
INTERIM REPORT
October 2021

CHIEFS OF ONTARIO
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Data were linked using unique encoded identifiers and analyzed at ICES. Parts of the report are based on data and/or information compiled and provided by 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 CIHI.

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About the Research Partners

Chiefs of Ontario (COO)

Chiefs of Ontario supports all First Nations in Ontario as they assert their sovereignty, jurisdiction, and their chosen expression of nationhood.

Guided by the Chiefs in Assembly, we uphold self-determination efforts of the Anishinaabek, Mushkegowuk, Onkwehonwe, and Lenape Peoples in protecting and exercising their inherent and Treaty rights. Keeping in mind the wisdom of our Elders, and the future for our youth, we continue to create the path forward in building our Nations as strong, healthy Peoples respectful of ourselves, each other, and all creation. The activities of the Chiefs of Ontario are mandated through and guided by:

- Resolutions passed by the Chiefs in Assembly of the 133 First Nations in Ontario;
- The Leadership Council made up of the Grand Chiefs of Political Territorial Organizations (PTOs) and Independent First Nations;
- The elected Regional Chief for the Chiefs of Ontario.

ICES

ICES (formerly the Institute for Clinical and 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.
Project Background

Access to Mental Health and Addiction (MHA) services have been identified as a priority within First Nations communities. Consequently, there is a need for a focused report assessing MHA service use and system performance. A request was submitted to ICES by the Chiefs of Ontario to replicate an Ontario Mental Health Scorecard\(^1\) using First Nations identifiers across the lifespan. The Indian Register (IR) has been linked with ICES health administrative data and is used to identify First Nations people in Ontario with a history of MHA-related service use and outcomes. ICES received approval from the Chiefs of Ontario to use the IR for this project on March 12, 2018. It examines rates of mental health service use and median length of hospital stay for First Nations people, compared to non-First Nations people and to Ontario overall. This is the first project to assess MHA-related performance indicators and factors relating to those indicators among the First Nations population in Ontario.

Project Objectives

1. Assess Mental Health and Addictions (MHA) indicators, which describe the current state of MHA service provision among First Nation communities in Ontario
2. Examine trends in performance indicators to assess changes over time in system performance and outcomes among First Nations people in Ontario\(^2\)
3. Explore the impact of socio-demographic characteristics (e.g. age, sex) on mental health service use and access to care

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\(^2\) This does not include service provisions on reserve programs such as: National Native Alcohol and Drug Abuse Program (NNDAP), Indigenous Healing and Wellness Strategy (IHWS) and Mental Health Works (MHW)
Introduction

Mental health has been established as a key priority by First Nations in Ontario, with several leaders calling for action to address the mental health crises in their communities. In 2016, the Chiefs of Ontario, the Ontario SPOR Support Unit, the Centre for Rural and Northern Health Research, and ICES hosted a First Nations Health Research Symposium where the need for MHA research was also highlighted as a priority by First Nations community members.

In 2015, as part of Ontario’s Open Minds, Healthy Minds: Ontario’s Comprehensive Mental Health and Addictions Strategy, ICES developed a baseline scorecard report\(^3\) describing the state of the child and youth MHA system, followed by an update in 2017\(^3\) and an adult baseline scorecard in March 2018\(^4\). The reports provide comprehensive trends over time in Ontario’s MHA system, including measures of MHA-related hospital and emergency department use access to receiving mental health care; and outcomes such as intentional self-injury and suicide. To date, the performance of Ontario’s MHA system for First Nations in Ontario is relatively unknown.

Since 2017, the Chiefs of Ontario has been working with ICES to respond to the research priorities set in February 2016. Thus, this project will be the first report assessing MHA-related performance and contextual-level indicators among the First Nations in Ontario population. The Indian Registry System which has been linked with the Registered Persons Database, will be used to identify First Nations in Ontario with a history of MHA-related service use and outcomes between 2009 and 2019 through linkage with ICES administrative health databases.

The project includes the following indicators:

**System Use:**

1. Rates of MHA-related outpatient visits
2. Percentage of individuals with MHA-related outpatient visits
3. Rates of MHA-related emergency department visits
4. Rates of MHA-related hospitalizations
5. Median length of stay for psychiatric hospitalizations

**Access to Care:**

1. Rates of 30-day emergency department re-visits following a MHA emergency department visit
2. Rates of 30-day hospital readmission following a MHA hospital discharge
3. Rates of outpatient visits within 7 days following a MHA hospital discharge
4. Emergency department as first point of contact for MHA care

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Outcomes:
1. Prenatal opioid exposure (POE) and neonatal abstinence syndrome (NAS)
2. Rates of death by suicide
3. Rates of emergency department visits for deliberate self-harm
4. Use of physical restraints during MHA hospitalizations

The current interim report includes discussion on indicators within the first category, System Use. The remaining indicators within Access to Care and Outcomes will be reported in a Final report to be released in the next year.

