Mental Health and Addictions System Performance in Ontario

2021 Scorecard

**CHART PACK** 

February 2021









Mental Health and Addictions System Performance in Ontario: 2021 Scorecard

**Chart Pack** 

MHAP Research Team

February 2021

### **Publication Information**

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### Data

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# **About the Organizations Involved in This Report**

### **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.

### 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.

# **Statement on Indigenous Mental Health Data**

In this scorecard, we do not present Indigenousspecific 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.

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### 1.0 Mental health and addictions indicators

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

### **QUALITY DIMENSION INDICATOR: SAFE**

### 2.0 Use of physical restraints during psychiatric hospitalizations

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**EXHIBIT 3.3** Number of emergency department visits for deliberate self-harm per 10,000 population aged 10 to 105 years, by method of harm, in Ontario, 2009 to 2017

**EXHIBIT 3.4** Number of emergency department visits for deliberate self-harm per 10,000 population aged 10 to 105 years, by sex, in Ontario, 2009 to 2017

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**EXHIBIT 8.2** Number of mental health and addictions–related emergency department revisits within 30 days per  $100 \, \text{ED}$  visits by individuals aged 0 to 105 years, overall and by age group, in Ontario, 2009 to 2017

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#### INDICATOR: HEALTH SERVICE USE

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**EXHIBIT 10.1** Number of individuals seen by a psychiatrist, primary care provider or paediatrician for mental health and addictions care per 100 population aged 0 to 105 years overall and by sex and provider specialty, in Ontario, 2009 to 2017

**EXHIBIT 10.2** Number of individuals seen by a psychiatrist, primary care provider or paediatrician for mental health and addictions care per 100 population aged 0 to 24 years, by age group and provider specialty, in Ontario, 2009 to 2017

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### 15.0 INDICATORS BY LOCAL HEALTH INTEGRATION NETWORK

**EXHIBIT 15.1** Performance indicators for the mental health and addictions system, by Local Health Integration Network, in Ontario, three-year average for 2015 to 2017

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## 1.0

Mental health and addictions indicators

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

	Quality Dimer	Health Service Use	Opioid-Related Indicator		
Safe	Safe Effective		Efficient	Indicators	Indicator
Use of physical restraints during psychiatric hospitalizations	Rates of emergency department visits for deliberate self-harm     Rates of death by suicide	Rates of emergency department visits as first point of contact for mental health and addictions-related care	Rates of outpatient visits within 7 days following a mental health and addictions-related hospital discharge  Rates of 30-day hospital readmission following a mental health and addictions-related hospital discharge  Rates of 30-day emergency department revisits following a mental health and addictions-related emergency department visit	Rates of mental health and addictions-related outpatient visits  Rates at which individuals were seen by a psychiatrist, primary care provider or paediatrician for mental health and addictions care  Rates of mental health and addictions-related emergency department visits  Rates of mental health and addictions-related hospitalizations  Length of stay for psychiatric hospitalizations	Rates of prenatal opioid exposure and neonatal abstinence syndrome

### 2.0

Performance indicators for the mental health and addictions system

# 2.0 Use of physical restraints

### Rationale

In caring for individuals with severe mental illness who are in acute crisis, reducing the risk for harm to self or others is a priority. Physical restraints (external devices, materials or equipment that are attached to or near a person's body to hinder freedom of movement<sup>1</sup>) may prevent suicide or aggressive acts.

In managing agitation, it is optimal to use the least restraint necessary. Examples of escalating interventions that are deployed prior to mechanical restraints are provision of a hazard-free environment, verbal de-escalation and offering or administering sedative medications. Mechanical restraints are used as a last resort to manage safety when a patient becomes extremely agitated.

Following a coroner's inquest in Ontario in 2008,<sup>2</sup> psychiatric health care facilities have been strongly encouraged to minimize the use of physical restraints.

### **Results**

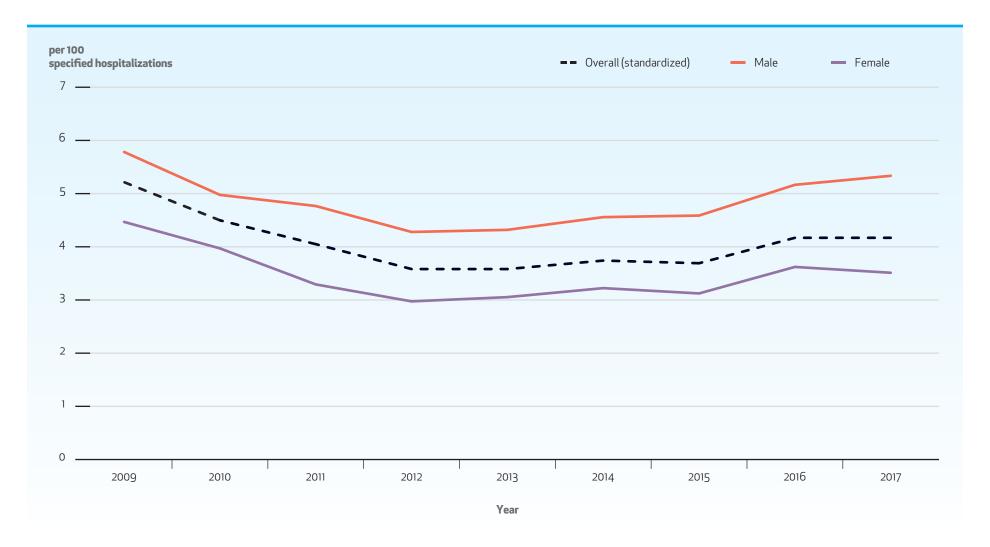
- The use of restraints was at a high of 5.1 per 100 hospitalizations in 2009. Rates decreased to a low of 3.6 per 100 hospitalizations in 2012, and have slowly continued to rise since that time, stabilizing in 2016 and 2017 at approximately 4.4 per 100 hospitalizations.
- Restraint use was greater for men than for women over time. The rate for females did not increase after 2012 to the same degree as the rate for males.
- Physical restraint use was most common among patients in the youngest and oldest age groups and least common among those aged 45–64 years. Between 2009 and 2017, the rate of restraint use declined among all age groups, except those aged 25–44 years for whom the rate remained stable.
- Patients diagnosed with schizophrenia or mood disorders were most likely to be physically restrained during a hospitalization. The rate of restraint use declined over time for patients with schizophrenia or mood disorders and remained stable for patients with substance-related or anxiety disorders.

Note: Rates presented in the following exhibits are crude rates unless otherwise specified. Standardized rates are age- and sex-standardized.

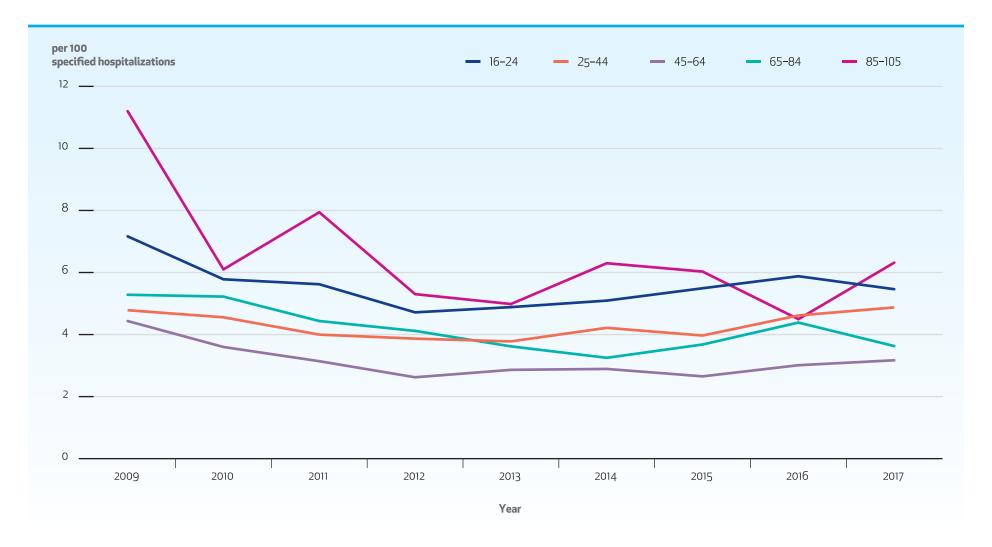
Retsas AP. Survey findings describing the use of physical restraints in nursing homes in Victoria, Australia. Int J Nurs Stud. 1998; 35(3):184–91. DOI: https://doi.org/10.1016/S0020-7489(98)00027-3

Canadian Institute for Health Information. Restraint Use and Other Control Interventions for Mental Health Inpatients in Ontario. Executive Summary. August 2011. Accessed October 20, 2020 at https://secure.cihi.ca/free\_products/Restraint\_Use\_and\_Other\_Control\_Interventions\_AIB\_EN.pdf.

