

# Mental Health and Addictions System Performance in Ontario

**2021 Scorecard**

**TECHNICAL APPENDIX**

February 2021



**Ontario Health**  
Mental Health and Addictions  
Centre of Excellence





# Mental Health and Addictions System Performance in Ontario: 2021 Scorecard

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**Technical Appendix**

MHAP Research Team

**February 2021**

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## Publication Information

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## How to cite this publication

Mental Health and Addictions Program Framework Research Team. *Mental Health and Addictions System Performance in Ontario: 2021 Scorecard. Technical Appendix*. Toronto, ON: ICES; 2021.

**ISBN: 978-1-926850-93-1** (Digital)

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## Acknowledgements

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### Data

Data were linked using unique encoded identifiers and analyzed at ICES.

Parts of this report are based on data and/or information compiled and provided by Service Ontario and the Canadian Institute for Health Information (CIHI). However, the analyses, conclusions, opinions and statements expressed in the report are those of the authors and not necessarily those of Service Ontario or CIHI.

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### Funding

Financial support for this project was provided by ICES, which is funded by an annual grant from the Ontario Ministry of Health (MOH). The opinions, results and conclusions included in the report are those of the authors and are independent from the funding sources. No endorsement by ICES or the MOH is intended or should be inferred.

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## About the Organizations Involved in This Report

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### ICES

ICES (formerly the Institute for Clinical Evaluative Sciences) is an independent, nonprofit research institute that uses population-based health information to produce knowledge on a broad range of health care issues. ICES' unbiased evidence helps measure health system performance, provides a clearer understanding of the shifting health care needs of Ontarians, and creates discussion of practical solutions for using scarce resources. ICES' knowledge is highly regarded in Canada and abroad, and is widely used by governments, hospitals, planners and practitioners to make decisions about care delivery and develop policy.

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### Mental Health and Addictions Centre of Excellence

The Mental Health and Addictions Centre of Excellence will support Ontario in building a comprehensive and connected mental health and addictions system.

The Centre has been embedded in Ontario Health, the government agency created to oversee health care delivery in Ontario, so that it can take what has worked to improve quality of care for other conditions and apply the same approaches to mental health and addictions in Ontario.

The Centre is working with partners across the health care system to develop programs and resources to support people who need care and their families.

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## Statement on Indigenous Mental Health Data

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In this scorecard, we do not present Indigenous-specific mental health data. ICES has relationships and data governance agreements with Indigenous organizations that acknowledge the inherent rights of First Nations, Métis and Inuit peoples to determine how data are used to tell their stories. As a result, ICES works directly with Indigenous partners and communities to ensure that indicators are contextualized in a way that supports the substantial work that Indigenous people are undertaking. This involves working in close partnership, respecting the diversity of Indigenous communities, integrating Indigenous perspectives and acknowledging the impacts of ongoing colonialism.



## Abbreviations

|                 |   |                  |   |              |  |
|-----------------|---|------------------|---|--------------|--|
| <b>CHC</b>      | Community Health Centre   | <b>ICD-10-CA</b> | International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Canada | <b>OHIP</b>  | Ontario Health Insurance Plan  |
| <b>DA</b>       | Dissemination Area  |                  |   | <b>OMHRS</b> | Ontario Mental Health Reporting System                               |
| <b>DAD</b>      | Discharge Abstract Database   | <b>IKN</b>       | ICES key number   | <b>ORGD</b>  | Office of the Registrar General – Deaths (Vital Statistics Database) |
| <b>DSM-IV</b>   | Diagnostic and Statistical Manual of Mental Disorders, 4th Edition            | <b>LHIN</b>      | Local Health Integration Network  | <b>PC</b>    | primary care   |
| <b>DSM-5</b>    | Diagnostic and Statistical Manual of Mental Disorders, 5th Edition            | <b>MHA</b>       | mental health and addictions  | <b>PCCF</b>  | Postal Code Conversion File  |
| <b>ED</b>       | emergency department  | <b>MHAP</b>      | Mental Health and Addictions Program Framework Research Team  | <b>POE</b>   | prenatal opioid exposure   |
| <b>FP/GP</b>    | family physician/general practitioner   | <b>NACRS</b>     | National Ambulatory Care Reporting System   | <b>RPDB</b>  | Registered Persons Database  |
| <b>ICD-8-CM</b> | International Classification of Diseases, 8th Revision, Clinical Modification | <b>NAS</b>       | neonatal abstinence syndrome  |              |  |
| <b>ICD-9-CM</b> | International Classification of Diseases, 9th Revision, Clinical Modification | <b>NMS</b>       | Narcotics Monitoring System   |              |  |
|                 |   | <b>OCD</b>       | obsessive-compulsive disorder   |              |  |

## Data Sources

### Community Health Centre (CHC)

The CHC data file includes client and encounter level details for all people who have received service from a physician, nurse practitioner or member of the interprofessional team. The client and encounter data included is a subset of standardized, coded data recorded by providers employed at Community Health Centres in Ontario.

### Discharge Abstract Database (DAD)

The DAD is compiled by the Canadian Institute for Health Information and contains administrative, clinical (diagnoses and procedures/interventions), demographic and administrative information for all admissions to acute care hospitals and rehabilitation, chronic and day surgery institutions in Ontario. At ICES, consecutive DAD records are linked together to form “episodes of care” among the hospitals to which patients have been transferred after their initial admission.

### Local Health Integration Network (LHIN)

The LHIN database contains information on LHIN information tables, Dissemination Areas, LHIN/sub-LHIN population estimates and projections, and postal code lookup tables.

### MOMBABY

The MOMBABY database, which is derived from the DAD, contains inpatient records of delivering mothers and their newborns in Ontario.

### National Ambulatory Care Reporting System (NACRS)

NACRS is compiled by the Canadian Institute for Health Information and contains administrative, clinical (diagnoses and procedures), demographic, and administrative information for all patient visits made to hospital-and community-based ambulatory care centres(emergency departments, day surgery units, hemodialysis units and cancer care clinics). At ICES, NACRS records are linked with other data sources (DAD, OMHRS) to identify transitions to other care settings, such as inpatient acute care or psychiatric care.

### Narcotics Monitoring System (NMS)

Data on dispensed prescriptions for narcotics, controlled substances and other monitored drugs.

### Office of the Registrar General – Deaths (ORGD) Vital Statistics Database

The ORGD Vital Statistics Database contains information on all deaths registered in Ontario beginning on January 1, 1990. Information on the causes of death (immediate, antecedent and underlying) recorded on the death certificate is captured. At ICES, a single cause of death variable is derived based on the underlying cause of death if available and, otherwise, the immediate cause of death using the ICD-9 coding system.

### Ontario Health Insurance Plan (OHIP)

The OHIP claims database contains information on inpatient and outpatient services provided to Ontario residents eligible for the province’s publicly funded health insurance system by fee-for-service health care practitioners (primarily physicians) and “shadow billings” for those paid through non-fee-for-service payment plans. The main data elements include patient and physician identifiers (encrypted), codes for service provided, date of service, associated diagnosis and fee paid.

## Data Sources

### Ontario Mental Health Reporting System (OMHRS)

OMHRS is compiled by the Canadian Institute for Health Information and contains administrative, clinical (diagnoses and procedures), demographic and administrative information for all admissions to adult designated inpatient mental health beds. This includes beds in general hospitals, provincial psychiatric facilities and specialty psychiatric facilities. Clinical assessment data is ascertained using the Resident Assessment Instrument for Mental Health (RAI-MH), but different amounts of information are collected using this instrument depending on the length of stay in the mental health bed. Multiple assessments may occur during the length of a mental health admission.

### Postal Code Conversion File (PCCF)

The PCCF database will link to postal codes within a given cohort and determine other census geographic identifiers such as, dissemination/enumeration area, census division, longitude/latitude, urban/rural flag and neighbourhood income quintile.

### Registered Persons Database (RPDB)

The RPDB provides basic demographic information (age, sex, location of residence, date of birth, and date of death for deceased individuals) for those issued an Ontario health insurance number. The RPDB also indicates the time periods for which an individual was eligible to receive publicly funded health insurance benefits and the best-known postal code for each registrant on July 1 of each year.

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# 1.0

Mental health and addictions indicators reported in this scorecard

**EXHIBIT 1.1** Mental health and addictions system performance indicators

| Quality Dimension Indicators   |  |  |   | Health Service Use Indicators   | Opioid-Related Indicator   |
|--|--|--|---|---|--|
| Safe   | Effective  | Timely   | Efficient   |   |  |
| <ul style="list-style-type: none"> <li>• Use of physical restraints during psychiatric hospitalizations</li> </ul> | <ul style="list-style-type: none"> <li>• Rates of emergency department visits for deliberate self-harm</li> <li>• Rates of death by suicide</li> </ul> | <ul style="list-style-type: none"> <li>• Rates of emergency department visits as first point of contact for mental health and addictions-related care</li> </ul> | <ul style="list-style-type: none"> <li>• Rates of outpatient visits within 7 days following a mental health and addictions-related hospital discharge</li> <li>• Rates of 30-day hospital readmission following a mental health and addictions-related hospital discharge</li> <li>• Rates of 30-day emergency department revisits following a mental health and addictions-related emergency department visit</li> </ul> | <ul style="list-style-type: none"> <li>• Rates of mental health and addictions-related outpatient visits</li> <li>• Rates at which individuals were seen by a psychiatrist, primary care provider or paediatrician for mental health and addictions care</li> <li>• Rates of mental health and addictions-related emergency department visits</li> <li>• Rates of mental health and addictions-related hospitalizations</li> <li>• Length of stay for psychiatric hospitalizations</li> </ul> | <ul style="list-style-type: none"> <li>• Rates of prenatal opioid exposure and neonatal abstinence syndrome</li> </ul> |

Note: Indicators will be assessed through five dimensions: age group, sex, diagnostic category, neighbourhood income and Local Health Integration Network.

# 2.0

## Indicator methodology

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## 2.1 General instructions for indicator creation

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### 2.1.1 General exclusion criteria for indicators

Unless otherwise stated, the following numerator and denominator exclusion criteria were consistent for all indicators (for additional indicator-specific exclusions, see **Section 2.2**):

- Age older than 105 years
- Non-residents of Ontario
- Individuals with an invalid health card number
- Missing sex information

For indicators that use the Ontario population as the denominator, additional exclusions were applied.

These include:

- Individuals who were born after or died before the midpoint of the calendar year (July 1)
- Individuals who were not eligible for OHIP at the midpoint of the calendar year
- Individuals whose date of last contact with the health care system was equal to or greater than 8 years from the midpoint of the calendar year

For indicators that used a general Ontario population denominator, exclusion criteria were applied to the numerator independently, as the denominator is a population estimate at the midpoint of the year (i.e., the numerator is not a subset of the population denominator).