Methodology

Population: All registered First Nations (FN) people in Ontario aged 6 to 105 years, from 2009-2019, including both FN people living within a FN community and outside of a FN community.

Annual Population Estimate: The annual population estimate was determined with the Registered Persons Database (RPDB). RPDB contains the age, sex, and postal codes of every resident that is covered under Ontario’s universal health insurance. This project included the annual Ontario population ages 6-105 years, inclusive, with a valid health card and calendar years 2009 to 2019 (ages 0-6 were excluded due to small cell sizes). This database was then linked with the Indian Register (IR) and First Nations, non-First Nations and Ontario groups were created. Postal codes were used to determine whether First Nations people were living within or outside of a First Nations community. Exception: The emergency department (ED) visits indicator captures First Nations people aged 0 to 105 years.
Project Data Sources

The following list is all of the project’s data sources. Indicators may not access every database. A full description of indicator descriptions and data sources can be found in the Technical Appendix.

- Indian Register (IR)
- Ontario Health Insurance Plan (OHIP)
- Community Health Centre (CHC)
- Postal Code Conversions File (PCCF)
- Registered Person’s Database (RPDB)
- Discharge Abstract Database (DAD)
- Ontario Mental Health Reporting System (OMHRS)
- National Ambulatory Care Reporting System (NACRS)

Geographical Stratifications

The data were stratified according to location within Ontario: Local Health Integration Network (LHIN), living within a First Nations community and living outside a First Nations community.

Rate is how often an event or circumstance happens per unit of time, population or other standard of comparison. Crude rate is total number of cases in a given period of time by total population and a standardized rates take into account differences in age and sex between groups.
Limitations and Strengths

We acknowledge that this report does not provide a complete picture of mental health service use and how care is provided across Ontario. Access to additional information, as well as qualitative information, would help us form a more complete picture of mental health service use in Ontario and describe how care is coordinated across different sectors.

Limitations

- There is a lack of data on mental health and addictions (MHA) services provided by non-physicians, particularly allied health professionals such as social workers, traditional counsellors healers and elders, etc.
- Individuals who access health services in Ontario without a valid Ontario health card, and data from those who access health services outside of Ontario are not included.
- Individuals who access National Native Alcohol and Drug Abuse Program (NNDAP), Indigenous Healing and Wellness Strategy (IHWS) and Mental Health Works (MHW) programs.
- Data are not available from Federal Nursing Stations and Aboriginal Health Access Centres (AHAC) and First Nations that access NIHB counselling.
- Location may be misclassified due to use of postal code identifiers, which may include those living in proximity to, but not within, a First Nation community with the same postal code. Location may also be misclassified if the OHIP card address is not updated.
- Data from member communities within the Kenora Chiefs Advisory (KCA) are not included as ICES was unable to receive approval from KCA as required.
- Indian Register (IR) data: First Nations registration status are only available through 2014. Since IR data is only available up to 2014 any persons born 2015 and later were not included in this analysis; therefore, data is only available for ages 6 and up.
- Given that the First Nations population on average is younger than the rest of Ontario, we calculated both crude and standardized rates to account for this. This is to adjust for the impact of the younger age within the First Nation population on indicator rates.
- We are only able to access IR data for First Nations people from communities located within ON. Therefore any First Nation individual who is a registered Band member from a community outside of Ontario but living within Ontario and accessing services here with an OHIP card will be included in the Ontario data.

Strengths

The preparation of this report is guided by the First Nations Mental Health System Performance Advisory Committee, which includes representation from each of the PTOs and Independent First Nations organizations in Ontario. In particular, this partnership focused on engagement practices and perspectives from First Nations communities, and on integration of the principles of OCAP® and First Nations way of knowing.
Results

There are three (3) categories of indicators: System Use, Access to Care, and Outcomes. This report includes results of System Use Indicators (Outpatient Visits, Emergency Department Visits, Hospitalizations, and Length of Stay) and will be presented in the order above. Crude rates are presented unless otherwise specified. All indicators were reviewed by the First Nations Mental Health System Performance Advisory Committee.

The remaining indicators of Access to Care and Outcomes will be presented in a final report at a later date.
1 Outpatient visits

Mental Health and Addictions (MHA) related Outpatient Visit is defined as: When an individual visits either a psychiatrist, a family physician/general practitioner, a paediatrician, or visits to a community health centre for mental health-related disorders.