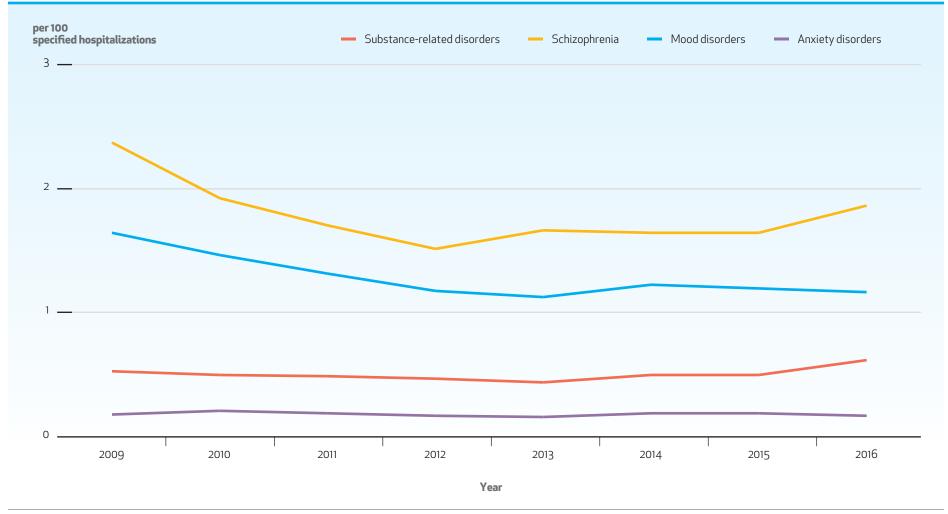
**EXHIBIT 2.1** Number of mental health and addictions—related hospitalizations where physical restraints were used per 100 MHA-related hospitalizations among individuals aged 16 to 105 years, overall and by sex, in Ontario, 2009 to 2017



**EXHIBIT 2.2** Number of mental health and addictions—related hospitalizations where physical restraints were used per 100 MHA-related hospitalizations among individuals aged 16 to 105 years, by age group, in Ontario, 2009 to 2017



**EXHIBIT 2.3** Number of mental health and addictions—related hospitalizations where physical restraints were used per 100 MHA-related hospitalizations among individuals aged 16 to 105 years, by type of diagnosis, in Ontario, 2009 to 2016



#### Notes:

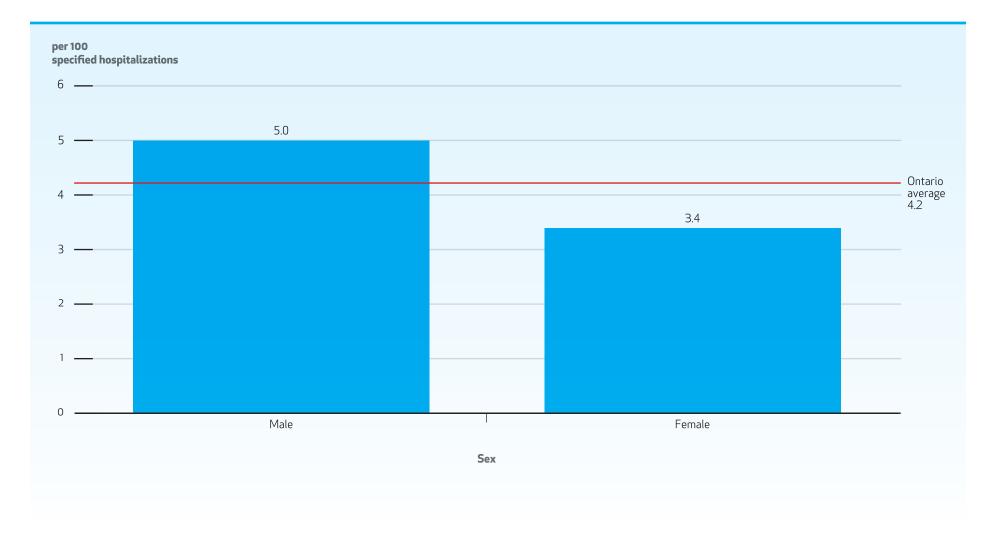
 $<sup>1.\,\</sup>mathsf{An}\, \text{``other''}\,\mathsf{group}\,\mathsf{that}\,\mathsf{captures}\,\mathsf{less}\,\mathsf{common}\,\mathsf{mental}\,\mathsf{health}\,\mathsf{and}\,\mathsf{addictions-related}\,\mathsf{diagnoses}\,\mathsf{is}\,\mathsf{not}\,\mathsf{shown}.$ 

<sup>2.</sup> 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. Deliberate self-harm may be present as a secondary diagnosis in any of the other diagnostic types.

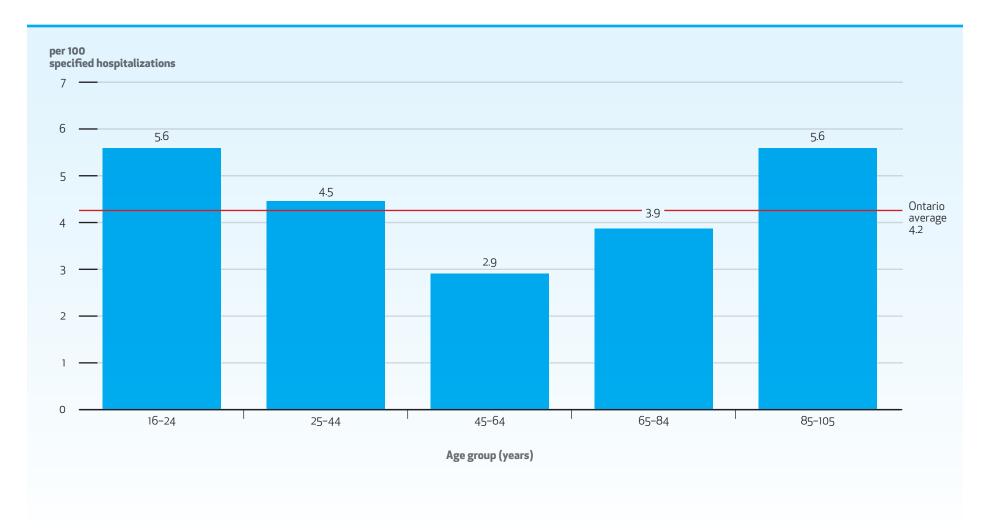
<sup>3.</sup> For rates of obsessive-compulsive disorder and related disorders and deliberate self-harm, the numerators contained small cells with values ≤5 and were suppressed

<sup>4.</sup> Rates for 2009 to 2016 are based on diagnostic categories in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders, and rates for 2017 are based on diagnostic categories in the 5th edition.