## 2.1.2 Indicator stratifications

These variables are used for the stratification of indicators. Please note that stratifications may vary across indicators. For indicator-specific calculations, see [Section 2.2](#).

| Stratification                          | Definition  | Categories  |                   |            |               |                 |                        |                |                                     |               |                 |                          |                       |                |                    |                |
|---|---|---|-------------------|------------|---------------|-----------------|------------------------|----------------|-------------------------------------|---------------|-----------------|--------------------------|-----------------------|----------------|--------------------|----------------|
| <b>Age group<sup>1</sup></b>            | Age group cut-offs were defined in order to examine transitions between youth and adult services.   | <ul style="list-style-type: none"> <li>• 0–9 years</li> <li>• 10–13</li> <li>• 14–17</li> <li>• 18–21</li> <li>• 22–24</li> <li>• 25–44</li> <li>• 45–64</li> <li>• 65–84</li> <li>• 85–105</li> </ul>  |                   |            |               |                 |                        |                |                                     |               |                 |                          |                       |                |                    |                |
| <b>Sex</b>                              | Sex of a person – male or female – is determined based on demographic information available in the existing databases. 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 the sex assigned at birth.   | <ul style="list-style-type: none"> <li>• Male</li> <li>• Female</li> </ul>  |                   |            |               |                 |                        |                |                                     |               |                 |                          |                       |                |                    |                |
| <b>Diagnostic category, 2009–2016</b>   | Some indicators were stratified by diagnosis. These diagnostic groups do not add up to the overall Mental Health and Addictions (MHA) category, as only specific diagnostic groupings were examined, rather than all of the mental health diagnostic groupings contributing to the overall category. For a list of the diagnostic codes used to calculate indicators, see <a href="#">Section 2.3</a> .   | <ul style="list-style-type: none"> <li>• Substance-related disorders</li> <li>• Schizophrenia</li> <li>• Mood disorders</li> <li>• Anxiety disorders</li> <li>• Deliberate self-harm</li> </ul>   |                   |            |               |                 |                        |                |                                     |               |                 |                          |                       |                |                    |                |
| <b>Diagnostic category, 2017</b>        | Some indicators were stratified by diagnosis. These diagnostic groups do not add up to the overall MHA category as they are more specific. For more information on diagnostic codes and definitions, see <a href="#">Section 2.3</a> .  | <ul style="list-style-type: none"> <li>• Substance-related and addictive disorders</li> <li>• Schizophrenia spectrum and other psychotic disorders</li> <li>• Mood disorders</li> <li>• Anxiety disorders</li> <li>• Trauma and stressor-related disorders</li> <li>• Obsessive-compulsive and related disorders</li> <li>• Personality disorders</li> <li>• Deliberate self-harm</li> </ul>  |                   |            |               |                 |                        |                |                                     |               |                 |                          |                       |                |                    |                |
| <b>Neighbourhood income quintile</b>    | In the absence of individual-level income data, neighbourhood-based income was calculated according to methods developed by Statistics Canada. Individuals’ postal codes were first matched to Dissemination Areas (or DAs, the smallest census areas), where the average income per single-person equivalent (weighted for household size) was obtained from the Census of Canada for 2006 and 2016. DAs within each census metropolitan area were ranked and assigned to five groups, or quintiles, of approximately equal population. The corresponding neighbourhood income quintile of that DA was assigned to the individual. | <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>   |                   |            |               |                 |                        |                |                                     |               |                 |                          |                       |                |                    |                |
| <b>Local Health Integration Network</b> | Local Health Integration Networks (LHINs) are the regional health authorities responsible for administering public health care services funded by the Ontario Ministry of Health. <sup>2</sup> Individual postal codes were first mapped to census geography and then to a LHIN.  | <table border="0"> <tr> <td>1. Erie St. Clair</td> <td>8. Central</td> </tr> <tr> <td>2. South West</td> <td>9. Central East</td> </tr> <tr> <td>3. Waterloo Wellington</td> <td>10. South East</td> </tr> <tr> <td>4. Hamilton Niagara Haldimand Brant</td> <td>11. Champlain</td> </tr> <tr> <td>5. Central West</td> <td>12. North Simcoe Muskoka</td> </tr> <tr> <td>6. Mississauga Halton</td> <td>13. North East</td> </tr> <tr> <td>7. Toronto Central</td> <td>14. North West</td> </tr> </table> | 1. Erie St. Clair | 8. Central | 2. South West | 9. Central East | 3. Waterloo Wellington | 10. South East | 4. Hamilton Niagara Haldimand Brant | 11. Champlain | 5. Central West | 12. North Simcoe Muskoka | 6. Mississauga Halton | 13. North East | 7. Toronto Central | 14. North West |
| 1. Erie St. Clair                       | 8. Central  |   |                   |            |               |                 |                        |                |                                     |               |                 |                          |                       |                |                    |                |
| 2. South West                           | 9. Central East   |   |                   |            |               |                 |                        |                |                                     |               |                 |                          |                       |                |                    |                |
| 3. Waterloo Wellington                  | 10. South East  |   |                   |            |               |                 |                        |                |                                     |               |                 |                          |                       |                |                    |                |
| 4. Hamilton Niagara Haldimand Brant     | 11. Champlain   |   |                   |            |               |                 |                        |                |                                     |               |                 |                          |                       |                |                    |                |
| 5. Central West                         | 12. North Simcoe Muskoka  |   |                   |            |               |                 |                        |                |                                     |               |                 |                          |                       |                |                    |                |
| 6. Mississauga Halton                   | 13. North East  |   |                   |            |               |                 |                        |                |                                     |               |                 |                          |                       |                |                    |                |
| 7. Toronto Central                      | 14. North West  |   |                   |            |               |                 |                        |                |                                     |               |                 |                          |                       |                |                    |                |

Notes:  
 1. For the indicator Use of physical restraints during psychiatric hospitalizations, the age groups were 16–24, 25–44, 45–64, 65–84 and 85–105 years. For the indicator Rates of emergency department visits for deliberate self-harm, the age groups were 10–13, 14–17, 18–21, 25–44, 45–64, 65–84 and 85–105 years.  
 2. Ontario Ministry of Health, Ontario’s LHINs. Accessed on October 22, 2020 at <http://www.lhins.on.ca>.

## 2.1.3 Indicator rates that were calculated

| Method   | Calculation   | Categories  |
|--|---|---|
| Rate calculation                                   | Over time, for calendar years 2009–2017, where possible | <ul style="list-style-type: none"> <li>• Ontario</li> <li>• Age</li> <li>• Sex</li> <li>• Diagnostic category</li> </ul>  |
|  | Three-year average rate, for calendar years 2015–2017   | <ul style="list-style-type: none"> <li>• Ontario</li> <li>• Age</li> <li>• Sex</li> <li>• Diagnostic category</li> <li>• Neighbourhood income quintile</li> <li>• Local Health Integration Network</li> </ul>   |
| Standardization                                    | Direct standardization method                           | <ul style="list-style-type: none"> <li>• Ontario</li> <li>• Local Health Integration Network</li> </ul>   |
|  | Standard population                                     | 2011 Ontario population standardized by age and sex: <ul style="list-style-type: none"> <li>• Males: 0–9, 10–13, 14–17, 18–21, 22–24, 25–44, 45–64, 65–84, 85–105 years</li> <li>• Females: 0–9, 10–13, 14–17, 18–21, 22–24, 25–44, 45–64, 65–84, 85–105 years</li> </ul> |
| Calculation of three-year averages, where possible | Crude rate  | <ul style="list-style-type: none"> <li>• <math>(N1/D1 + N2/D2 + N3/D3) / 3</math><br/>where N1 = numerator for 2015 and D1 = denominator for 2015</li> </ul>  |
|  | Standardized rate                                       | <ul style="list-style-type: none"> <li>• <math>(N1/D1 + N2/D2 + N3/D3) / 3</math><br/>where N1 = <math>(SR1 + SR2 + SR3) / 3</math> and SR1 = standardized rate for 2015 and D1 = reference population denominator</li> </ul>   |

## 2.2 Indicator calculation

For a list of the diagnostic codes used to calculate indicators, see [Section 2.3](#).

### 2.2.1 Use of physical restraints during psychiatric hospitalizations

|                                  |   |
|----------------------------------|---|
| <b>Data sets</b>                 | DAD, OMHRS, RPDB, PCCF  |
| <b>Denominator</b>               | Number of mental health and addictions (MHA)-related hospitalizations among Ontario residents aged 16-105 years in calendar years 2009-2015   |
| <b>Numerator</b>                 | Any restraint use during the hospitalization, including mechanical restraints or chair to prevent rising or physical or manual restraint by staff   |
| <b>Exclusions</b>                | In addition to general exclusions outlined in Section 2.1.1, other exclusions include: <ul style="list-style-type: none"> <li>• Hospitalization episodes that do not contain a stay in a psychiatric bed (OMHRS)</li> <li>• Age &lt;16 years</li> </ul>   |
| <b>Stratifications</b>           | See indicator stratifications in Section 2.1.2  |
| <b>Index</b>                     | Hospital admission date   |
| <b>Additional specifications</b> | The MHA diagnosis was ascertained from the last discharge record of the episode where an MHA diagnosis was included.  |
| <b>Notes</b>                     | <ul style="list-style-type: none"> <li>• Restraint use ascertained using all records in the episode</li> <li>• Deliberate self-harm may be present as a secondary diagnosis in any of the other diagnostic types. Deliberate self-harm refers to residual deliberate self-harm, i.e., the presence of a self-harm diagnosis where the main reason for the hospital admission is non-MHA-related.</li> </ul> |
| <b>Limitations</b>               | General limitations of health administrative data include potential coding errors and lack of clinical detail.  |

To categorize the denominator into diagnoses:

| A   | B     | C       | D     | To obtain diagnostic category |
|-----|-------|---------|-------|-------------------------------|
| DAD | OMHRS | DAD     | OMHRS | Use discharge record from D   |
| DAD | OMHRS | DAD-MHA |       | Use discharge record from C   |
|     | OMHRS | DAD     |       | Use discharge record from B   |
|     | OMHRS |         |       | Use discharge record from B   |

To flag restraint use (numerator):

| Scenario  | Code    |
|---|---------|
| Missing at discharge, missing restraint use (no other non-missing assessments, only a discharge assessment)   | Missing |
| Missing at provisional, missing restraint use (no other non-missing assessments, only provisional/short-stay) | Missing |
| Missing at discharge, no restraint use from other assessments   | No      |
| Missing at discharge, yes restraint use from other assessments  | Yes     |
| Missing at provisional, no restraint use from other assessments   | No      |
| Missing at provisional, yes restraint use from other assessments  | Yes     |
| No missing information, no restraint use  | No      |
| No missing information, yes restraint use   | Yes     |