The use of outpatient services for MHA may provide a measure of service needs. Knowing the rates and trends for outpatient visits according to physician type may help determine which type of physician (i.e. primary care, paediatrician, or psychiatrist) is providing services to respond to MHA needs. However, any needs that are unmet or gaps in other areas are not reported here. This indicator can be useful for human resource planning.

Key Findings:

- First Nations people had higher rates of MHA-related outpatient visits compared to Non-First Nations people, largely driven by visits to primary care providers.
- Among First Nations people, rates of MHA-related visits to primary care providers increased over time until 2016 followed by stable rates in more recent years.
- Rates of MHA-related visits to primary care providers were higher among First Nations females than males.
- Rates of MHA-related visits to primary care physicians, psychiatrists and paediatricians were higher among First Nations people living outside of a First Nations community compared to those living within a First Nations community.

5 Rates presented per 100 population, unless otherwise noted
**Figure 1.1** Below highlights the 2017-2019, outpatient visits in Ontario. Each number is the 3-year rounded average from 2017-2019:

<table>
<thead>
<tr>
<th>Approximate number of mental health and addictions-related outpatient visits in Ontario, 2017-2019</th>
<th>First Nations</th>
<th>Non-First Nations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual number of MHA outpatient visits</td>
<td>178,000</td>
<td>7,418,300</td>
</tr>
<tr>
<td>Total annual number of people</td>
<td>147,700</td>
<td>13,200,500</td>
</tr>
<tr>
<td>Annual rate of MHA outpatient visits (per 100 population)</td>
<td>121</td>
<td>56</td>
</tr>
<tr>
<td>Annual number of unique individuals with MHA outpatient visits</td>
<td>26,900</td>
<td>1,990,150</td>
</tr>
<tr>
<td>Annual percentage of MHA outpatient visits</td>
<td>18.2</td>
<td>15.1</td>
</tr>
</tbody>
</table>

**Figure 1.2** Number of mental health and addictions-related outpatient visits per 100 population among persons aged 6 to 105 years, by physician specialty, in Ontario, 3-year average for 2017 to 2019

The graphic above shows us that the rates of MHA-related outpatient visits were higher among First Nations people compared to Non-First Nations people. This is driven by rates of visits to primary care providers.

First Nations people are visiting primary care providers almost 3x more frequently compared to the rest of Ontario for MHA-related outpatient visits. (~102 visits per 100 First Nations people compared to ~38 visits per 100 Non-First Nations people); with Rates of visits to psychiatrists and paediatricians were similar between First Nations and Non-First Nations people.
On a three-year average (2017-2019), the rates of MHA-related outpatient visits to all physician specialties were higher among First Nations people living outside of a First Nations community compared to those living within a First Nations community.

**Figure 1.3** Number of mental health and addictions-related outpatient visits per 100 population among First Nation persons aged 6 to 105 years, by location and physician specialty, in Ontario, 2009 to 2019

Between 2009 and 2016, rates of MHA-related primary care provider visits among all First Nations people increased over time, irrespective of location. Between 2017 and 2019, these visit rates continued to increase among First Nations people living (an increase of 5%) within a First Nations community (figure 1.4) compared to First Nations people living outside of a First Nations community where there was no change over time (figure 1.5).

**Figure 1.4**

**Figure 1.5**

The rate of outpatient visits per 100 people, for mental health and addictions increased from 48.2 to 100.7 visits.

**OUTPATIENT VISITS 2009-2016**

The rate of outpatient visits per 100 people, for mental health and addictions increased from 48.2 to 100.7 visits.

**OUTPATIENT VISITS STABILIZED 2016-2019**

AN INCREASE OF 109%
Among First Nations people, the above graphic shows the rates of MHA-related outpatient visits were highest among 25-44 year-olds, and were largely driven by visits to primary care providers. Rates of visits to a psychiatrist were also highest in this age group. Among Non-First Nations people, the rates for 25-44 year olds also increased over time but to a lesser extent compared to First Nations people.

The greatest difference in rates between First Nations and Non-First Nations people, were for the 18-64 year age groups.
Shown below, among First Nations and Non-First Nations people, the rates of MHA outpatient visits were highest in Toronto Central LHIN. Rates were also high among First Nations people in Erie St. Clair LHIN. LHINs are where people live, not where healthcare providers are located.
2. Emergency Department Visits\textsuperscript{6}

The emergency department (ED) is an important MHA access point, especially for mental health events that might need additional resources or if there are safety concerns for individuals in crisis. The ED may also be the only access point for individuals who have difficulty accessing appropriate or timely care in outpatient and community settings.