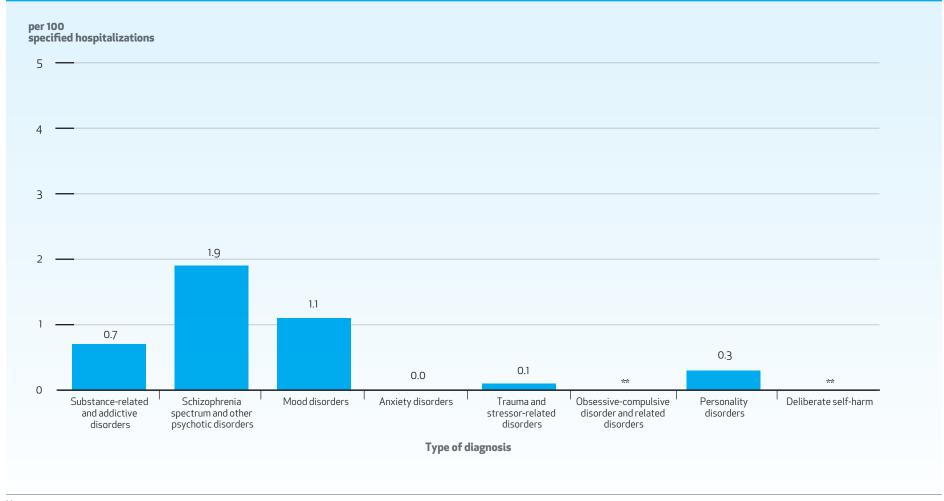
**EXHIBIT 2.4** Number of mental health and addictions—related hospitalizations where physical restraints were used per 100 MHA-related hospitalizations among individuals aged 16 to 105 years, by sex, in Ontario, three-year average for 2015 to 2017



**EXHIBIT 2.5** Number of mental health and addictions—related hospitalizations where physical restraints were used per 100 MHA-related hospitalizations among individuals aged 16 to 105 years, by age group, in Ontario, three-year average for 2015 to 2017



**EXHIBIT 2.6** Number of mental health and addictions—related hospitalizations where physical restraints were used per 100 MHA-related hospitalizations among individuals aged 16 to 105 years, by type of diagnosis, in Ontario, 2017

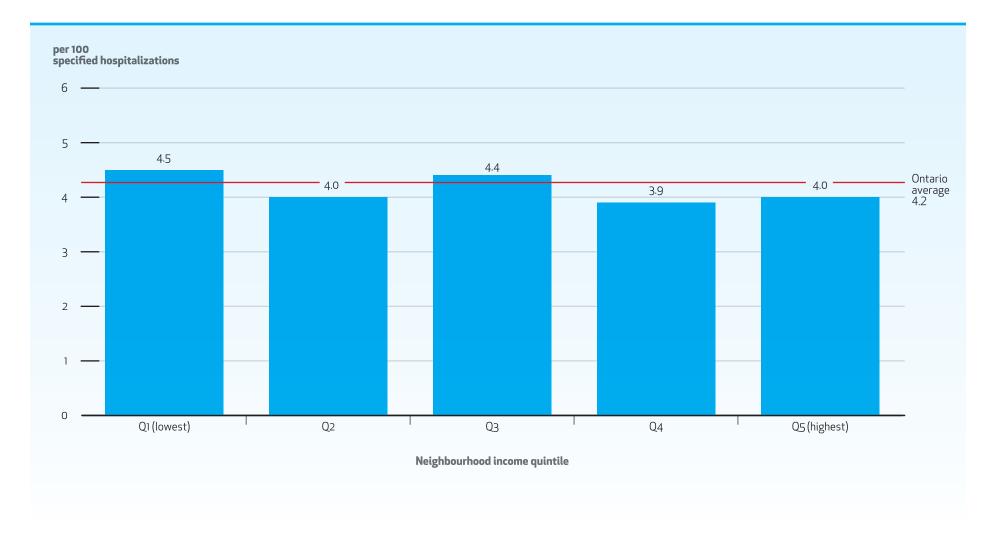


#### Notes

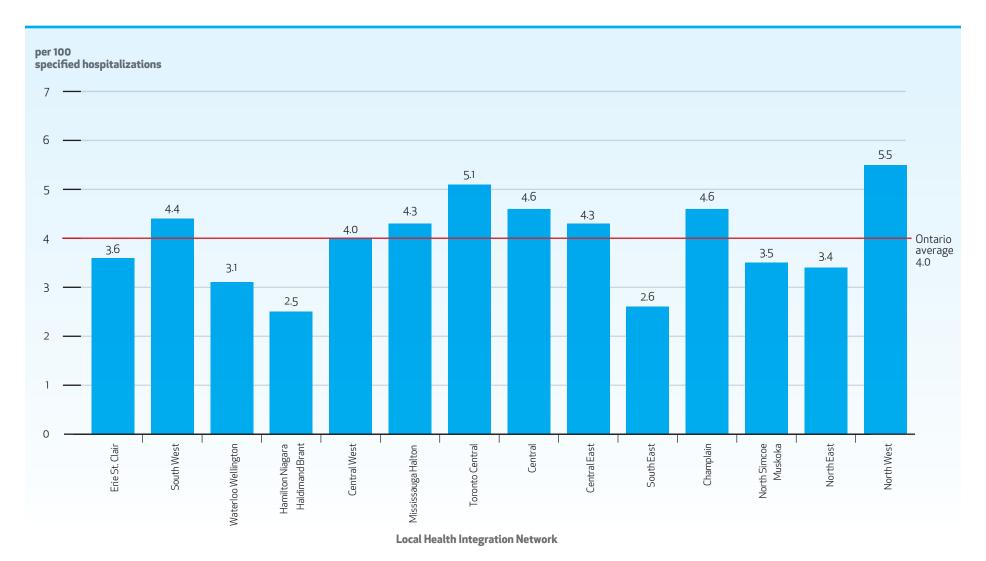
- $1.\, An\, "other"\, category\, that\, captures\, less\, common\, MHA-related\, diagnoses\, is\, not\, shown.$
- 2. Obsessive-compulsive disorder and related disorders includes body dysmorphic disorder and hoarding disorder.
- 3. Deliberate self-harm refers to residual deliberate self-harm, i.e., the presence of a self-harm diagnosis where the main reason for the hospitalization is non-MHA-related. Deliberate self-harm may be present as a secondary diagnosis in any of the other diagnostic types.
- $4. \, Rates \, are \, based \, on \, diagnostic \, categories \, in \, the \, \textit{Diagnostic} \, and \, \textit{Statistical Manual of Mental Disorders}, \, 5th \, Edition.$

<sup>\*\*</sup>For rates of obsessive-compulsive disorder and related disorders and deliberate self-harm, the numerators contained small cells with values ≤5 and were suppressed.

**EXHIBIT 2.7** Number of mental health and addictions—related hospitalizations where physical restraints were used per 100 MHA-related hospitalizations among individuals aged 16 to 105 years, by neighbourhood income quintile, in Ontario, three-year average for 2015 to 2017



**EXHIBIT 2.8** Number of mental health and addictions—related hospitalizations where physical restraints were used per 100 MHA-related hospitalizations among individuals aged 16 to 105 years, by Local Health Integration Network, in Ontario, three-year average for 2015 to 2017



Note: Rates are age- and sex-standardized.

## 3.0

# Rates of emergency department visits for deliberate self-harm

# 3.0 Rates of emergency department visits for deliberate self-harm

### Rationale

Deliberate self-harm refers to nonfatal self-poisoning or self-injury and encompasses a wide range of behaviours, from nonsuicidal acts to attempted suicide (carried out with at least some intent to end one's life).

This indicator takes into account all visits for deliberate self-harm regardless of whether a mental illness or addiction diagnosis is present.