### 2.2.2. Rates of emergency department visits for deliberate self-harm

|   |  |
|---|--|
| <b>Data sets</b>                        | NACRS, RPDB, PCCF  |
| <b>Denominator</b>                      | Number of Ontario residents aged 10–105 years in calendar years 2009–2017  |
| <b>Numerator</b>                        | Annual number of emergency department (ED) visits for deliberate self-harm   |
| <b>Exclusions</b>                       | In addition to general exclusions (see Section 2.1.1), other exclusions include: <ul style="list-style-type: none"> <li>• Age &lt;10 years</li> <li>• Scheduled ED visits</li> <li>• Transfers from another ED</li> </ul>  |
| <b>Stratifications</b>                  | In addition to indicator stratifications in Section 2.1.2, also by method of self-harm: <ul style="list-style-type: none"> <li>• Self-poisoning only</li> <li>• Self-cutting only</li> <li>• Other</li> <li>• Multiple (more than one type of self-harm )</li> </ul>   |
| <b>Index</b>                            | Date of ED visit   |
| <b>Additional specifications/ notes</b> | <ul style="list-style-type: none"> <li>• The numerator includes suspect diagnoses, unscheduled ED visits, individuals who left without being seen, patients who were admitted, and the first ED visit in the case of ED to ED transfers.</li> <li>• The numerator was derived separately from the denominator.</li> <li>• Exclusions have been pre-applied to the denominator.</li> <li>• Exclusions for the numerator were applied at index.</li> <li>• Presented as rates, which includes multiple visits per person per year.</li> <li>• For all exhibits, rates of ED visits for deliberate self-harm are presented where this diagnosis was made as a primary, secondary or other reason for the ED visit.</li> </ul> |
| <b>Limitations</b>                      | <ul style="list-style-type: none"> <li>• Individuals who self-harm but do not present to the ED were not included.</li> <li>• Self-harm treated in a non-hospital setting cannot be assessed.</li> <li>• Whether the individual who self-harmed had suicidal or non-suicidal intent cannot be determined.</li> <li>• General limitations of health administrative data include potential coding errors and lack of clinical detail.</li> </ul>   |

### 2.2.3. Rates of death by suicide

|   |  |
|---|--|
| <b>Data sets</b>                        | ORGD, RPDB, PCCF   |
| <b>Denominator</b>                      | Number of Ontario residents aged 10–105 years in calendar years 2009–2015  |
| <b>Numerator</b>                        | Number of deaths caused by suicide   |
| <b>Exclusions</b>                       | In addition to general exclusions (see Section 2.1.1), also excluded was age <10 years   |
| <b>Stratifications</b>                  | In addition to indicator stratifications in Section 2.1.2, also by method of suicide: <ul style="list-style-type: none"> <li>• Poisoning</li> <li>• Cutting</li> <li>• Hanging</li> <li>• Drowning</li> <li>• Firearms</li> <li>• Jumping</li> <li>• Other</li> </ul>  |
| <b>Index</b>                            | Date of death (from ORGD)  |
| <b>Additional specifications/ notes</b> | <ul style="list-style-type: none"> <li>• The numerator was derived separately from the denominator.</li> <li>• Exclusions have been pre-applied to the denominator.</li> <li>• Exclusions for the numerator were applied at index.</li> </ul>  |
| <b>Limitations</b>                      | <ul style="list-style-type: none"> <li>• Cause of death has to be clearly suicide (potential for underreporting due to misclassification).</li> <li>• Due to data availability, method of suicide is reported to December 2012 only and deaths by suicide are reported to December 2015 only.</li> <li>• General limitations of health administrative data include potential coding errors and lack of clinical detail.</li> </ul> |

## 2.2.4. Rates of emergency department visits as first point of contact for mental health and addictions–related care

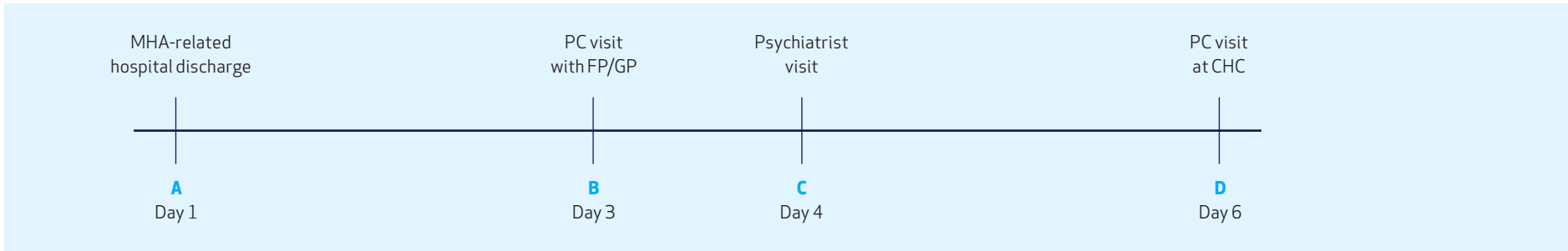
|  |  |
|--|--|
| <b>Data sets</b>                         | DAD, OMHRS, NACRS, OHIP, CHC, RPDB, PCCF   |
| <b>Denominator</b>                       | Number of unique Ontario residents aged 0–105 years with an incident (first in a calendar year) unscheduled mental health and addictions (MHA)–related emergency department (ED) visit in calendar years 2009–2017   |
| <b>Numerator (subset of denominator)</b> | Number of individuals in Ontario without an 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, primary care provider or pediatrician or an MHA-related ED visit (scheduled or unscheduled) or an MHA-related hospitalization in the 2 years preceding the index ED visit (see Section 2.3).   |
| <b>Exclusions</b>                        | In addition to general exclusions (see Section 2.1.1), also excluded was scheduled ED visits (from denominator only).  |
| <b>Stratifications</b>                   | See indicator stratifications (Section 2.1.2).   |
| <b>Index</b>                             | Date of ED visit   |
| <b>Additional specifications/ notes</b>  | <ul style="list-style-type: none"> <li>• Index ED visit includes individuals who left without being seen and those admitted to hospital.</li> <li>• Visits on the same day as the index are not considered prior contact.</li> <li>• Look-back can include scheduled ED visits.</li> <li>• Person-level indicator: one index visit per person.</li> <li>• Diagnostic categories represent the reason for the incident ED visit (i.e., the denominator).</li> <li>• Diagnoses-specific denominators do not add up to the overall denominator (see Section 2.3).</li> <li>• Deliberate self-harm may be present as a secondary diagnosis in any of the other diagnostic types. Deliberate self-harm refers to residual deliberate self-harm, i.e., the presence of a self-harm diagnosis where the main reason for the ED visit is non-MHA-related.</li> </ul> |
| <b>Limitations</b>                       | <ul style="list-style-type: none"> <li>• CHC data were not available for 2010/11 and after March 31, 2017.</li> <li>• Data did not capture most non-physician mental health and addictions services (i.e., psychologists, counsellors and social workers).</li> <li>• General limitations of health administrative data include potential coding errors and lack of clinical detail.</li> </ul>  |

## 2.2.5. Rates of outpatient visits within 7 days following a mental health and addictions-related hospital discharge

|  |  |
|--|--|
| <b>Data sets</b>                         | DAD, OMHRS, OHIP, CHC, RPDB, PCCF  |
| <b>Denominator</b>                       | Number of mental health and addictions (MHA)-related hospitalizations discharged alive among Ontario residents aged 0-105 years in calendar years 2009-2017  |
| <b>Numerator (subset of denominator)</b> | Outpatient visit within 7 days following hospital discharge <ul style="list-style-type: none"> <li>• Primary care providers, psychiatrists, paediatricians</li> </ul>  |
| <b>Exclusions</b>                        | In addition to general exclusions (see <a href="#">Section 2.1.1</a> ), also excluded was death/readmission in follow-up period without outcome  |
| <b>Stratifications</b>                   | <ul style="list-style-type: none"> <li>• In addition to indicator stratifications in <a href="#">Section 2.1.2</a>, also by: <ul style="list-style-type: none"> <li>- Any specialty</li> <li>- Primary care provider (OHIP family physician/general practitioner and CHC physician/nurse practitioner)</li> <li>- Psychiatrist</li> <li>- Paediatrician</li> </ul> </li> </ul>   |
| <b>Index</b>                             | <ul style="list-style-type: none"> <li>• Date to identify the denominator: Hospital discharge date (follow-up begins after discharge date)</li> <li>• Date used to identify the numerator: OHIP claim service date</li> </ul>  |
| <b>Additional specifications/ notes</b>  | <ul style="list-style-type: none"> <li>• Hospitalizations were constructed as episodes of care.</li> <li>• The final discharge of the hospital episode must have resulted in one of the following: <ul style="list-style-type: none"> <li>- a discharge home (with or without supportive services)</li> <li>- a transfer to a long-term or continuing care facility or to other ambulatory care, palliative care/hospice, addiction treatment centre, jail or social service agency</li> <li>- a sign-out against medical advice/absent without leave</li> </ul> </li> <li>• Index hospital discharges were restricted to calendar years, but the 7-day follow-up could cross over into the next calendar year. MHA diagnostic codes are not specified for outpatient visits (only for hospitalization).</li> <li>• Numerators are not mutually exclusive: a maximum of one numerator per specialty per follow-up per period.</li> <li>• Deliberate self-harm may be present as a secondary diagnosis in any of the other diagnostic types. Deliberate self-harm refers to residual deliberate self-harm, i.e., the presence of a self-harm diagnosis where the main reason for the hospital admission is non-MHA-related.</li> <li>• Diagnoses-specific denominators do not add up to the overall denominator (see <a href="#">Section 2.3</a>).</li> </ul> |
| <b>Limitations</b>                       | <ul style="list-style-type: none"> <li>• CHC data were not available for 2010/11 and after March 31, 2017.</li> <li>• Data did not capture most non-physician MHA services (i.e., psychologists, counsellors and social workers) that may have been provided post-discharge.</li> <li>• General limitations of health administrative data include potential coding errors and lack of clinical detail.</li> </ul>  |



For example, this diagram shows the events that would be considered in the numerator following an MHA-related hospital discharge:



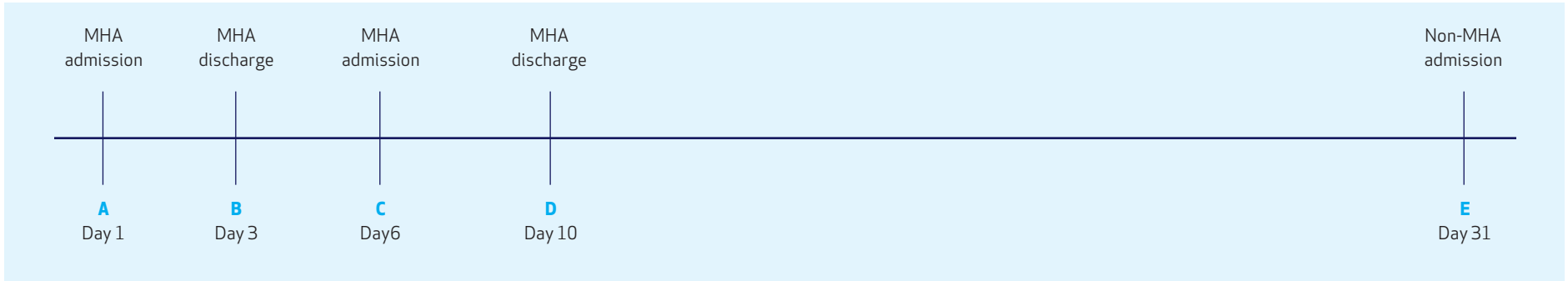
- Denominator includes MHA-related hospital discharge **A**.
- Numerator includes **B, C**.
  - A** index → **B** Follow-up visit with a PC provider within 7 days. Only the first visit counts toward follow-up (i.e., **B** but not **D**).
  - A** index → **C** Follow-up visit with a psychiatrist within 7 days.
  - A** index → No follow-up visit with a paediatrician within 7 days.
- This individual contributed in the calendar year to (independently):
  - Any specialty = 1/1; PC provider = 1/1; Psychiatrist = 1/1; Paediatrician = 0/1

Abbreviations: PC = primary care; FP/GP = family physician/general practitioner; CHC = community health centre

## 2.2.6. Rates of 30-day hospital readmission following a mental health and addictions-related hospital discharge

|  |   |
|--|---|
| <b>Data sets</b>                         | DAD, OMHRS, RPDB, PCCF  |
| <b>Denominator</b>                       | Number of mental health and addictions (MHA)-related hospitalizations that were discharged alive among Ontario residents aged 0–105 years in calendar years 2009–2017   |
| <b>Numerator (subset of denominator)</b> | Number of individuals in Ontario with a hospital admission for any MHA-related reason within 30 days following the index hospital discharge visit.  |
| <b>Exclusions</b>                        | In addition to general exclusions (see <a href="#">Section 2.1.1</a> ), also excluded were individuals who died without a readmission within 30 or fewer days of the index hospital discharge.  |
| <b>Stratifications</b>                   | See indicator stratifications ( <a href="#">Section 2.1.2</a> ).  |
| <b>Index</b>                             | Hospital discharge date   |
| <b>Additional specifications/ notes</b>  | <ul style="list-style-type: none"> <li>• Index discharges (i.e., the denominator) were restricted to calendar years but hospital readmission can cross over to the next calendar year, can be for a different MHA diagnosis than index, and does not have to result in a discharge alive.</li> <li>• Count only the first readmission per person per follow-up period.</li> <li>• Hospitalizations were constructed as episodes of care.</li> <li>• The final discharge of the hospital episode must result in one of the following:             <ul style="list-style-type: none"> <li>– a discharge home (with or without supportive services)</li> <li>– a transfer to a long-term or continuing care facility or to other ambulatory care, palliative care/hospice, addiction treatment centre, jail or social services agency</li> <li>– a sign-out against medical advice/absent without leave</li> </ul> </li> <li>• Diagnoses-specific denominators do not add up to the overall denominator (see <a href="#">Section 2.3</a>).</li> <li>• Deliberate self-harm may be present as a secondary diagnosis in any of the other diagnostic types. Deliberate self-harm refers to residual deliberate self-harm, i.e., the presence of a self-harm diagnosis where the main reason for the hospital admission is non-MHA-related.</li> </ul> |
| <b>Limitations</b>                       | General limitations of health administrative data include potential coding errors and lack of clinical detail.  |

For example, this diagram shows which events would be considered in the numerator following an MHA-related admission and which other admissions would be considered in the denominator:

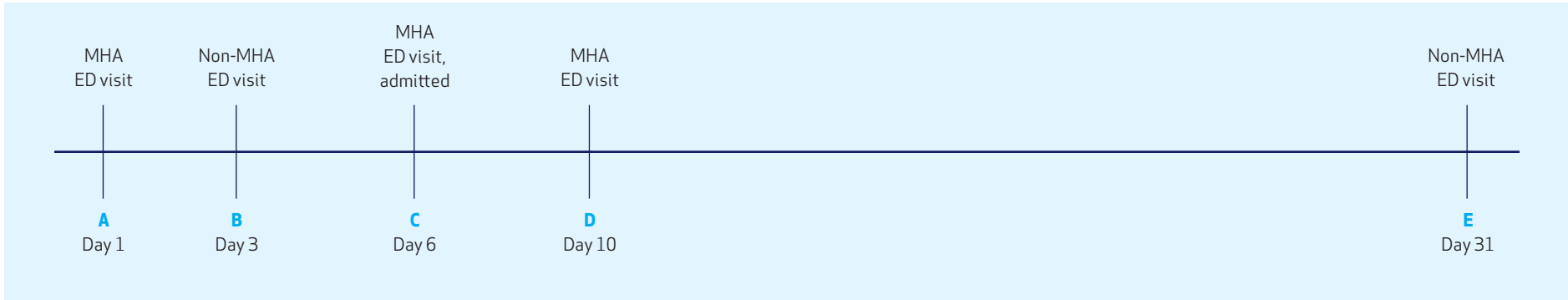


- Denominator includes **A—B** and **C—D** episodes.
- Numerator includes **C—D**.  
**A—B** index → **C—D** readmission within 30 days.  
 There is no MHA readmission after **C—D** discharge.
- This individual contributed denominator = 2, numerator = 1 in this calendar year.

## 2.2.7. Rates of 30-day emergency department revisits following a mental health and addictions-related emergency department visit

|  |  |
|--|--|
| <b>Data sets</b>                             | NACRS, RPDB, PCCF  |
| <b>Denominator</b>                           | Number of unscheduled mental health and addictions (MHA)-related emergency department (ED) visits that were discharged home among Ontario residents aged 0-105 years in calendar years 2009-2017   |
| <b>Numerator (subset of the denominator)</b> | Number of individuals in Ontario with an unscheduled ED visit for any MHA-related reason within 30 days following the index ED visit   |
| <b>Exclusions</b>                            | In addition to general exclusions (see Section 2.1.1), also excluded were: <ul style="list-style-type: none"> <li>• Left index ED visit without being seen</li> <li>• Died in the ED</li> <li>• Admitted to hospital</li> <li>• Death in follow-up period without outcome</li> </ul>   |
| <b>Stratifications</b>                       | See indicator stratifications (Section 2.1.2)  |
| <b>Index</b>                                 | <ul style="list-style-type: none"> <li>• Date of ED visit</li> </ul>   |
| <b>Additional specifications/ notes</b>      | <ul style="list-style-type: none"> <li>• Index ED visits were restricted to calendar years, but ED revisits can cross over to the next calendar year, result in a hospital admission, include those who left without being seen or be for a different MHA diagnosis than the index diagnosis.</li> <li>• Only the first revisit per person per follow-up period was counted.</li> <li>• For ED to ED transfers, the last record was kept, and transfers were not counted as ED revisits.</li> <li>• Diagnoses-specific denominators do not add up to the overall denominator (see Section 2.3).</li> <li>• Deliberate self-harm may be present as a secondary diagnosis in any of the other diagnostic types. Deliberate self-harm refers to residual deliberate self-harm, i.e., the presence of a self-harm diagnosis where the main reason for the ED visit is non-MHA-related.</li> <li>• Data did not capture non-physician mental health and addictions care that may have been provided in the period between ED discharge and repeat visit.</li> </ul> |
| <b>Limitations</b>                           | <ul style="list-style-type: none"> <li>• General limitations of health administrative data include potential coding errors and lack of clinical detail.</li> </ul>   |

For example, this diagram shows which events would be considered in the numerator following an MHA-related ED visit and which other visits would be considered in the denominator:



- Denominator includes **A, D**.  
**C** resulted in a hospital admission and thus is not in the denominator.
- Numerator includes **C**.  
**A** index → **C** revisit within 30 days, regardless of hospital admission.  
For **A** index, **D** is not the numerator (count only one numerator [the first applicable] per denominator follow-up).  
There is no MHA-related ED revisit after **D**.
- This individual contributed denominator = 2, numerator = 1 in this calendar year.

## 2.2.8 Rates of mental health and addictions-related outpatient visits

|                                  |  |
|----------------------------------|--|
| <b>Data sets</b>                 | OHIP, CHC, RPDB, PCCF  |
| <b>Denominator</b>               | Ontario population aged 0–105 years in the calendar years 2009–2017  |
| <b>Numerator</b>                 | <p>Number of mental health and addictions (MHA)–related outpatient visits from OHIP and CHC</p> <ul style="list-style-type: none"> <li>• Primary care providers, psychiatrists, paediatricians</li> </ul> <p>For a definition of MHA-related outpatient visits based on physician specialties and diagnostic codes, see <a href="#">Section 2.3</a>.</p>   |
| <b>Exclusions</b>                | General exclusions (see <a href="#">Section 2.1.1</a> )  |
| <b>Stratifications</b>           | <p>In addition to indicator stratifications in <a href="#">Section 2.1.2</a>, also by:</p> <ul style="list-style-type: none"> <li>• Any specialty</li> <li>• Primary care provider (OHIP family physician/general practitioner and CHC physician/nurse practitioner)</li> <li>• Psychiatrist</li> <li>• Paediatrician</li> </ul>   |
| <b>Index</b>                     | Date of OHIP or CHC service claim  |
| <b>Additional specifications</b> | <ul style="list-style-type: none"> <li>• The numerator was derived separately from the denominator.</li> <li>• Exclusions have been pre-applied to the denominator.</li> <li>• Exclusions for the numerator were applied at index.</li> </ul>  |
| <b>Notes</b>                     | <ul style="list-style-type: none"> <li>• When reporting on visits rather than unique individuals, the numerators for different physician specialties add up to “any specialty.”</li> <li>• A visit is, at most, one claim per patient per physician per service date (individuals may contribute more than one visit to various physician specialties in a calendar year)</li> </ul>   |
| <b>Limitations</b>               | <ul style="list-style-type: none"> <li>• CHC data were not available in 2010/11 and after March 31, 2017.</li> <li>• Rates may be undercounted because some specialists only “shadow bill” (i.e., they submit claims for services provided to patients that are funded through sources other than fee-for-service).</li> <li>• Data did not capture most non-physician mental health and addictions services.</li> <li>• General limitations of health administrative data include potential coding errors and lack of clinical detail.</li> </ul> |