Key Findings:

- First Nations people had higher rates of MHA ED visits and greater increases over time relative to non-First Nations people and Ontario.

- Among First Nations people, those aged 14-45 years had the largest increase in MHA ED visits over time relative to other age groups.

- Compared to First Nations people living outside a First Nations community; First Nations people living within a First Nations community had lower rates of MHA and Substance-Related and Addictive Disorders ED visits, however, the rates increased more sharply after 2014.

- The top two diagnoses were substance-related and addictive disorders and anxiety disorders for all groups. Substance-related disorders were by far the most common reason for an MHA ED visit among First Nations people, and these rates increased notably after 2014.

- Rates of MHA ED visits were highest for First Nations people living in Toronto Central and North West and North East LHINs (data not shown below).

\textbf{Figure 2.1} The table below highlights the approximate number of MHA ED visits and population size for Ontario. Each number is the 3-year rounded average from 2017-2019

<table>
<thead>
<tr>
<th>Approximate number of mental health and addictions-related emergency department visits in Ontario, 2017-2019</th>
<th>First Nations</th>
<th>Non-First Nations</th>
<th>Ontario</th>
</tr>
</thead>
<tbody>
<tr>
<td>\textsuperscript{~}Number of MHA ED visits per year</td>
<td>17,500</td>
<td>256,400</td>
<td>273,900</td>
</tr>
<tr>
<td>\textsuperscript{~}Total number of people per year</td>
<td>148,600</td>
<td>14,105,100</td>
<td>14,253,700</td>
</tr>
<tr>
<td>\textsuperscript{~}Annual rate of MHA ED visits (per 1,000 population)</td>
<td>118.0</td>
<td>18.2</td>
<td>19.2</td>
</tr>
</tbody>
</table>

\textsuperscript{6} Rates presented per 1,000 population, unless otherwise noted
The rates of MHA ED visits were higher among First Nations people compared to non-First Nations people and Ontario for all age groups. MHA ED visits increased among First Nations people aged 0-24 years old.

Over the ten-year period (2009-2019) among children and youth rates increased from 89 to 177 per 1,000 population (99% increase) among 18-21 year-olds, from 91 to 190 per 1,000 population (109% increase) among 22-24 year-olds, and from 72 to 139 per 1,000 population (92% increase) among 14-17 year-olds.

### MHA Emergency Department Visits Conditions with the Largest Increase (2009-2019)

<table>
<thead>
<tr>
<th>Anxiety Disorder</th>
<th>Substance Related Disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>89%</td>
<td>108%</td>
</tr>
</tbody>
</table>

Similarly, among adults, rates of MHA ED visits were higher across almost all age groups for First Nations people compared to non-First Nations and Ontario, except for 85-105 year-olds, where numbers were too small in the First Nations group for most years to report a trend. MHA ED visits were rising among First Nations people, mainly among ages 25-84 years.

Over the ten year period, rates increased from 107 to 192 per 1,000 population (78% increase) among 25-44 year olds, and from 22 to 31 per 1,000 population (40% increase) among 65-84 year olds.

Among First Nations people, MHA ED visits increased for all diagnostic categories, with the greatest increases for substance-related disorders (108%) and anxiety disorders (89%) over time.
For all 3 groups (First Nations, Non-First Nations, and Ontario) males had higher rates of MHA ED visits than females. The 3-year average crude rates of MHA ED visits for 2017-2019 were 118.0, 18.2 and 19.2 per 1000 population for First Nations, non-First Nations, and Ontario, respectively.

For all 3 groups (First Nations, Non-First Nations, and Ontario) males had higher rates of MHA ED visits than females. The 3-year average crude rates of MHA ED visits for 2017-2019 were 118.0, 18.2 and 19.2 per 1000 population for First Nations, non-First Nations, and Ontario, respectively.
First Nations people living outside of a First Nations community had greater rates of MHA ED visits. First Nations people living outside of a First Nations community had greater rates of substance-related and addictive disorder ED visits from 2017-2019, but started rising in 2014.

**Figure 2.4** Number of Substance-Related and Addictive Disorder emergency department visits per 1,000 persons aged 6 to 105 years, by substance type, among First Nations people, 2009 to 2019

The above figure shows the rates of emergency department visits for alcohol-related disorders and "other" drugs and addictions increased over time to a much greater extent among First Nations people compared with non-First Nations people. There was no change in opioid-related emergency department visits among First Nations people over the same time period, although rates remained higher compared with non-First Nations people. Alcohol-related disorders were by far the most common reasons for these visits.
3. Hospitalizations

The rate of hospitalizations for mental health and addictions care is influenced by a number of things such as: community resources available at the point of access to care, the illness severity in the population requiring psychiatric hospitalization, regional availability of hospital beds, and other factors.