### Results

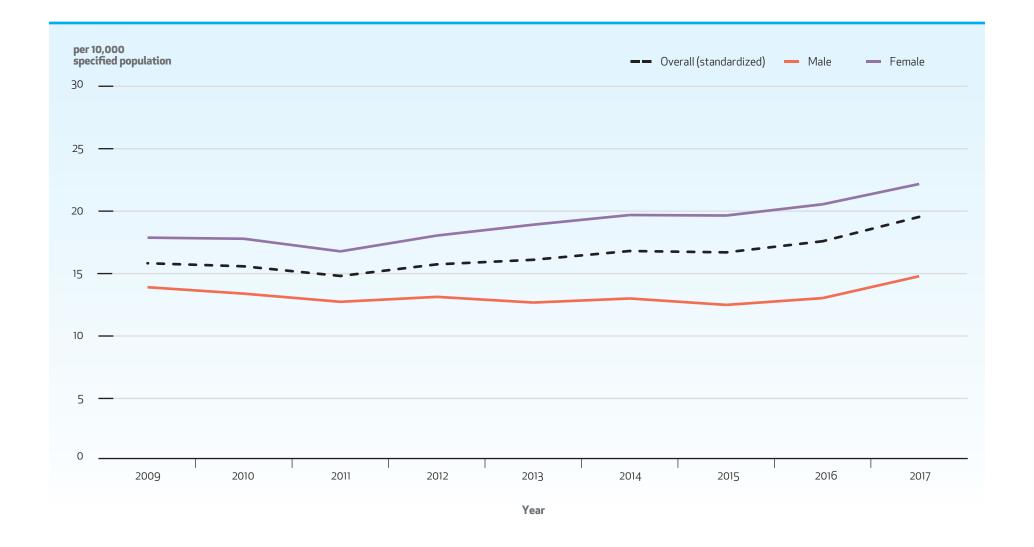
- Rates of deliberate self-harm per 10,000 Ontario residents increased from a low of 16.0 in 2009 to a high of 19.4 in 2017.
- Rates were higher among females than males and were much higher in children and youth than in adults.
- In the lowest-income group, the rate of ED visits for deliberate self-harm was almost 2.5 times that of the highest-income group.
- The rate of ED visits for deliberate self-harm was highest in the North West and North East LHINs and lowest in the Central West, Mississauga Halton and Central LHINs.

Notes

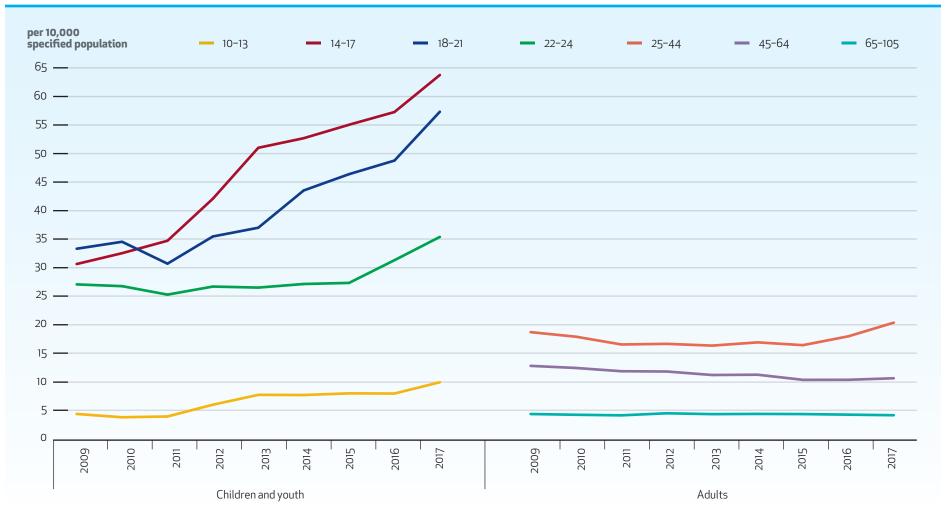
<sup>1.</sup> Rates presented in the following exhibits are crude rates unless otherwise specified. Standardized rates are age- and sex- standardized.

<sup>2.</sup> Rates of emergency department visits for deliberate self-harm are presented where this diagnosis was made as a primary, secondary or other reason for the visit.

**EXHIBIT 3.1** Number of emergency department visits for deliberate self-harm per 10,000 population aged 10 to 105 years, overall and by sex, in Ontario, 2009 to 2017

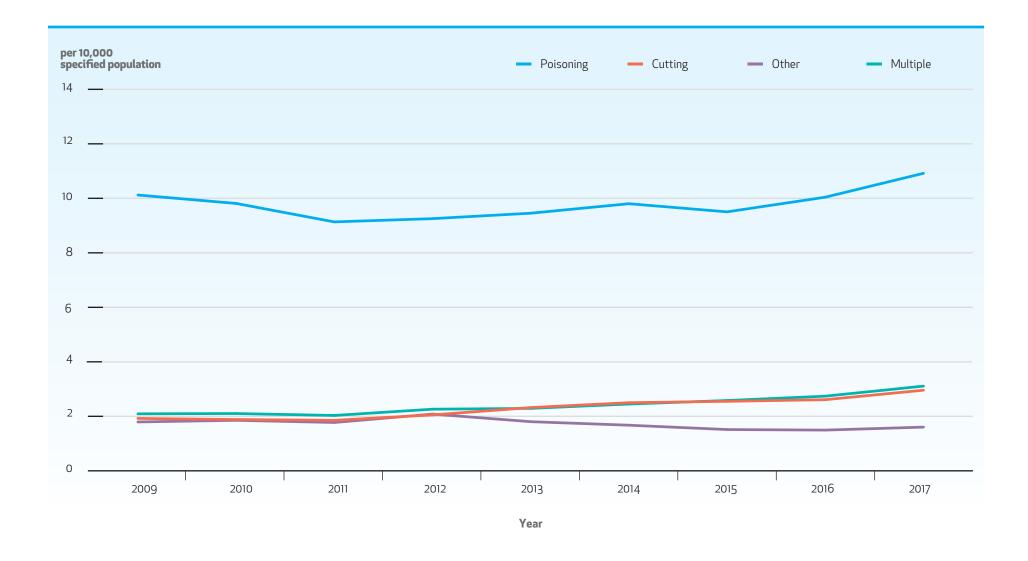


**EXHIBIT 3.2** Number of emergency department visits for deliberate self-harm per 10,000 population aged 10 to 105 years, by age group, in Ontario, 2009 to 2017



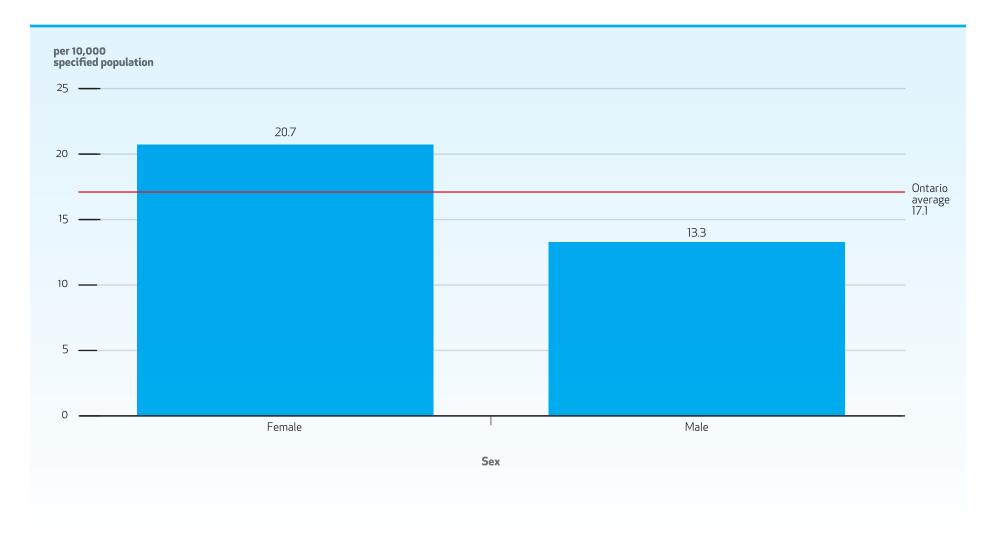
Year

**EXHIBIT 3.3** Number of emergency department visits for deliberate self-harm per 10,000 population aged 10 to 105 years, by method of harm, in Ontario, 2009 to 2017