### 2.2.9 Rates at which individuals were seen by a psychiatrist, primary care provider or paediatrician for mental health and addictions care

|   |   |
|---|---|
| <b>Data sets</b>                        | OHIP, CHC, RPDB, PCCF   |
| <b>Denominator</b>                      | Ontario population aged 0–105 years in the calendar years 2009–2017   |
| <b>Numerator</b>                        | Number of unique individuals who received MHA-related service from a care provider, including primary care providers, psychiatrists and paediatricians, in an outpatient setting,   |
| <b>Exclusions</b>                       | General exclusions (see Section 2.1.1)  |
| <b>Stratifications</b>                  | In addition to indicator stratifications in Section 2.1.2, also by: <ul style="list-style-type: none"> <li>• Any specialty</li> <li>• Primary care provider (OHIP family physician/general practitioner and CHC physician/nurse practitioner)</li> <li>• Psychiatrist</li> <li>• Paediatrician</li> </ul>   |
| <b>Index</b>                            | Date of OHIP or CHC service claim   |
| <b>Additional specifications/ notes</b> | <ul style="list-style-type: none"> <li>• The numerator was derived separately from the denominator.</li> <li>• Exclusions have been pre-applied to the denominator.</li> <li>• Exclusions for the numerator were applied at index.</li> <li>• If a patient had multiple OHIP claims, only the first claim for each physician specialty was considered (i.e., each patient was counted once per specialty).</li> </ul>   |
| <b>Limitations</b>                      | <ul style="list-style-type: none"> <li>• CHC data were not available in 2010/11 and after March 31, 2017.</li> <li>• Rates may be undercounted because some specialists only “shadow bill” (i.e., they submit claims for services provided to patients that are funded through sources other than fee-for-service).</li> <li>• Data did not capture most non-physician mental health and addictions services</li> <li>• General limitations of health administrative data include potential coding errors and lack of clinical detail.</li> </ul> |

## 2.2.10. Rates of mental health and addictions-related emergency department visits

|   |  |
|---|--|
| <b>Data sets</b>                        | NACRS, RPDB, PCCF  |
| <b>Denominator</b>                      | Ontario population aged 0–105 years in the calendar years 2009–2017  |
| <b>Numerator</b>                        | Number of MHA-related ED visits  |
| <b>Exclusions</b>                       | In addition to general exclusions (see <a href="#">Section 2.1.1</a> ), also excluded were: <ul style="list-style-type: none"> <li>• Scheduled ED visits</li> <li>• Transfers from another ED</li> </ul>   |
| <b>Stratifications</b>                  | See indicator stratifications ( <a href="#">Section 2.1.2</a> )  |
| <b>Index</b>                            | Date of ED visit   |
| <b>Additional specifications/ notes</b> | <ul style="list-style-type: none"> <li>• Includes suspect diagnoses, visits with admissions to hospital and those who left without being seen.</li> <li>• Removed duplicates and kept the first visit in the case of transfers.</li> <li>• The numerator was derived separately from the denominator.</li> <li>• Exclusions have been pre-applied to the denominator.</li> <li>• Exclusions for the numerator were applied at index.</li> <li>• Presented as rates, which includes multiple visits per person per year.</li> <li>• Emergency department visit episodes were constructed to avoid double counting visits that were transfers between multiple institutions and to better identify ED episode discharges.</li> <li>• Diagnoses-specific numerators do not add up to the overall numerator (see <a href="#">Section 2.3</a>).</li> <li>• Deliberate self-harm may be present as a secondary diagnosis in any of the other diagnostic types. Deliberate self-harm refers to residual deliberate self-harm, i.e., the presence of a self-harm diagnosis where the main reason for the ED visit is non-MHA-related.</li> </ul> |
| <b>Limitations</b>                      | General limitations of health administrative data include potential coding errors and lack of clinical detail.   |



### 2.2.11. Rates of mental health and addictions–related hospitalizations

|   |  |
|---|--|
| <b>Data sets</b>                        | DAD, OMHRS, RPDB, PCCF   |
| <b>Denominator</b>                      | Ontario population aged 0–105 years in the calendar years 2009–2017  |
| <b>Numerator</b>                        | Number of MHA-related hospitalizations   |
| <b>Exclusions</b>                       | General exclusions (see Section 2.1.1)   |
| <b>Stratifications</b>                  | See indicator stratifications (Section 2.1.2)  |
| <b>Index</b>                            | Hospital discharge date  |
| <b>Additional specifications/ notes</b> | <ul style="list-style-type: none"> <li>• Hospitalizations were constructed as episodes of care:                             <ul style="list-style-type: none"> <li>– A DAD-OMHRS episode of care is a series of inpatient admissions to acute care inpatient hospitals (records including DAD and OMHRS) that are linked because the patient was transferred from one hospital to another.</li> </ul> </li> <li>• The numerator was derived separately from the denominator.</li> <li>• Exclusions were pre-applied to the denominator.</li> <li>• Exclusions were applied to the numerator at index.</li> <li>• Diagnoses-specific numerators do not add up to the overall numerator.</li> <li>• Deliberate self-harm may be present as a secondary diagnosis in any of the other diagnostic types. Deliberate self-harm refers to residual deliberate self-harm, i.e., the presence of a self-harm diagnosis where the main reason for the hospital admission is non-MHA-related.</li> </ul> |
| <b>Limitations</b>                      | General limitations of health administrative data include potential coding errors and lack of clinical detail.   |

## 2.2.12. Length of stay for psychiatric hospitalizations

|   |  |
|---|--|
| <b>Data sets</b>                        | DAD, OMHRS, RPDB, PCCF   |
| <b>Denominator</b>                      | Not applicable   |
| <b>Numerator</b>                        | Median length of stay (in days) for mental health and addictions (MHA)-related hospitalizations among individuals aged 0-105 years in Ontario in the calendar years 2009-2017  |
| <b>Exclusions</b>                       | General exclusions (see Section 2.1.1)   |
| <b>Stratifications</b>                  | See indicator stratifications (Section 2.1.2)  |
| <b>Index</b>                            | Hospital discharge date  |
| <b>Additional specifications/ notes</b> | <ul style="list-style-type: none"> <li>• Hospitalizations were constructed as episodes of care:                             <ul style="list-style-type: none"> <li>- A DAD-OMHRS episode of care is a series of inpatient admissions to acute care inpatient hospitals (records including DAD and OMHRS) that are linked because the patient was transferred from one hospital to another.</li> </ul> </li> <li>• Diagnoses-specific lengths of stay do not add up to the overall length of stay.</li> <li>• Deliberate self-harm may be present as a secondary diagnosis in any of the other diagnostic types. Deliberate self-harm refers to residual deliberate self-harm, i.e., the presence of a self-harm diagnosis where the main reason for the hospitalization is non-MHA-related.</li> </ul> |
| <b>Limitations</b>                      | General limitations of health administrative data include potential coding errors and lack of clinical detail.   |

### 2.2.13. Rates of prenatal opioid exposure and neonatal abstinence syndrome

|   |   |
|---|---|
| <b>Data sets</b>                              | MOMBABY, RPDB, NMS, DAD, NACRS, OHIP, PCCF  |
| <b>Denominator</b>                            | Number of live births in Ontario between January 1, 2013, and December 31, 2017   |
| <b>Numerator</b>                              | <ul style="list-style-type: none"> <li>• For prenatal opioid exposure (POE): Total number of live births with POE</li> <li>• For neonatal abstinence syndrome (NAS): Total number of live births with NAS</li> </ul>  |
| <b>Exclusions</b>                             | <p>In addition to general exclusions outlined in Section 2.1.1, also excluded were:</p> <ul style="list-style-type: none"> <li>• For mother: Invalid maternal IKN; non-Ontario residents</li> <li>• Missing information on gestational weeks; stillbirths</li> </ul>  |
| <b>Stratifications</b>                        | In addition to indicator stratifications in Section 2.1.2, also by maternal age at first delivery   |
| <b>Index</b>                                  | Date of live birth  |
| <b>Definition of prenatal opioid exposure</b> | <ul style="list-style-type: none"> <li>• Time window to measure POE: From the date of conception to the date of live birth</li> <li>• Prenatal opioid exposure was defined as three hierarchical and mutually exclusive categories:                             <ul style="list-style-type: none"> <li>– Opioid maintenance therapy (OMT): Included prescription records for methadone and buprenorphine (indicated for OMT), and OHIP fee codes for opioid maintenance program (K682, K683, K684)</li> <li>– Opioids for pain control: Included prescription records for narcotics (including opioid agonists and partial agonists), and methadone and buprenorphine (indicated for pain control)</li> <li>– Other: Included either the maternal health care encounters for opioid addiction during pregnancy or NAS in babies without an associated maternal prescription use of opioids                                     <ul style="list-style-type: none"> <li>– This group likely includes at least mothers who used illicit opioids; however, it wouldn't capture all of them. For example, if the mother used heroin during pregnancy, but her infant didn't have NAS and she didn't seek health care use that suggested it, than she wouldn't be captured.</li> <li>– Some of the NAS cases may involve the use of substances other than opioids.</li> </ul> </li> </ul> </li> </ul> |
| <b>Note</b>                                   | <ul style="list-style-type: none"> <li>• The POE category "Opioids for pain control" includes only the chronic use of opioids analgesics, i.e., a prescription for opioid analgesics for &gt;10 days</li> </ul>   |
| <b>Limitations</b>                            | <ul style="list-style-type: none"> <li>• The MOMBABY database captures in-hospital births only</li> <li>• The NMS database does not have prescription information if identification other than an OHIP card is used, or in cases where physicians dispense Subutex (buprenorphine) directly to patients</li> <li>• It is not possible to identify a mother with illicit drug use unless she receives opioid-related medical care during pregnancy or her baby is diagnosed with NAS.</li> <li>• For 2013, some live births were not captured if the mother's conception was not covered by the period when NMS was available.</li> <li>• General limitations of health administrative data include potential coding errors and lack of clinical detail.</li> </ul>  |

