = 07) that have MCC = 19 (Trauma, injury, poisoning, toxic effect of drugs)

NACRS death records (VISIT\_DISPOSITION = '10', '11') where any diagnosis code begins with one of the following: 'S', 'T', 'V', 'W', 'X', 'Y' (sudden deaths)

OMHRS death records (x90 = 2 or 3) where x90 = 2 (suicide)

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

None

#### **Data Source**

National Ambulatory Care Reporting System (NACRS), National Rehabilitation Reporting System (NRS), Ontario Health Insurance Plan (OHIP) Claims History Database, Registered Persons Database (RPDB), Postal Code Conversion File Plus (PCCF+), Continuing Care Reporting System (CCRS), Discharge Abstract Database (DAD)

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

Cancer Care Ontario (CCO)

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

Time, Age, Income, Rurality, Region, Sex

### **OTHER RELEVANT INFORMATION**

#### **Caveats and Limitations**

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

#### **Comments Summary**

This indicator aligns with the palliative care QS overarching and the OPCN system level indicators.

## Percentage of people who had at least one home care visit during their last 30 days of life, among people who lived in the community during that period.

### Description

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

- Any home care
- Palliative home care

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

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

Inclusions:

Include if the records specify that the decedent had any HCD services based on stated below variable SERVICE except 10 and 14 within 1 month

SERVICE = Type of service provided (home care service)

ID	Description
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
19	Primary Care Clinics
20	Pharmacy
21	Health Promotion Education and Symptom Management
22	Other Combined Clinics
23	Telehomecare
24	Primary Care
99	Other

2. Palliative home care (who had any of the codes listed below)  
Home Care Database (HCD):

Service\_RPC = 95: Service care goal of end of life; patient provided service under end of life designation OR

For any service record within the 1 month (30 days) , consider it palliative if:

SRC\_admission = 95: Service recipient code (i.e., classification) of end of life on admission OR

SRC\_discharge = 95: Service recipient code of end of life on discharge

### Denominator

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

Exclusions:

1. People who spent their last month in the hospital, LTC/CCC or NRS.
  - If the sum of the lengths of stay (considering episodes of care within acute inpatient stays) across all institutions during the last 30 days of life equals or exceeds 30 days, the patient is considered in an institution for the duration of interest, and is excluded.
  - Institution is defined as: Acute inpatient hospital, Complex Continuing care, Long term care home, Inpatient mental health, Inpatient rehab
2. DAD death records (discharge disposition = 07) that have MCC = 19 (Trauma, injury, poisoning, toxic effect of drugs)

NACRS death records (VISIT\_DISPOSITION = '10', '11') where any diagnosis code begins with one of the following: 'S', 'T', 'V', 'W', 'X', 'Y' (sudden deaths)

OMHRS death records (x90 = 2 or 3) where x90 = 2 (suicide)

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

None

### **Data Source**

Home Care Database (HCD), National Ambulatory Care Reporting System (NACRS), National Rehabilitation Reporting System (NRS), Ontario Mental Health Reporting System (OMHRS), Registered Persons Database (RPDB), Postal Code Conversion File Plus (PCCF+), Continuing Care Reporting System (CCRS), Discharge Abstract Database (DAD)

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

Cancer Care Ontario (CCO)

### **Reported Levels of comparability**

Time, Income, Rurality, Region, Sex

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

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

### **Comments Summary**

This indicator aligns with the palliative care QS overarching and the OPCN system level indicators.

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

## Description

This indicator measures the percentage of people who had at least one unplanned emergency department visit in their last 30 days of life among those who were not in hospital the entire month.

## HQO reporting tool/product

Public reporting

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

Numerator divided by the denominator times 100

### Numerator

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

Inclusions:

People who had unplanned ED visit in NACRS

Unscheduled/unplanned ED visits are identified by:

NACRS variables VISITTYPE = [1,2,4] or SCHEDEDVISIT = N

Exclusions:

Planned ED visits

### Denominator

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

Exclusions:

- DAD death records (discharge disposition = 07) that have MCC = 19 (Trauma, injury, poisoning, toxic effect of drugs)
- NACRS death records (VISIT\_DISPOSITION = '10', '11') where any diagnosis code begins with one of the following: 'S', 'T', 'V', 'W', 'X', 'Y' (sudden deaths)
- OMHRS death records (x90 = 2 or 3) where x90 = 2 (suicide)
- Decedents who were in hospital for the entire period of 1 month before death, as people who are in hospital during this time cannot have an unplanned ED visit).
- NOTE: for acute care (DAD) records, 'episodes of care' are considered, not individual discharge records.

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

None

### Data Source

National Ambulatory Care Reporting System (NACRS), Registered Persons Database (RPDB), Postal Code Conversion File Plus (PCCF+), Discharge Abstract Database (DAD)

### Data provided to HQO by

Cancer Care Ontario (CCO)

### Reported Levels of comparability

Time, Age, Income, Rurality, Region, Sex



## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

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

### **Comments Summary**

This indicator aligns with the palliative care QS overarching and the OPCN system level indicators.

# Percentage of people who died in Ontario reported by location of death

## Description

This indicator measures the proportion of deaths in:

- Hospital (inpatient, ED, CCC, rehab, inpatient mental health)
- Long-term care
- Community (home, residential hospices, retirement homes and assisted living homes)

## HQO reporting tool/product

Public reporting

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

Numerator divided by the denominator times 100

### Numerator

Number of people who died in each of the following settings:

- Hospital (inpatient, ED, CCC and rehab)
- Long-term care home
- Community (home, residential hospices, retirement homes and assisted living homes)

Inclusions:

- Hospital deaths are identified by the following codes:
  - Inpatient: DAD – SDS dischdisp = 07
  - ED: NACRS – Visit disposition = 10 or 11
  - CCC: CCRS discharge\_to\_facility\_type = 11
  - Rehab: NRS dreason=8
- Deaths in mental health beds (from OMHRS)

LTC

- CCRS-LTC discharge\_to\_facility\_type = 11

Community

- All other deaths not included in one of the above categories

Note:

Merge the administrative data death lists by health card number to compile a final administrative death list. If one health card number appears in multiple care settings (multiple death records), the following hierarchy based on the care intensity should be used to assign death setting: acute care, Emergency, CCC, Rehabilitation facilities, LTCs. There should only be one record per health card number in the final results.