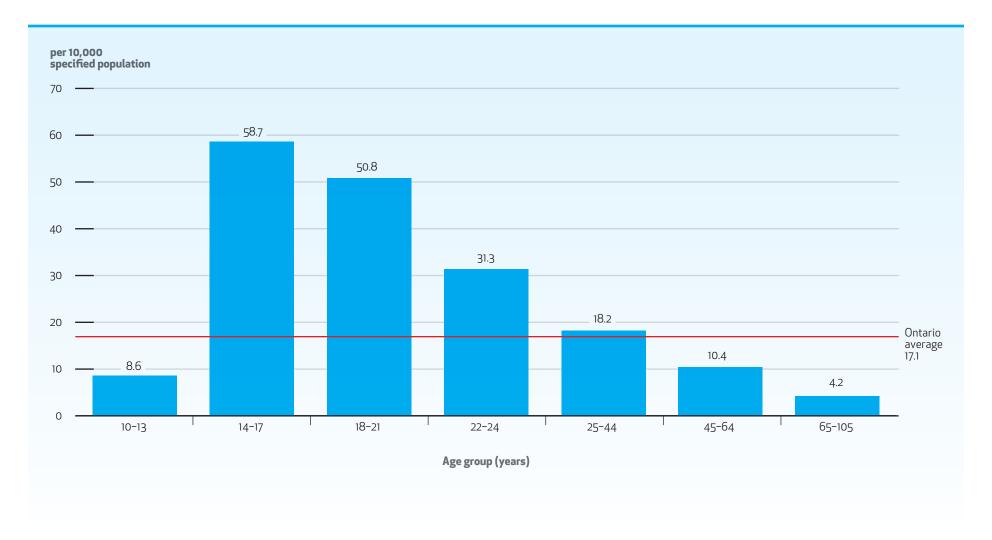


 $Note: The \ four \ categories \ of self-harm \ are \ mutually \ exclusive. The \ "Multiple" \ category \ includes \ more \ than \ one \ method \ of \ self-harm.$ 

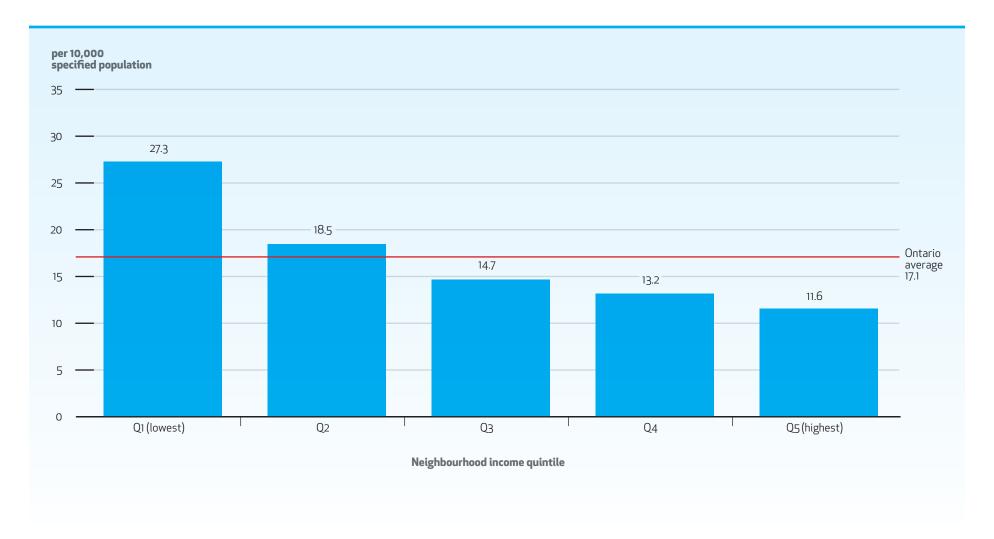
**EXHIBIT 3.4** Number of emergency department visits for deliberate self-harm per 10,000 population aged 10 to 105 years, by sex, in Ontario, three-year average for 2015 to 2017



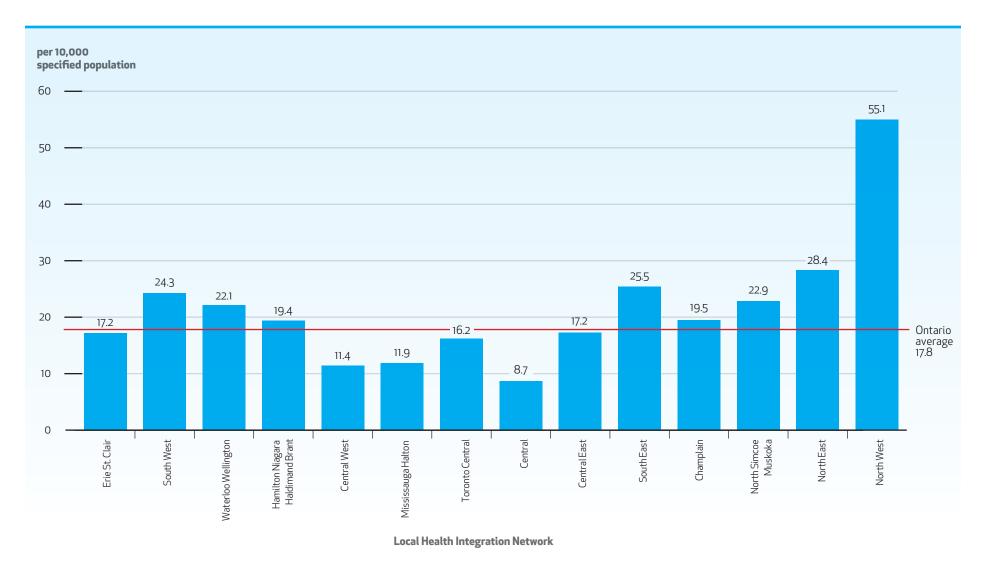
**EXHIBIT 3.5** Number of emergency department visits for deliberate self-harm per 10,000 population aged 10 to 105 years, by age group, in Ontario, three-year average for 2015 to 2017



**EXHIBIT 3.6** Number of emergency department visits for deliberate self-harm per 10,000 population aged 10 to 105 years, by neighbourhood income quintile, in Ontario, three-year average for 2015 to 2017

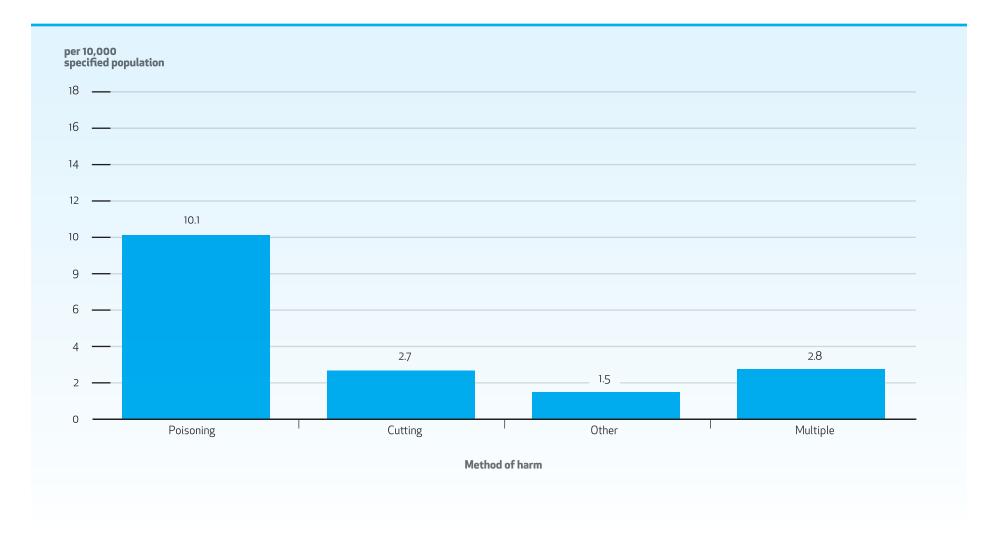


**EXHIBIT 3.7** Number of emergency department visits for deliberate self-harm per 10,000 population aged 10 to 105 years, by Local Health Integration Network, in Ontario, three-year average for 2015 to 2017



Note: Rates are age- and sex-standardized.

**EXHIBIT 3.8** Number of emergency department visits for deliberate self-harm per 10,000 population aged 10 to 105 years, by method of harm, in Ontario, three-year average for 2015 to 2017



Note: The four categories of self-harm are mutually exclusive. The "Multiple" category includes more than one method of self-harm.

4.0
Rates of death by suicide

## 4.0 Rates of death by suicide

#### Rationale

Death by suicide is a major public health issue. Understanding variations and trends in the rate of death by suicide may assist in identifying high-risk groups and designing appropriate interventions to reduce the occurrence of suicide.