## 2.3 Diagnostic groupings used in indicator calculation

### 2.3.1 Hospitalizations

#### DIAGNOSTIC CODES PRIOR TO 2017 (DSM-IV)

| Category  | ICD-9-CM code (OMHRS)  | ICD-10-CA (DAD)  |
|---|--|--|
| <b>Any mental health disorders and addictions</b> | Any diagnosis (including missing, except for 290.x, 294.x in primary diagnosis). If primary diagnosis missing and provisional diagnosis = 2, exclude                             | Primary diagnosis at discharge = F06–F99 (which excludes dementia) or secondary diagnosis fields = X60–X84, Y10–Y19, Y28 when primary diagnosis is not F06–F99 |
| <b>Substance-related disorders</b>                | 291.x (all 291 codes, excluding 291.82), 292.x (all 292 codes, excluding 292.85), 303.x (all 303 codes), 304.x (all 304 codes), 305.x (all 305 codes). Provisional diagnosis = 4 | F10 to F19, F55  |
| <b>Schizophrenia</b>                              | 295.x (all 295 codes), 297.x (all 297 codes), 298.x (all 298 codes). Provisional diagnosis = 5   | F20 (excluding F20.4), F22, F23, F24, F25, F28, F29, F53.1   |
| <b>Mood disorders</b>                             | 296.x (all 296 codes), 300.4x, 301.13. Provisional diagnosis = 6   | F30, F31, F32, F33, F34, F38, F39, F53.0   |
| <b>Anxiety disorders</b>                          | 300, 300.0x, 300.2x, 300.3x, 308.3x, 309.0x, 309.24, 309.28, 309.3x, 309.4x, 309.8x, 309.9x. Provisional diagnosis = 7, 15   | F40, F41, F42, F43, F48.8, F48.9, F93.1, F93.2   |
| <b>Deliberate self-harm</b>                       | Not applicable (DAD/NACRS only)  | Secondary diagnosis fields X60–X84, Y10–Y19, Y28 when primary diagnosis is not F06–F99   |

## DIAGNOSTIC CODES FROM 2017 ONWARD (DSM-5)

| Category  | ICD-9-CM code (OMHRS)   | ICD-10-CA  |
|---|---|--|
| <b>Any mental health disorders and addictions</b>           | Any diagnosis (including missing, except for 290.x, 294.x in primary diagnosis). If primary diagnosis missing and provisional diagnosis = 17, exclude | Primary diagnosis at discharge = F06–F99 (which excludes dementia) or secondary diagnosis fields = X60–X84, Y10–Y19, Y28 when primary diagnosis is not F06–F99 |
| <b>Substance-related and addictive disorders</b>            | 291.x (all 291 codes), 292.x (all 292 codes), 303.x (all 303 codes), 304.x (all 304 codes), 305.x, 312.31. Provisional diagnosis = 16                 | F10–F19, F55, F63.0  |
| <b>Schizophrenia spectrum and other psychotic disorders</b> | 293.81, 293.82, 295.x (all 295 codes), 297.x (all 297 codes), 298.x (all 298 codes). Provisional diagnosis = 2  | F06.0-2, F20, F22–F29, F53.1   |
| <b>Mood disorders</b>                                       | 293.83, 296.x (all 296 codes), 300.4x, 301.13, 311.x, 625.4. Provisional diagnosis = 3, 4   | F06.3, F30.x–F34.x, F38.x, F39.x, F53.0  |
| <b>Anxiety disorders</b>                                    | 293.84, 300, 300.0x, 300.2x, 309.21, 313.23. Provisional diagnosis = 5  | F06.4, F40, F41, F93.0-2, F94.0  |
| <b>Trauma and stressor-related disorders</b>                | 308.3x, 309, 309.0x, 309.24, 309.28, 309.3x, 309.4x, 309.81, 309.89, 309.9x, 313.89. Provisional diagnosis = 7  | F43.x, F94.1, F94.2  |
| <b>Obsessive-compulsive disorder and related disorders</b>  | 300.3x, 300.7x, 312.39, 698.4x. Provisional diagnosis = 6   | F42.x, F45.2, F63.3  |
| <b>Personality disorders</b>                                | 301, 301.0x, 301.2x, 301.4x, 301.5x, 301.6x, 301.7x, 301.81-3, 301.89, 301.9x 310.1. Provisional diagnosis = 18                                       | F07.0, F21, F60, F61, F62, F68, F69  |
| <b>Deliberate self-harm</b>                                 | Not applicable (DAD/NACRS only)   | Secondary diagnosis fields = X60–X84, Y10–Y19, Y28 when primary diagnosis is not F06–F99   |

Note: For more details on standard mental health and addictions diagnostic codes, see Section 2.3.4.

## 2.3.2 Emergency department visits

### DIAGNOSTIC CODES PRIOR TO 2017 (DSM-IV)

| Emergency department visits                             | ICD-10-CA (NACRS)  |
|---|--|
| <b>Overall, any mental health disorder or addiction</b> | Primary diagnosis field = F06–F99 (which excludes dementia), or secondary diagnoses fields = X60–X84, Y10–Y19, Y28 when primary diagnosis is not F06–F99 |
| <b>Substance-related disorders</b>                      | F10–F19, F55   |
| <b>Schizophrenia</b>                                    | F20 (excluding F20.4), F22, F23, F24, F25, F28, F29, F53.1   |
| <b>Mood disorders</b>                                   | F30, F31, F32, F33, F34, F38, F39, F53.0   |
| <b>Anxiety disorders</b>                                | F40, F41, F42, F43, F48.8, F48.9, F93.1, F93.2   |
| <b>Deliberate self-harm</b>                             | Secondary diagnosis fields = X60–X84, Y10–Y19, Y28 when primary diagnosis is not F06–F99   |

### DIAGNOSTIC CODES FROM 2017 ONWARD (DSM-5)

| Emergency department visits                                 | ICD-10-CA (NACRS)   |
|---|---|
| <b>Any mental health disorders and addictions</b>           | Primary diagnosis field = F06–F99 or secondary diagnosis fields = X60–X84, Y10–Y19, Y28 when DX10CODE1 is not F06–F99 |
| <b>Substance-related and addictive disorders</b>            | F10-19, F55, F63.0  |
| <b>Schizophrenia spectrum and other psychotic disorders</b> | F06.0-2, F20, F22–F29, F53.1  |
| <b>Mood disorders</b>                                       | F06.3, F30.x–F34.x, F38.x, F39.x, F53.0   |
| <b>Anxiety disorders</b>                                    | F06.4, F40, F41, F93.0-2, F94.0   |
| <b>Trauma and stressor-related disorders</b>                | F43.x, F94.1, F94.2   |
| <b>Obsessive-compulsive disorder and related disorders</b>  | F42.x, F45.2, F63.3   |
| <b>Personality disorders</b>                                | F07.0, F21, F60, F61, F62, F68, F69   |
| <b>Deliberate self-harm</b>                                 | Secondary diagnosis fields = X60–X84, Y10–Y19, Y28 when primary diagnosis is not F06–F99                              |

### 2.3.3. Outpatient visits

| Outpatient visits                     | OHIP algorithm   |
|---------------------------------------|--|
| <b>Any physician specialty</b>        | Psychiatrist, paediatrician or primary care provider, as defined below   |
| <b>Psychiatrist</b>                   | Any outpatient OHIP-funded visit/consultation held at a psychiatrist's office, patient's residence, long-term care facility, or virtually but not by telephone (exclude all laboratory fee codes G.x)  |
| <b>Paediatrician</b>                  | Any outpatient OHIP-funded visit/consultation held at a paediatrician's office, patient's residence, long-term care facility, or virtually but not by telephone, with a mental health diagnostic code listed below (exclude all laboratory fee codes G.x)<br>OR<br>Any OHIP-funded visit/consultation with a paediatrician held at an undefined location, with a mental health diagnostic code listed below and one of the following fee codes: <ul style="list-style-type: none"> <li>• K122 Developmental and/or behavioural care – individual developmental and/or behavioural care</li> <li>• K123 Developmental and/or behavioural care – family developmental and/or behavioural care</li> <li>• K704 Paediatric outpatient case conference</li> </ul> |
| <b>Primary care provider</b>          | Any OHIP-funded visit/consultation held at a GP/FP's office, patient's residence, long-term care facility, or virtually but not by telephone, a mental health diagnostic code listed below (exclude all laboratory fee codes G.x)<br>OR<br>Any CHC visit with an ICD-10-CA diagnostic code F06–F99 to identify MHA-related visits to physicians and nurse practitioners  |
| <b>Mental health diagnostic codes</b> | OHIP diagnostic codes: 291-292, 295-299, 300-304, 306-307, 309, 311, 313-315, 897-902, 904-906, 909  |

## 2.3.4 Standard mental health and addictions diagnostic codes

### DIAGNOSTIC CODES PRIOR TO 2017 (DSM-IV)

| Diagnostic category                | International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Canada (ICD-10-CA) codes  | Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (DSM-IV) codes   |
|------------------------------------|--|---|
| <b>Substance-related disorders</b> | F10: Mental and behavioural disorders due to use of alcohol<br>F11: Mental and behavioural disorders due to use of opioids<br>F12: Mental and behavioural disorders due to use of cannabinoids<br>F13: Mental and behavioural disorders due to use of sedatives or hypnotics<br>F14: Mental and behavioural disorders due to use of cocaine<br>F15: Mental and behavioural disorders due to use of other stimulants, including caffeine<br>F16: Mental and behavioural disorders due to use of hallucinogens<br>F17: Mental and behavioural disorders due to use of tobacco<br>F18: Mental and behavioural disorders due to use of volatile solvents<br>F19: Mental and behavioural disorders due to multiple drug use and use of other psychoactive substances<br>F55: Abuse of non-dependence-producing substances | 291.00: Alcohol – Intoxication or withdrawal delirium<br>291.10: Alcohol – Induced persisting amnesic disorder<br>292.20: Alcohol – Induced persisting dementia<br>291.30: Alcohol – Induced psychotic disorder, with hallucinations<br>291.50: Alcohol – Induced psychotic disorder, with delusions<br>291.81: Alcohol – Withdrawal<br>291.89: Alcohol – Induced anxiety/mood disorder or sexual dysfunction<br>291.90: Alcohol – Related disorder not otherwise specified (NOS)<br>292.00: Substance – Withdrawal<br>292.11: Substance – Induced psychotic disorder, with delusions<br>292.12: Substance – Induced psychotic disorder, with hallucinations<br>292.81: Substance – Intoxication or withdrawal delirium<br>292.82: Substance – Induced persisting dementia<br>292.83: Substance – Induced persisting amnesic disorder<br>292.84: Substance – Induced mood disorder<br>292.89: Substance – Intoxication or induced anxiety disorder/sexual dysfunction<br>292.90: Substance – Related NOS<br>303.00: Alcohol intoxication<br>303.90: Alcohol dependence<br>304.00: Opioid dependence<br>304.10: Sedative, hypnotic or anxiolytic dependence<br>304.20: Cocaine dependence<br>304.30: Cannabis dependence<br>304.40: Amphetamine dependence<br>304.50: Hallucinogen dependence<br>304.60: Inhalant or phencyclidine dependence<br>304.80: Polysubstance dependence<br>304.90: Other (or unknown) substance dependence<br>305.00: Alcohol abuse<br>305.10: Nicotine dependence<br>305.20: Cannabis abuse<br>305.30: Hallucinogen abuse<br>305.40: Sedative, hypnotic or anxiolytic abuse<br>305.50: Opioid abuse<br>305.60: Cocaine abuse<br>305.70: Amphetamine abuse<br>305.90: Other (or unknown) substance abuse |