### Denominator

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

Exclusions:

DAD death records (discharge disposition = 07) that have MCC = 19 (Trauma, injury, poisoning, toxic effect of drugs)

NACRS death records (VISIT\_DISPOSITION = '10', '11') where any diagnosis code begins with one of the following: 'S', 'T', 'V', 'W', 'X', 'Y' (sudden deaths)

OMHRS death records (x90 = 2 or 3) where x90 = 2 (suicide)

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

None

### **Data Source**

National Ambulatory Care Reporting System (NACRS), National Rehabilitation Reporting System (NRS), Ontario Mental Health Reporting System (OMHRS), Registered Persons Database (RPDB), Postal Code Conversion File Plus (PCCF+), Continuing Care Reporting System (CCRS), Discharge Abstract Database (DAD)

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

Cancer Care Ontario (CCO)

### **Reported Levels of comparability**

Time, Age, Income, Rurality, Region

## **OTHER RELEVANT INFORMATION**

### **Caveats and Limitations**

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

### **Comments Summary**

If there are multiple death records with different death date in each of the above administrative database, the last (i.e. most recent) death record for each unique health card number was selected. •If one health card number appears in multiple care settings, the following hierarchy based on the care intensity were used to assign death setting: acute care, Emergency, CCC, Rehabilitation facilities, LTC homes. There should only be one record per health card number. This indicator aligns with the palliative care QS overarching and the OPCN system level indicators.

# 10. Health Spending

## Total health spending per person

### Description

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

### HQO reporting tool/product

Public reporting

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Dollars per person

### Calculation Methods

Numerator divided by denominator.

### Numerator

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

### Denominator

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

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

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

### Data Source

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, Province, Time

## 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 2018 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.

## Health spending on drugs per person

### 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 is 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)  
Population Estimates, 2015, Statistics Canada

### Data provided to HQO by

Canadian Institute for Health Information (CIHI), Organisation for Economic Cooperation and Development (OECD)

### Reported Levels of comparability

International comparison, Province

## OTHER RELEVANT INFORMATION

### Caveats and Limitations

OECD member countries are asked to report health spending according to concepts presented in the OECD manual A System of Health Accounts (SHA). Countries are at varying stages of reporting total health spending according to the boundary of health care proposed in the SHA manual. That means data presented in OECD health Statistics 2018 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 people 18 and older who report having skipped dental care or dental checkups due to the cost

### Description

This indicator measures the percentage of survey respondents age 18 and older who report a time during the past 12 months when they skipped dental care or dental checkups because of the cost. A lower percentage is better.

### HQO reporting tool/product

Public reporting

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

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

### Numerator

Commonwealth Fund question Q1120A4:

Number of respondents who answered "yes" to Commonwealth Fund International Health Policy Survey question Q1120A4: during the past 12 months, was there a time when you skipped dental care or dental checkups because of the cost?

Response options: 1. Yes, 2. No, 3. Not applicable, 4. Not sure, 5. Decline to answer

### Denominator

All respondents aged 18 and over

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

This indicator is weighted by age-by-gender, educational attainment, phone-status (cell phone only or not), knowledge of official language and Canada's overall geographic distribution

### Data Source

Commonwealth Fund International Health Policy Survey

### Data provided to HQO by

The Commonwealth Fund

### Reported Levels of comparability

International comparison, Province, Age, Sex

## 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

The data for this indicator is collected from the Commonwealth Fund International Health Policy Survey. i.e. the data are not calculated by HQO



# Percentage of Ontarian, aged 12 to 64 years, who report having prescription medication insurance

## Description

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

## HQO reporting tool/product

Public reporting

## DEFINITION AND SOURCE INFORMATION

### Unit of Measurement

Percentage

### Calculation Methods

Numerator divided by the denominator times 100

### Numerator

Respondents who report having prescription medication insurance (INS\_Q005)

Exclusions:

1. Respondents age  $\geq 65$  years
2. Respondents who refused to answer

CCHS variable INS\_Q005:

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

- 1: Yes
- 2: No
- 8: RF
- 9: DK

### Denominator

All respondents aged 12 to 64

### 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, 60-69, 70+

### Data Source

Canadian Community Health Survey (CCHS)

### Data provided to HQO by

Statistics Canada

### Reported Levels of comparability

Province, Age, Income, Education, Rurality, Region, Sex

## OTHER RELEVANT INFORMATION

### Caveats and Limitations

Because of the significant changes to the survey methodology, Statistics Canada does not recommend making comparisons of the redesigned 2015 cycle of the CCHS with past cycles. As this indicator relies on self-reported data, the true rate might in fact be higher or lower. In addition, this survey excludes persons living on

reserves and other Aboriginal settlements in the provinces; full-time members of the Canadian Forces; the institutionalized population, children aged 12-17 that are living in foster care, and persons living in the Quebec health regions of Région du Nunavik and Région des Terres-Cries-de-la-Baie-James, which will affect the representativeness of the sample and underestimation of the true rates. Altogether, these exclusions represent less than 3% of the Canadian population aged 12 and over.

### **Comments Summary**

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