#### Results

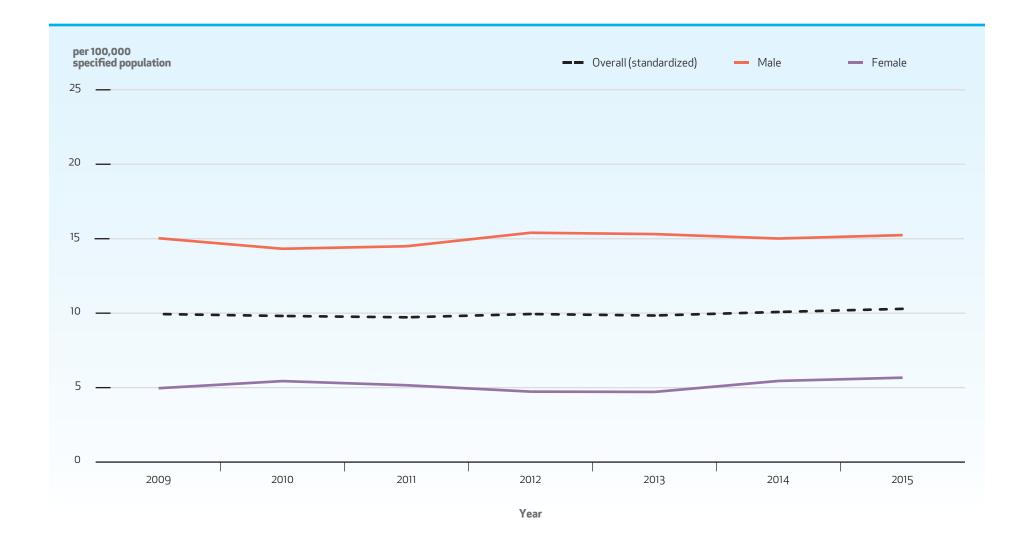
- Between 2009 and 2015, the rate of death by suicide remained stable in Ontario. The rate was highest for men and among those aged 45–64 years.
- The three-year average rate of death by suicide was highest among residents of the lowestincome neighborhoods and lowest among residents of the highest-income neighborhoods.
- The three-year average rate of death by suicide was highest in the North West, North East and North Simcoe Muskoka LHINs.

Notes

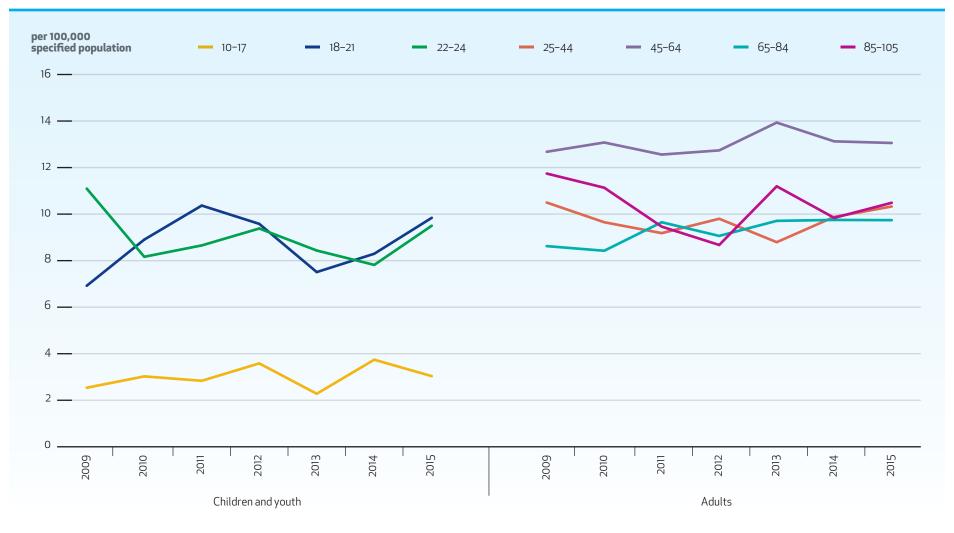
 $<sup>1.</sup> Rates \, presented \, in \, the \, following \, exhibits \, are \, crude \, rates \, unless \, otherwise \, specified. \, Standardized \, rates \, are \, age- \, and \, sex-standardized.$ 

<sup>2.</sup> Due to data availability, method of harm is reported to December 2012 only, and deaths by suicide are reported to December 2015 only.

**EXHIBIT 4.1** Number of deaths by suicide per 100,000 population aged 10 to 105 years, overall and by sex, in Ontario, 2009 to 2015

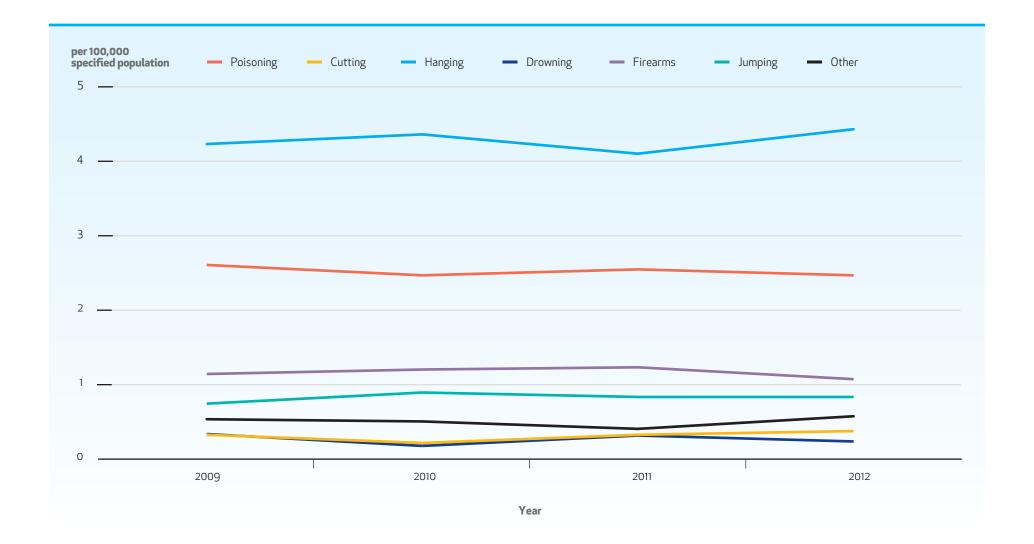


**EXHIBIT 4.2** Number of deaths by suicide per 100,000 population aged 10 to 105 years, by age group, in Ontario, 2009 to 2015



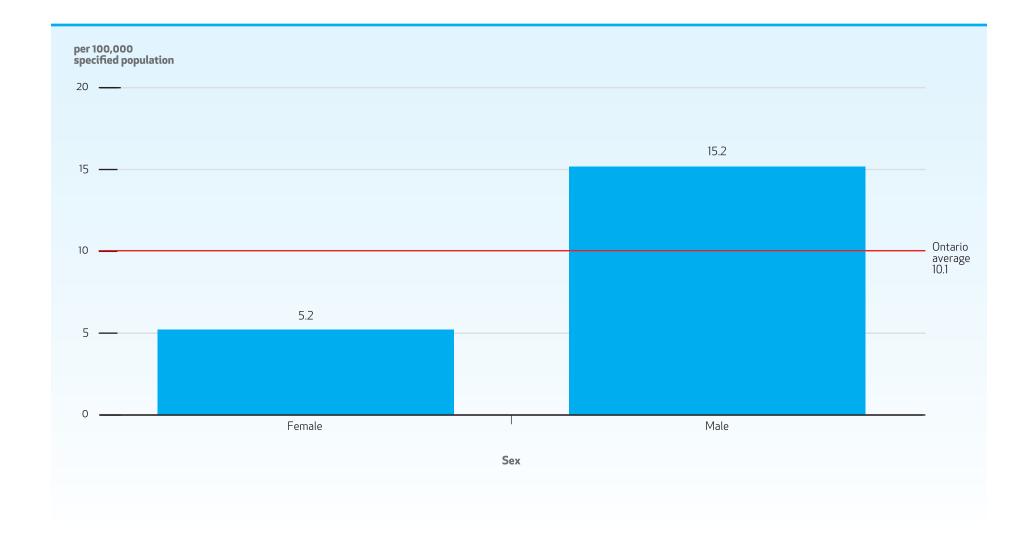
Year

**EXHIBIT 4.3** Number of deaths by suicide per 100,000 population aged 10 to 105 years, by method of suicide, in Ontario, 2009 to 2012