| Diagnostic category      | International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Canada (ICD-10-CA) codes  | Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (DSM-IV) codes   |
|--------------------------|--|---|
| <b>Schizophrenia</b>     | F20: Schizophrenia (excluding F20.4: Post-schizophrenic depression)<br>F22: Persistent delusional disorders<br>F23: Acute and transient psychotic disorders<br>F24: Induced delusional disorder<br>F25: Schizoaffective disorders<br>F28: Other nonorganic psychotic disorders<br>F29: Unspecified nonorganic psychosis<br>F53.1: Severe mental and behavioural disorders associated with the puerperium, not elsewhere classified | 295.10: Schizophrenia, disorganized type<br>295.20: Schizophrenia, catatonic type<br>295.30: Schizophrenia, paranoid type<br>295.40: Schizophreniform disorder<br>295.60: Schizophrenia, residual type<br>295.70: Schizoaffective disorder<br>295.90: Schizophrenia, undifferentiated type<br>297.10: Delusional disorder<br>297.30: Shared psychotic disorder<br>298.80: Brief psychotic disorder<br>298.90: Psychotic disorder NOS  |
| <b>Mood disorders</b>    | F30: Manic episode<br>F31: Bipolar affective disorder<br>F32: Depressive episode<br>F33: Recurrent depressive disorder<br>F34: Persistent mood [affective] disorders<br>F38: Other mood [affective] disorders<br>F39: Unspecified mood [affective] disorder<br>F53.0: Mild mental and behavioural disorders associated with the puerperium, not elsewhere classified   | 296.0x: Bipolar I disorder, single manic episode<br>296.2x: Major depressive disorder, single episode<br>296.3x: Major depressive disorder, recurrent<br>296.4x: Bipolar I disorder, most recent episode manic<br>296.5x: Bipolar I disorder, most recent episode depressed<br>296.6x: Bipolar I disorder, most recent episode mixed<br>296.7: Bipolar I disorder, most recent episode unspecified<br>296.80: Bipolar disorder NOS<br>296.89: Bipolar II disorder<br>296.90: Mood disorder NOS<br>300.4: Dysthymic disorder<br>301.13: Cyclothymic disorder   |
| <b>Anxiety disorders</b> | F40: Phobic anxiety disorders<br>F41: Other anxiety disorders<br>F42: Obsessive-compulsive disorder<br>F43: Reaction to severe stress and adjustment disorders<br>F48.8: Other specified neurotic disorders<br>F48.9: Neurotic disorder, unspecified<br>F93.1: Phobic anxiety disorder of childhood<br>F93.2: Social anxiety disorder of childhood   | 300.00: Anxiety disorder NOS<br>300.01: Panic disorder without agoraphobia<br>300.02: Generalized anxiety disorder<br>300.21: Panic disorder with agoraphobia<br>300.22: Agoraphobia without history of panic disorder<br>300.23: Social phobia<br>300.29: Specific phobia<br>300.3: Obsessive-compulsive disorder<br>308.3: Acute stress disorder<br>309.0: Adjustment disorder with depressed mood<br>309.24: Adjustment disorder with anxiety<br>309.28: Adjustment disorder with mixed anxiety and depressed mood<br>309.3: Adjustment disorder with disturbance of conduct<br>309.4: Adjustment disorder with mixed disturbance of emotions and conduct<br>309.81: Posttraumatic stress disorder<br>309.9: Adjustment disorder unspecified |

| Diagnostic category         | International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Canada (ICD-10-CA) codes   | Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (DSM-IV) codes |
|-----------------------------|---|---|
| <b>Deliberate self-harm</b> | <p>X60: Intentional self-poisoning by and exposure to non-opioid analgesics, antipyretics and antirheumatics</p> <p>X61: Intentional self-poisoning by and exposure to antiepileptic, sedative-hypnotic, antiparkinsonism and psychotropic drugs, NOS</p> <p>X62: Intentional self-poisoning by and exposure to narcotics and psychodysleptics [hallucinogens], NOS</p> <p>X63: Intentional self-poisoning by and exposure to other drugs acting on the autonomic nervous system</p> <p>X64: Intentional self-poisoning by and exposure to other and unspecified drugs, medicaments and biological substances</p> <p>X65: Intentional self-poisoning by and exposure to alcohol</p> <p>X66: Intentional self-poisoning by and exposure to organic solvents and halogenated hydrocarbons and their vapours</p> <p>X67: Intentional self-poisoning by and exposure to other gases and vapours</p> <p>X68: Intentional self-poisoning by and exposure to pesticides</p> <p>X69: Intentional self-poisoning by and exposure to other and unspecified chemicals and noxious substances</p> <p>X70: Intentional self-harm by hanging, strangulation and suffocation</p> <p>X71: Intentional self-harm by drowning and submersion</p> <p>X72: Intentional self-harm by handgun discharge</p> <p>X73: Intentional self-harm by rifle, shotgun and larger firearm discharge</p> <p>X74: Intentional self-harm by other and unspecified firearm discharge</p> <p>X75: Intentional self-harm by explosive material</p> <p>X76: Intentional self-harm by smoke, fire and flames</p> <p>X77: Intentional self-harm by steam, hot vapours and hot objects</p> <p>X78: Intentional self-harm by sharp object</p> <p>X79: Intentional self-harm by blunt object</p> <p>X80: Intentional self-harm by jumping from a high place</p> <p>X81: Intentional self-harm by jumping or lying before a moving object</p> <p>X82: Intentional self-harm by crashing of motor vehicle</p> <p>X83: Intentional self-harm by other specified means</p> <p>X84: Intentional self-harm by unspecified means</p> <p>Y10: Poisoning by and exposure to non-opioid analgesics, antipyretics and antirheumatics, undetermined intent</p> <p>Y11: Poisoning by and exposure to antiepileptic, sedative-hypnotic, antiparkinsonism and psychotropic drugs, not elsewhere classified, undetermined intent</p> <p>Y12: Poisoning by and exposure to narcotics and psychodysleptics [hallucinogens], not elsewhere classified, undetermined intent</p> <p>Y13: Poisoning by and exposure to other drugs acting on the autonomic nervous system, undetermined intent</p> <p>Y14: Poisoning by and exposure to other and unspecified drugs, medicaments and biological substances, undetermined intent</p> <p>Y15: Poisoning by and exposure to alcohol, undetermined intent</p> <p>Y16: Poisoning by and exposure to organic solvents and halogenated hydrocarbons and their vapours, undetermined intent</p> <p>Y17: Poisoning by and exposure to other gases and vapours, undetermined intent</p> <p>Y18: Poisoning by and exposure to pesticides, undetermined intent</p> <p>Y19: Poisoning by and exposure to other and unspecified chemicals and noxious substances, undetermined intent</p> <p>Y28: Contact with sharp object, undetermined intent</p> | Not applicable  |

| Diagnostic category                  | International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Canada (ICD-10-CA) codes  | Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (DSM-IV) codes |
|--------------------------------------|--|---|
| Death caused by suicide (from ICD-9) | E950: Suicide and self-inflicted poisoning by solid/liquid substances<br>E951: Suicide and self-inflicted poisoning by gases in domestic use<br>E952: Suicide and self-inflicted poisoning by other gases and vapours<br>E953: Suicide and self-inflicted injury by hanging, strangulation and suffocation<br>E954: Suicide and self-inflicted injury by submersion (drowning)<br>E955: Suicide and self-inflicted injury firearms and explosives<br>E956: Suicide and self-inflicted injury by cutting and piercing instruments<br>E957: Suicide and self-inflicted injury jumping from a high place<br>E958: Suicide and self-inflicted injury by other and unspecified means<br>E959: Late effects of self-inflicted injury |   |

### DEFINITIONS OF CODES FROM 2017 ONWARD (BASED ON DSM-5)

| Diagnostic category   | International Statistical Classification of Diseases and Related Health Problems, 10th Revision (ICD-10), Canadian Enhancement codes   | Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5) codes <sup>1</sup>                               |
|---|--|---|
| <b>Substance-related and addictive disorders</b>            | F10: Mental and behavioural disorders due to use of alcohol<br>F11: Mental and behavioural disorders due to use of opioids<br>F12: Mental and behavioural disorders due to use of cannabinoids<br>F13: Mental and behavioural disorders due to use of sedatives or hypnotics<br>F14: Mental and behavioural disorders due to use of cocaine<br>F15: Mental and behavioural disorders due to use of other stimulants, including caffeine<br>F16: Mental and behavioural disorders due to use of hallucinogens<br>F17: Mental and behavioural disorders due to use of tobacco<br>F18: Mental and behavioural disorders due to use of volatile solvents<br>F19: Mental and behavioural disorders due to multiple drug use and use of other psychoactive substances<br>F55: Abuse of non-dependence-producing substances<br>F63.0: Pathological gambling | 291.x (all 291 codes), 292.x (all 292 codes), 303.x (all 303 codes), 304.x (all 304 codes), 305.x, 312.31. Provisional = 16 |
| <b>Schizophrenia spectrum and other psychotic disorders</b> | F06.0-2: Other mental disorders due to brain damage and dysfunction and to physical disease<br>F20: Schizophrenia (excluding F20.4: Post-schizophrenic depression)<br>F22: Persistent delusional disorders<br>F23: Acute and transient psychotic disorders<br>F24: Induced delusional disorder<br>F25: Schizoaffective disorders<br>F28: Other nonorganic psychotic disorders<br>F29: Unspecified nonorganic psychosis<br>F53.1: Severe mental and behavioural disorders associated with the puerperium, not elsewhere classified  | 293.81, 293.82, 295.x (all 295 codes), 297.x (all 297 codes), 298.x (all 298 codes). Provisional = 2                        |

<sup>1</sup> For descriptions of DSM-5 codes, see the *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition. Arlington, VA: American Psychiatric Association; 2013.