Key Findings:

- First Nations people had higher rates of MHA hospitalizations compared to Non-First Nations people and Ontario.
- First Nations people aged 14-24 years had the greatest increase in rates of MHA hospitalizations over time; more than doubling among 14-17 year-olds from 2009-2019.
- First Nations people living outside of a First Nations community had higher rates of MHA hospitalizations compared to First Nations people living within a First Nations community. The same was observed for substance use and addictive disorders.
- Among First Nations people, the three most common diagnoses were substance-related and addictive disorders, mood disorders, and schizophrenia. These are also the most common reasons for MHA hospitalizations among Non-First Nations people and Ontario.
- First Nations people living in the Toronto Central, North East and North West LHINs had the highest rates of MHA-related hospitalizations (data not shown below).

Figure 3.1 Below highlights the approximate number of MHA related hospitalizations and population size for Ontario. Each number is the 3 year rounded average from 2017-2019 estimates.

<table>
<thead>
<tr>
<th>Approximate number of visits 2017-2019</th>
<th>First Nations</th>
<th>Non-First Nations</th>
<th>Ontario</th>
</tr>
</thead>
<tbody>
<tr>
<td>~Number of MHA Hospitalizations per year</td>
<td>3,300</td>
<td>73,100</td>
<td>76,400</td>
</tr>
<tr>
<td>~Total number of people per year</td>
<td>147,600</td>
<td>13,200,700</td>
<td>13,360,400</td>
</tr>
<tr>
<td>~Annual rate of MHA Hospitalizations (per 1000 population)</td>
<td>22.3</td>
<td>5.5</td>
<td>5.7</td>
</tr>
</tbody>
</table>

The rates of MHA-related hospitalizations were increasing for all groups and were increasing to a greater extent among First Nations people (especially between 2015 and 2019). Standardized rates were similar to crude rates.

7 Rates presented per 1,000 persons, unless otherwise noted
The rates of MHA hospitalizations were higher among First Nations people who lived outside of a First Nations community. First Nations people living within a First Nations community showed a large relative increase in rates of MHA hospitalizations from 2015 (12.33) to 2017 (18.99), an increase of 54% as compared to First Nations people living outside of a First Nations community.

The increase in rates of MHA hospitalizations between 2015 and 2019 was observed among males and females, with the female demographic increasing steadily higher since 2011.

Between 2009 and 2019, the rates increased for both First Nation sexes, 28% for males, and 61% for females, notably with First Nation females surpassing First Nation males in 2011 thereafter. First Nations females had higher rates of MHA hospitalizations than First Nations males. In Non-First Nations and Ontario, males had a slightly higher rate of MHA hospitalizations than females.

The rates of MHA hospitalizations were higher among First Nations people compared to Non-First Nations people and Ontario for all youth.

From 2009-2019, the greatest increase in rates were observed among First Nations people aged 14-24 years, more than doubling for 14-17 year-olds. A notable increase was observed after 2015 among 14-24 year-olds (data not shown). Note: Some rates for ages 6-9 were suppressed due to small cells or risk of re-identification.

Likewise, during the same time period (2009-2019) among adults, rates of MHA hospitalizations were higher across all adult age groups among First Nations people compared to Non-First Nations and Ontario. Rates of MHA hospitalizations showed an increasing trend among First Nations 25-44 year-olds, but a decreasing trend among 45-84 year-olds.

From 2009-2019, MHA hospitalizations among First Nations people aged 25-44 years increased by 32.7% compared to Non-First Nations (24.6%) and Ontario (25.1%). (Data not shown).
The graphic below shows rates of MHA hospitalizations across all diagnostic categories were higher among First Nations people compared to Non-First Nations people and Ontario. Among First Nations people, substance-related disorders showed a rising trend compared to other diagnostic categories, which showed a decreasing trend after 2017. Substance-related disorders have also increased in the Non-First Nations people and Ontario. Rates of substance-related hospitalizations appeared steady from 2009-2012 for First Nations persons. Rates of substance-related hospitalizations have gradually increased from 2013 to 2019, with a rate of 4.82 in 2013 to 8.24 in 2019, which was a 71% increase over a 6-year period.