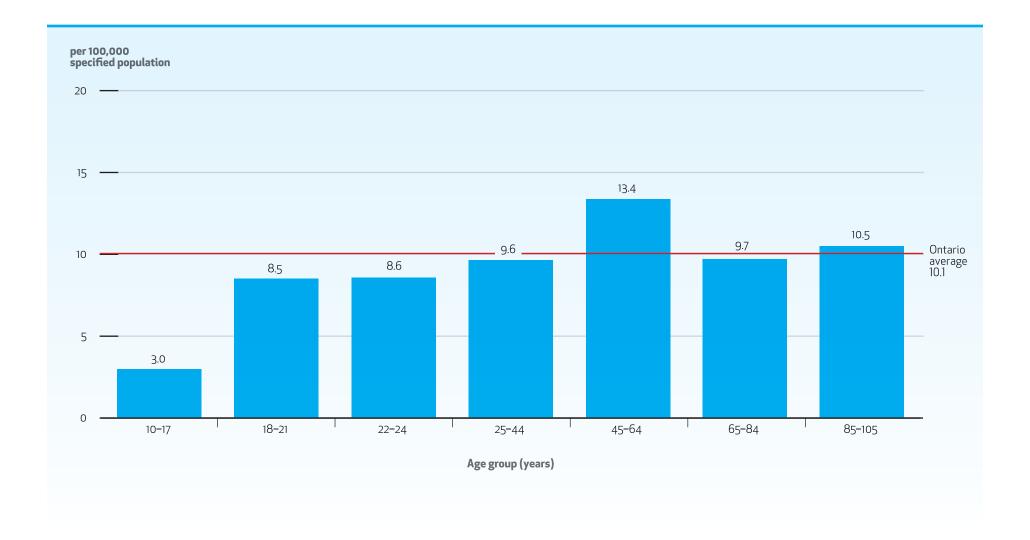


Note: Rates are presented to December 2012 only, as the definition of cause of death was changed in 2013.

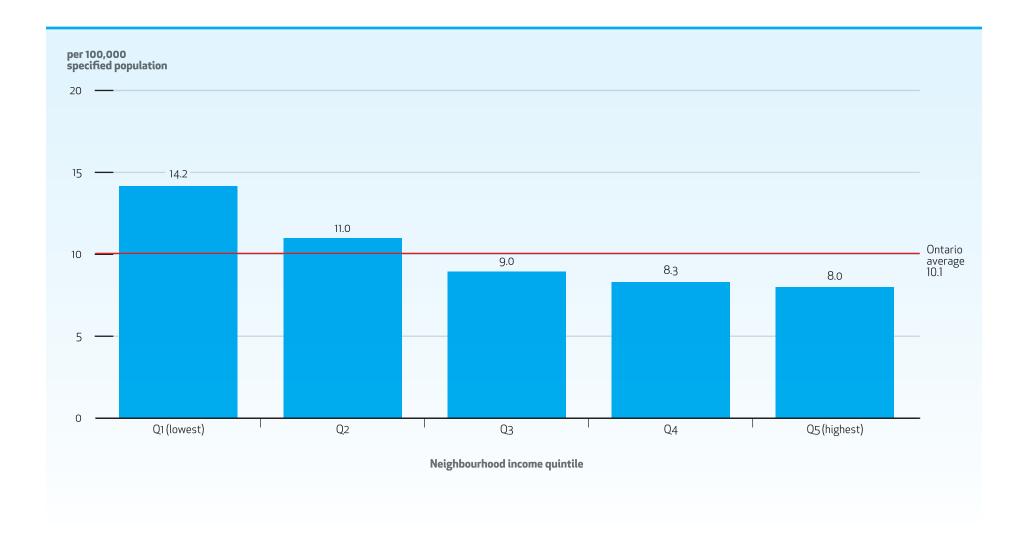
**EXHIBIT 4.4** Number of deaths by suicide per 100,000 population aged 10 to 105 years, by sex, in Ontario, three-year average for 2013 to 2015



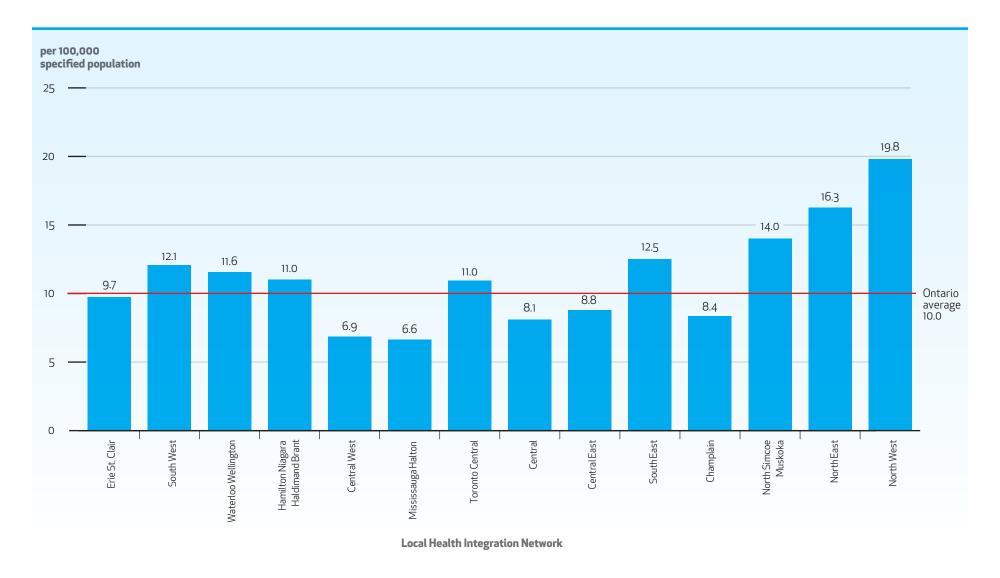
**EXHIBIT 4.5** Number of deaths by suicide per 100,000 population aged 10 to 105 years, by age group, in Ontario, three-year average for 2013 to 2015



**EXHIBIT 4.6** Number of deaths by suicide per 100,000 population aged 10 to 105 years, by neighbourhood income quintile, in Ontario, three-year average for 2013 to 2015



**EXHIBIT 4.7** Number of deaths by suicide per 100,000 population aged 10 to 105 years, by Local Health Integration Network, in Ontario, three-year average for 2013 to 2015



Note: Rates are age- and sex-standardized.

## 5.0

Emergency department as first point of contact for mental health and addictions care

## 5.0 Emergency department as first point of contact for mental health and addictions care

#### Rationale

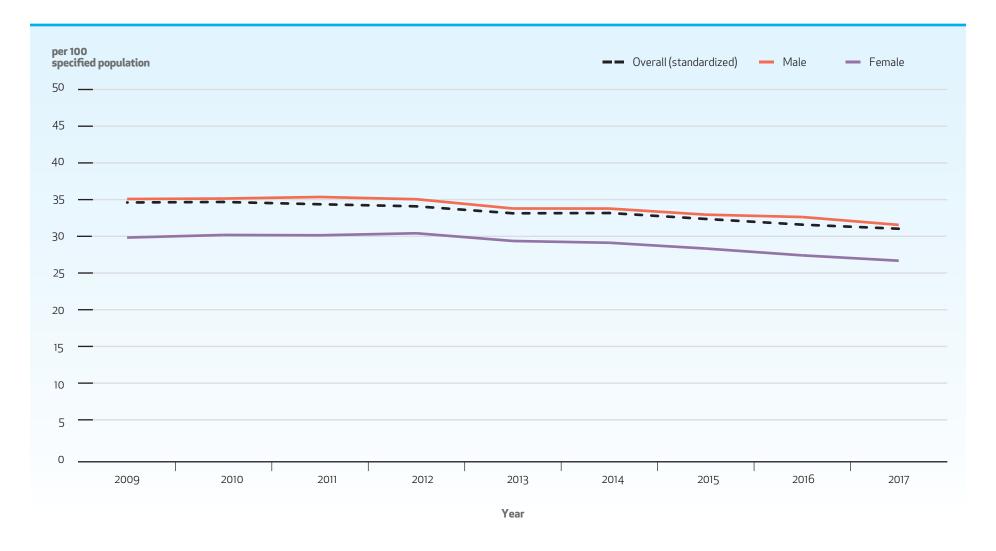
When access to timely community-based mental health assessment and treatment is insufficient, individuals who require services may use the emergency department (ED) as their first point of contact. Therefore, a high rate of use of the ED as a first point of contact for mental health and addictions (MHA) care may be a useful indicator of inadequate access to outpatient physician- and community-based care.