| Diagnostic category  | International Statistical Classification of Diseases and Related Health Problems, 10th Revision (ICD-10), Canadian Enhancement codes  | Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5) codes <sup>1</sup>         |
|--|---|---|
| <b>Mood disorders</b>                                      | F06.3: Organic mood disorders<br>F30: Manic episode<br>F31: Bipolar affective disorder<br>F32: Depressive episode<br>F33: Recurrent depressive disorder<br>F34: Persistent mood [affective] disorders<br>F38: Other mood [affective] disorders<br>F39: Unspecified mood [affective] disorder<br>F53.0: Mild mental and behavioural disorders associated with the puerperium, not elsewhere classified | 293.83, 296.x (all 296 codes), 300.4x, 301.13, 311.x, 625.4. Provisional = 3, 4                       |
| <b>Anxiety disorders</b>                                   | F06.4: Organic anxiety disorder<br>F40: Phobic anxiety disorders<br>F41: Other anxiety disorders<br>F93.0-2: Emotional disorders with onset specific to childhood<br>F94.0: Elective mutism   | 293.84, 300, 300.0x, 300.2x, 309.21, 313.23. Provisional = 5  |
| <b>Trauma and stressor-related disorders</b>               | F43: Reaction to severe stress and adjustment disorders<br>F94.1: Reactive attachment disorder of childhood<br>F94.2: Disinhibited attachment disorder of childhood   | 308.3x, 309, 309.0x, 309.24, 309.28, 309.3x, 309.4x, 309.81, 309.89, 309.9x, 313.89. Provisional = 7  |
| <b>Obsessive-compulsive disorder and related disorders</b> | F42: Obsessive-compulsive disorder<br>F45.2: Hypochondriacal disorder<br>F63.3: Trichotillomania  | 300.3x, 300.7x, 312.39, 698.4x. Provisional = 6   |
| <b>Personality disorders</b>                               | F07.0: Organic personality disorder<br>F21: Schizotypal disorder<br>F60: Specific personality disorders<br>F61: Mixed and other personality disorders<br>F62: Enduring personality changes, not attributable to brain damage and disease<br>F68: Other disorders of adult personality and behaviour<br>F69: Unspecified disorder of adult personality and behaviour                                   | 301, 301.0x, 301.2x, 301.4x, 301.5x, 301.6x, 301.7x, 301.81-3, 301.89, 301.9x 310.1. Provisional = 18 |

| Diagnostic category         | International Statistical Classification of Diseases and Related Health Problems, 10th Revision (ICD-10), Canadian Enhancement codes   | Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5) codes <sup>1</sup> |
|-----------------------------|--|---|
| <b>Deliberate self-harm</b> | <p>X60: Intentional self-poisoning by and exposure to non-opioid analgesics, antipyretics and antirheumatics</p> <p>X61: Intentional self-poisoning by and exposure to antiepileptic, sedative-hypnotic, antiparkinsonism and psychotropic drugs, NOS</p> <p>X62: Intentional self-poisoning by and exposure to narcotics and psychodysleptics [hallucinogens], NOS</p> <p>X63: Intentional self-poisoning by and exposure to other drugs acting on the autonomic nervous system</p> <p>X64: Intentional self-poisoning by and exposure to other and unspecified drugs, medicaments and biological substances</p> <p>X65: Intentional self-poisoning by and exposure to alcohol</p> <p>X66: Intentional self-poisoning by and exposure to organic solvents and halogenated hydrocarbons and their vapours</p> <p>X67: Intentional self-poisoning by and exposure to other gases and vapours</p> <p>X68: Intentional self-poisoning by and exposure to pesticides</p> <p>X69: Intentional self-poisoning by and exposure to other and unspecified chemicals and noxious substances</p> <p>X70: Intentional self-harm by hanging, strangulation and suffocation</p> <p>X71: Intentional self-harm by drowning and submersion</p> <p>X72: Intentional self-harm by handgun discharge</p> <p>X73: Intentional self-harm by rifle, shotgun and larger firearm discharge</p> <p>X74: Intentional self-harm by other and unspecified firearm discharge</p> <p>X75: Intentional self-harm by explosive material</p> <p>X76: Intentional self-harm by smoke, fire and flames</p> <p>X77: Intentional self-harm by steam, hot vapours and hot objects</p> <p>X78: Intentional self-harm by sharp object</p> <p>X79: Intentional self-harm by blunt object</p> <p>X80: Intentional self-harm by jumping from a high place</p> <p>X81: Intentional self-harm by jumping or lying before a moving object</p> <p>X82: Intentional self-harm by crashing of motor vehicle</p> <p>X83: Intentional self-harm by other specified means</p> <p>X84: Intentional self-harm by unspecified means</p> <p>Y11: Poisoning by and exposure to antiepileptic, sedative-hypnotic, antiparkinsonism and psychotropic drugs, not elsewhere classified, undetermined intent</p> <p>Y12: Poisoning by and exposure to narcotics and psychodysleptics [hallucinogens], not elsewhere classified, undetermined intent</p> <p>Y13: Poisoning by and exposure to other drugs acting on the autonomic nervous system, undetermined intent</p> | Not applicable  |

| Diagnostic category         | International Statistical Classification of Diseases and Related Health Problems, 10th Revision (ICD-10), Canadian Enhancement codes   | Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5) codes |
|-----------------------------|--|--|
| <b>Deliberate self-harm</b> | Y14: Poisoning by and exposure to other and unspecified drugs, medicaments and biological substances, undetermined intent<br>Y15: Poisoning by and exposure to alcohol, undetermined intent<br>Y16: Poisoning by and exposure to organic solvents and halogenated hydrocarbons and their vapours, undetermined intent<br>Y17: Poisoning by and exposure to other gases and vapours, undetermined intent<br>Y18: Poisoning by and exposure to pesticides, undetermined intent<br>Y19: Poisoning by and exposure to other and unspecified chemicals and noxious substances, undetermined intent<br>Y28: Contact with sharp object, undetermined intent | Not applicable   |

### ICD-9-CM (OMHRS) AND ICD-10-CA DIAGNOSTIC CODES

| Category  | International Classification of Diseases, Ninth Revision, Clinical Modification, (ICD-9-CM code) – OMHRS                                    | International Statistical Classification of Diseases and Health Related Problems, Tenth Revision, Canada (ICD-10-CA)         |
|---|---|--|
| <b>Any mental health and addictions</b>                     | Any diagnosis (including missing, except for 290.x, 294.x in primary diagnosis). If primary diagnosis missing and provisional = 17, exclude | Primary diagnosis field = F06–F99 or secondary diagnosis field = X60–X84, Y10–Y19, Y28 when primary diagnosis is not F06–F99 |
| <b>Substance-related and addictive disorders</b>            | 291.x (all 291 codes), 292.x (all 292 codes), 303.x (all 303 codes), 304.x (all 304 codes), 305.x, 312.31. Provisional = 16                 | F10–F19, F55, F63.0  |
| <b>Schizophrenia spectrum and other psychotic disorders</b> | 293.81/82, 295.x (all 295 codes), 297.x (all 297 codes), 298.x (all 298 codes). Provisional = 2   | F06.0-2, F20, F22–F29, F53.1   |
| <b>Mood disorders</b>                                       | 293.83, 296.x (all 296 codes), 300.4x, 301.13, 311.x, 625.4. Provisional = 3, 4   | F06.3, F30.x–F34.x, F38.x, F39.x, F53.0  |
| <b>Anxiety disorders</b>                                    | 293.84, 300, 300.0x, 300.2x, 309.21, 313.23. Provisional = 5  | F06.4, F40, F41, F93.0-2, F94.0  |
| <b>Trauma and stressor-related disorders</b>                | 308.3x, 309, 309.0x, 309.24, 309.28, 309.3x, 309.4x, 309.81, 309.89, 309.9x, 313.89. Provisional = 7  | F43.x, F94.1, F94.2  |
| <b>Obsessive-compulsive disorder and related disorders</b>  | 300.3x, 300.7x, 312.39, 698.4x. Provisional = 6   | F42.x, F45.2, F63.3  |
| <b>Personality disorders</b>                                | 301, 301.0x, 301.2x, 301.4x, 301.5x, 301.6x, 301.7x, 301.81-3, 301.89, 301.9x 310.1. Provisional = 18                                       | F07.0, F21, F60, F61, F62, F68, F69  |
| <b>Deliberate self-harm</b>                                 | Not applicable (DAD/NACRS only)   | Secondary diagnosis = X60–X84, Y10–Y19, Y28 when primary diagnosis is not F06–F99  |

**OHIP DIAGNOSTIC CODES (BASED ON ICD-8-CM)**

| Category                                       | International Classification of Diseases, Eighth Revision, Clinical Modification (ICD-8-CM) code  |
|--|---|
| <b>Any mental health disorder or addiction</b> | <p>Psychotic disorders</p> <ul style="list-style-type: none"> <li>295: Schizophrenia</li> <li>296: Manic-depressive psychoses, involuntal melancholia</li> <li>297: Other paranoid states</li> <li>298: Other psychoses</li> </ul> <p>Non-psychotic disorders</p> <ul style="list-style-type: none"> <li>300: Anxiety neurosis, hysteria, neurasthenia, obsessive-compulsive neurosis, reactive depression</li> <li>301: Personality disorders</li> <li>302: Sexual deviations</li> <li>306: Psychosomatic illness</li> <li>309: Adjustment reaction</li> <li>311: Depressive disorder</li> </ul> <p>Substance use disorders</p> <ul style="list-style-type: none"> <li>303: Alcoholism</li> <li>304: Drug dependence</li> </ul> <p>Social problems</p> <ul style="list-style-type: none"> <li>897: Economic problems</li> <li>898: Marital difficulties</li> <li>899: Parent-child problems</li> <li>900: Problems with aged parents or in-laws</li> <li>901: Family disruption/divorce</li> <li>902: Education problems</li> <li>904: Social maladjustment</li> <li>905: Occupational problems</li> <li>906: Legal problems</li> <li>909: Other problems of social adjustment</li> </ul> <p>Other</p> <ul style="list-style-type: none"> <li>291: Alcoholic psychosis, delirium tremens, Korsakov's psychosis</li> <li>292: Drug psychosis</li> <li>299: Childhood psychoses (e.g., autism)</li> <li>307: Habit spasms, tics, stuttering, tension headaches, anorexia nervosa, sleep disorders</li> <li>313: Behaviour disorders of childhood and adolescence</li> <li>314: Hyperkinetic syndrome of childhood</li> <li>315: Specified delays in development (e.g., dyslexia, dyslalia, motor retardation)</li> </ul> |

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