Indicated by the chart below, in all groups, individuals aged 14-17 years had the highest rates of MHA hospitalizations relative to other age groups. Note: Some rates for ages 6-9 and ages 85-105 were suppressed due to small cells (Marked with *)

Figure 3.2 Number of mental health and addictions hospitalizations per 1,000 persons aged 6 to 105 years, by age group, in Ontario, 3-year average for 2017 to 2019

First Nations people living outside of a First Nations community had greater rates (33.7%) of MHA hospitalizations.
Figure 3.3 Number of mental health and addictions hospitalizations per 1,000 persons aged 6 to 105 years, by diagnosis, in Ontario, 3-year average for 2017 to 2019

Substance-Related and Addictive Disorder Hospitalizations for First Nations

OVERALL INCREASED BY 62%

IN COMMUNITY 79%

OUTSIDE COMMUNITY 57%

First Nations people living outside of a First Nations community had greater rates (62%) of MHA hospitalizations for substance-related and addictive disorders. Among First Nations people the top 3 diagnoses were: substance-related addictive disorders, Mood disorders, and Schizophrenia spectrum and other psychotic disorders in that order in 2017-2019. Among Non-First Nations people and Ontario the top 3 diagnoses were: Mood disorders, followed by substance-related and addictive disorders, and schizophrenia spectrum and other psychotic disorders. Note: Rates for OCD & related disorders were suppressed due to small cells (Marked with *).
The rates of hospitalizations for alcohol-related disorders and “other” drugs and addictions increased over time to a greater extent among First Nations people than non-First Nations people. The rates of opioid-related hospitalizations has not increased over time for First Nations. The rates of alcohol-related hospitalizations increased over time for First Nations people living outside the community.

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8 (The “other” category comprises of other substances that are often misused, such as cannabinoids, sedatives or hypnotics, cocaine, stimulants including caffeine, hallucinogens, volatile solvents, multiple drug use and psychoactive substances, tobacco, and abuse of non-dependence producing substances, plus problem gambling and all other addictive disorders)
**Figure 3.5** Substance related and addictions disorders (SRAD) ED Visits and Hospitalizations. Each number is the 3-year rounded average from 2017-2019

<table>
<thead>
<tr>
<th>Substance related and addictions disorders (SRAD) ED Visits and Hospitalizations</th>
<th>First Nations</th>
<th>Non-First Nations</th>
</tr>
</thead>
<tbody>
<tr>
<td>~Number of SRAD <strong>ED visits</strong> per year</td>
<td>9,800</td>
<td>72,650</td>
</tr>
<tr>
<td>~Total number of people per year</td>
<td>147,700</td>
<td>13,237,500</td>
</tr>
<tr>
<td>~Annual rate of SRAD visits (per 1000 population)</td>
<td>66.4</td>
<td>5.5</td>
</tr>
<tr>
<td>~Number of SRAD <strong>hospitalizations</strong> per year</td>
<td>1,090</td>
<td>14,700</td>
</tr>
<tr>
<td>~Total number of people per year</td>
<td>147,700</td>
<td>13,200,500</td>
</tr>
<tr>
<td>~Annual rate of SRAD hospitalizations (per 1000 population)</td>
<td>7.4</td>
<td>1.1</td>
</tr>
</tbody>
</table>

In the above table, comparison of the 3-year rounded average of ED visits vs. hospitalizations between First Nations and non-First Nations, it appears that First Nations are systematically almost half as likely to be hospitalized after an assessment in an emergency department visit for a substance related and addictions disorder.

**Note:** 3-year rounded average was calculated for two SRAD indicators, hospitalizations and ED visits in figure 3.5.
4. Median Length of Stay of Psychiatric Hospitalizations

The length of psychiatric hospitalizations can be affected by illness severity at admission, discharge planning and other care processes at the hospital, and by the availability of resources to support discharge in the community. Along with patterns of hospitalization prevalence, and use of outpatient services, trends in lengths of stay may reflect the efficiency of the MHA care system, i.e. a shorter length of stay MAY indicate adequate aftercare in the community but this is not always the case.

Key Findings:

- First Nations people had shorter median lengths of stay compared to Non-First Nations and Ontario groups.
- Among First Nations people, the median length of stay were similar between males and females, and between people living within and outside of a First Nations community.
- People aged 65 to 105 years had the longest median length of stay for First Nations, Non-First Nations and Ontario groups.
- The median length of stay was longest for patients with schizophrenia among all three groups, followed by patients with mood disorders.

**Figure 4.1** Length of Stay: Approximate number of hospitalizations, in Ontario, 3-year average for 2017 to 2019. Each number is the 3-year rounded average from 2017-2019

<table>
<thead>
<tr>
<th>3-year average 2017-2019</th>
<th>First Nations</th>
<th>Non-First Nations</th>
<th>Ontario</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of hospitalizations (unique patients)</td>
<td>9,800 (5,300)</td>
<td>219,600 (131,300)</td>
<td>229,500 (136,700)</td>
</tr>
<tr>
<td>Median Length of Stay (days)</td>
<td>4.0</td>
<td>7.0</td>
<td>6.0</td>
</tr>
</tbody>
</table>
The median length of stay for psychiatric hospitalizations was shorter among First Nations people compared to Non-First Nations and Ontario groups. For all length of stay results, please note that a change in one day should not be over-interpreted.

The median length of stay among First Nations people remained constant over time and was shorter compared to Non-First Nations people and Ontario. Median length of stay for First Nations people was on average, 2 to 4 fewer days in hospital compared to Ontario groups.

No difference between sexes for First Nations patients. In all groups, people aged 65 to 105 years had the longest median length of stay.

Among First Nations people aged 45-84 years had shorter lengths of stay compared to Non-First Nations and Ontario groups. The median lengths of stay were longest across all groups for schizophrenia spectrum and other psychotic disorders, OCD and related disorders, and mood disorders.

Among First Nations children and youth, the median length of stay was longest across all age groups for schizophrenia-related hospitalizations. Among First Nations adults, the median length of stay was longest among First Nations people with schizophrenia and mood disorders. Among 65-84 year-olds, over time (2009 to 2019) there was a decline in length of stay among people with schizophrenia and an increase in people with mood disorders.
Conclusion

This report presents highlights of the findings on Mental Health and Addictions System Use for First Nations in Ontario. Overall, there has been an increase in outpatient health service system use for MHA in the First Nations’ population in Ontario, particularly among young people. The main point of access for outpatient care is with primary care providers, and outpatient visits for those living outside of community were higher than those within community.

Hospitalization rates were higher among First Nations, with the three most common diagnoses of substance-related and addictive disorders, mood disorders, and schizophrenia. The rates of hospitalizations for alcohol-related disorders and “other” drugs and addictions increased over time to a greater extent among First Nations people than non-First Nations people. However, First Nations people had shorter median lengths of stay compared to non-First Nations and Ontario groups.

There has also been a large increase in the rate of emergency department visits for MHA for all age groups among First Nations people, with the highest rate being among young people aged 18-24, which has also doubled during the study period. Additionally, the rates for emergency department visits for substance-related and addictive disorders were several times higher compared to non-First Nations people. Alcohol remains the primary cause for ED visits and hospitalizations for withdrawal, which may be a more frequent occurrence.

Taken together, these findings present important service delivery implications, and support the need for additional health human resources within communities as has been identified by leadership. Adequate sustainable funding would allow First Nations to access critical, culturally relevant services in a timely manner close to home such as “wrap-around” services including more culturally appropriate care such as traditional healers, access to elders, counsellors, and the ongoing need for treatment for alcohol use disorder. Ontario is generally under-serviced to meet the needs of First Nations patients at the community level, and the gap between services provided and actual need is not measured. Higher rates of system use is not indicative of good access to appropriate care.

Further attention to a number of factors influencing these results can make effective changes with program and policy planning.

- The effect of the Truth and Reconciliation process which began in 2009 increased the needs for First Nations to seek Mental Health supports and continues to do so.
- Stigma and discrimination may prevent individuals from seeking medical care or harm-reduction programs.
- Changes made to drug formularies, public drug funding, and prescribing limits, made in response to the opioid crisis fueled by OxyContin, might have increased use of more dangerous street-sourced drugs.
- There are long waitlists for services for children/youth especially for psychiatrist services.
- Access to specialists by virtual care is needed for those living in rural/remote areas.
### Project Data Sources

<table>
<thead>
<tr>
<th>Data Sources</th>
<th>What does this database contain?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indian Register (IR)</td>
<td>Demographic and administrative information on all Registered/Status First Nations, both living within and outside of a First Nations community.</td>
</tr>
<tr>
<td>Ontario Health Insurance Plan (OHIP)</td>
<td>Patient-level data for outpatient services, by physicians, provided to Ontario residents eligible for OHIP including details of services provided and associated diagnoses.</td>
</tr>
<tr>
<td>Community Health Centre (CHC)</td>
<td>Patient-level data for outpatient services at a community health centre provided by a physician, nurse practitioner, or other health professional.</td>
</tr>
<tr>
<td>Postal Code Conversions File (PCCF)</td>
<td>Information on various geographic identifiers, including postal codes.</td>
</tr>
<tr>
<td>Registered Person’s Database (RPDB)</td>
<td>The central population registry that enables linkage across health-administrative datasets. Contains age, sex, and postal code for every resident covered under Ontario’s universal health insurance.</td>
</tr>
<tr>
<td>Discharge Abstract Database (DAD)</td>
<td>Patient-level data for acute, rehab, chronic and day surgery institutions in Ontario.</td>
</tr>
<tr>
<td>Ontario Mental Health Reporting System (OMHRS)</td>
<td>Patient-level data on adult designated inpatient mental health beds including beds in General, Provincial, Psychiatric, and Specialty Psychiatric facilities.</td>
</tr>
<tr>
<td>National Ambulatory Care Reporting System (NACRS)</td>
<td>Most emergency department visits paid for by the Ontario Health Insurance Plan.</td>
</tr>
</tbody>
</table>
Glossary

**Anxiety disorders:** Anxiety disorders are characterized by excessive fear or worry. It is a classification of mental disorders that are generated during emergency department and hospital visits.

**Deliberate self-harm or Intentional self-injury:** Non-fatal self-poisoning or self-injury carried out with an intent to end one’s life, including a wide range of behaviours from non-suicidal acts to attempted suicide.

**Diagnosis:** Classification of an individual’s mental health or addiction disorder by a physician (e.g. anxiety disorders).

- All mental health disorders were included in the analysis. An ‘other’ group that captured other less common disorders was also included.

**Emergency Department (ED) Visit:** When an individual receives unscheduled services from an emergency department for MHA care

**Federal Nursing Station:** Nursing stations are set up as primary health care for remote First Nations in Canadian provinces. They help provide such services where hospitals and other medical facilities do not exist.

**Indicator or Performance Measure:** Measurement of a specific result or outcome that can be used to evaluate how well the mental health care system is performing.

**Length of Stay:** The number of nights spent in hospital care, from the day of admission to the day of discharge. The length of stay indicator is calculated as the median number of days for all hospitalizations in a given month.

**Median:** In a set of numbers arranged from lowest to highest, the median is the middle number where at most 50% of the values are above that number, and at most 50% are below that number. For example, if the lengths of stay for 5 patients are 2, 4, 5, 7 and 9 days, the median length of stay is the middle number which is 5 days.

**MHA or Psychiatric Hospitalization:** When an individual is admitted for the hospital for MHA care.

**MHA-related Outpatient Visit:** When an individual visits either a psychiatrist, a family physician/general practitioner, a paediatrician, or visits to a community health centre for mental health-related disorders. The use of outpatient services for MHA problems provides a measure of service needs.

**Mood disorders:** Mood disorders, such as depressive or bipolar disorders, are characterized by disturbance in mood, motivation, and general functioning. It is a classification of mental disorders that are generated during emergency department and hospital visits.

**Obsessive compulsive and related disorders:** Obsessive compulsive and related disorders are characterized by repetitive, uncontrollable thoughts and associated compulsive behaviours that cause distress or anxiety. It is a classification of mental disorders that are generated during emergency department and hospital visits.
Outpatient visit: When an individual visits either a psychiatrist, a family physician/general practitioner, or a paediatrician for MHA care.

Primary care provider: A family physician or a general practitioner billing through the Ontario Health Insurance Plan or a physician or nurse practitioner that sees patients in Community Health Centers.

Provider specialty: The medical area of focus and expertise of the physician seen by a patient at a given visit. MHA-related services can be provided by psychiatrists, primary care providers such as family physicians or general practitioners, and paediatricians.

Rate: How often a health event or disease occurs in a specific group or population over a specific period of time.

- **Age and Sex-Standardized Rate**: Compares and describes how often a health event or disease occurs in a specific group or population over a specific period of time, after accounting for how the health event or disease affects people of different ages and/or sexes. In other words, standardization is a useful tool for comparing rates between populations that differ significantly by age and/or sex (e.g. 80 mental health hospitalizations per 10,000 people per year after adjusting for age and sex).
- **Crude**: total number of cases in a given period of time by total population
- **Standardized**: the rate of an event that is adjusted, e.g. for age or sex

Schizophrenia spectrum and other psychotic disorders: Individuals with schizophrenia spectrum and other psychotic disorders often appear to have lost touch with reality because of the impact of these disorders on how people think, feel and behave. It is a classification of mental disorders that are generated during emergency department and hospital visits.

Small Cells: Values or numbers used to calculate rates of events that are less than or equal to five, which result in a rate that is too small to be reported. Rates calculated using small cells are not reported to avoid potential re-identification of individuals.

Substance-related and addictive disorders: A classification of mental disorders that are generated during emergency department and hospital visits. Substance-related and addictive disorders are characterized by the dependence and/or abuse of substances. It is a classification of mental disorders that are generated during emergency department and hospital visits.

Trauma and stressor-related disorders: Trauma and stressor-related disorders are characterized by symptoms similar to those experienced in anxiety or mood disorders, as a result of a traumatic life event. It is a classification of mental health disorders that are generated during emergency department and hospital visits.