#### Results

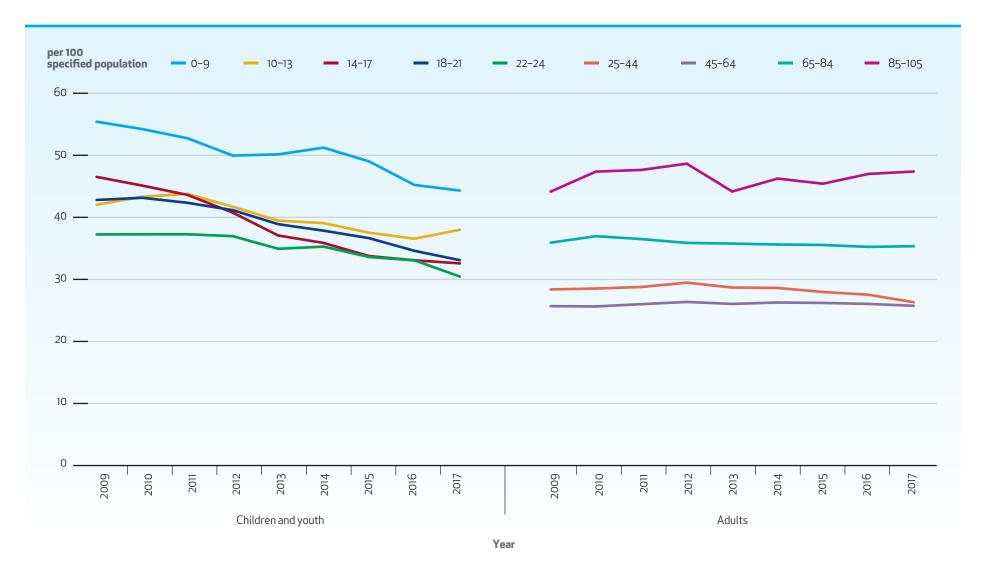
- About one-third of individuals with an incident MHA-related ED visit did not have any MHA-related health service contact in the ED, hospital or outpatient settings in the previous two years. This proportion declined between 2009 and 2017 (from 35% to 31%) and was higher for males than females.
- Individuals in the 0–9 and 85–105-year age groups were the most likely to use the ED as the first point of contact for MHA care; those aged 45–64 years were the least likely. Over time, individuals aged 0–44 years experienced a decline in MHA-related ED visits.
- ED first-point-of-contact rates for MHA care were highest among individuals diagnosed with substance-related disorders, followed by those with anxiety disorders and deliberate self-harm.
   ED first-point-of-contact rates declined for all three conditions between 2009 and 2016.
- Residents of the North West and North East LHINs most frequently accessed the ED as the first point of contact for MHA care.

Note: Rates presented in the following exhibits are crude rates unless otherwise specified. Standardized rates are age- and sex-standardized. Rates are for all physician specialties.

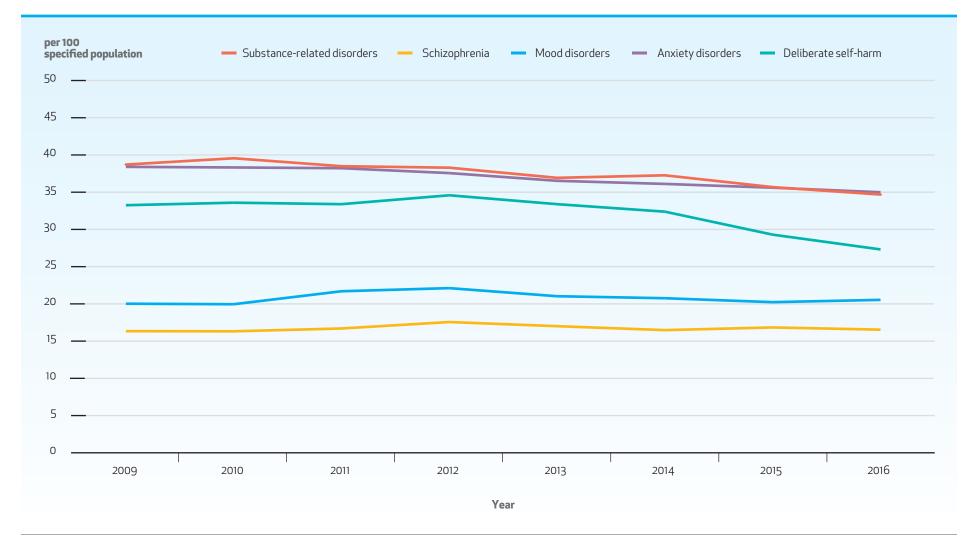
**EXHIBIT 5.1** Number of individuals for whom the emergency department was the first point of contact for mental health and addictions care per 100 population aged 0 to 105 years with an incident MHA-related ED visit, overall and by sex, in Ontario, 2009 to 2017



**EXHIBIT 5.2** Number of individuals for whom the emergency department was the first point of contact for mental health and addictions care per 100 population aged 0 to 105 years with an incident MHA-related ED visit, by age group, in Ontario, 2009 to 2017



**EXHIBIT 5.3** Number of individuals for whom the emergency department was the first point of contact for mental health and addictions care per 100 population aged 0 to 105 years with an incident MHA-related ED visit, by type of diagnosis, in Ontario, 2009 to 2016



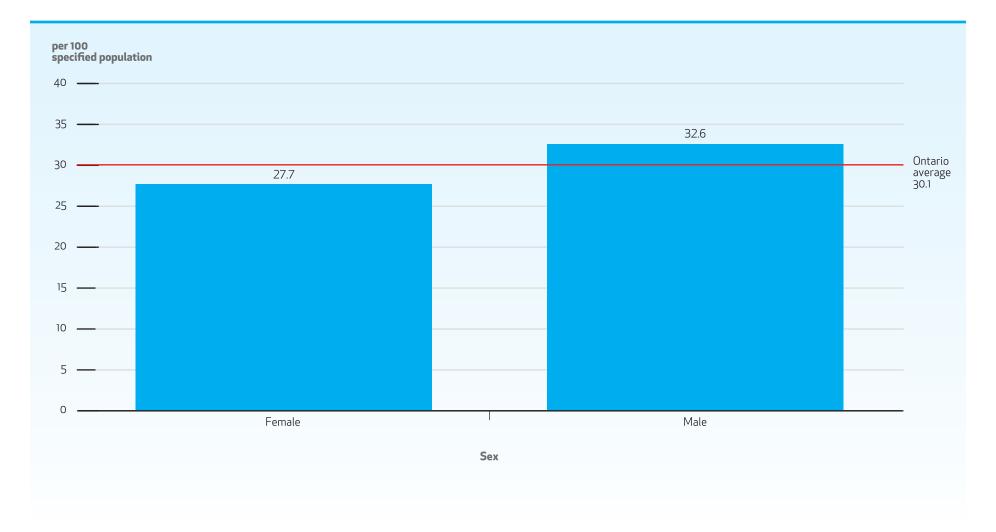
#### Notes

 $<sup>1.\,\</sup>mathsf{An}\, \text{``other''}\,\mathsf{group}\,\mathsf{that}\,\mathsf{captures}\,\mathsf{less}\,\mathsf{common}\,\mathsf{mental}\,\mathsf{health}\,\mathsf{and}\,\mathsf{addictions}\mathsf{-related}\,\mathsf{diagnoses}\,\mathsf{is}\,\mathsf{not}\,\mathsf{shown}.$ 

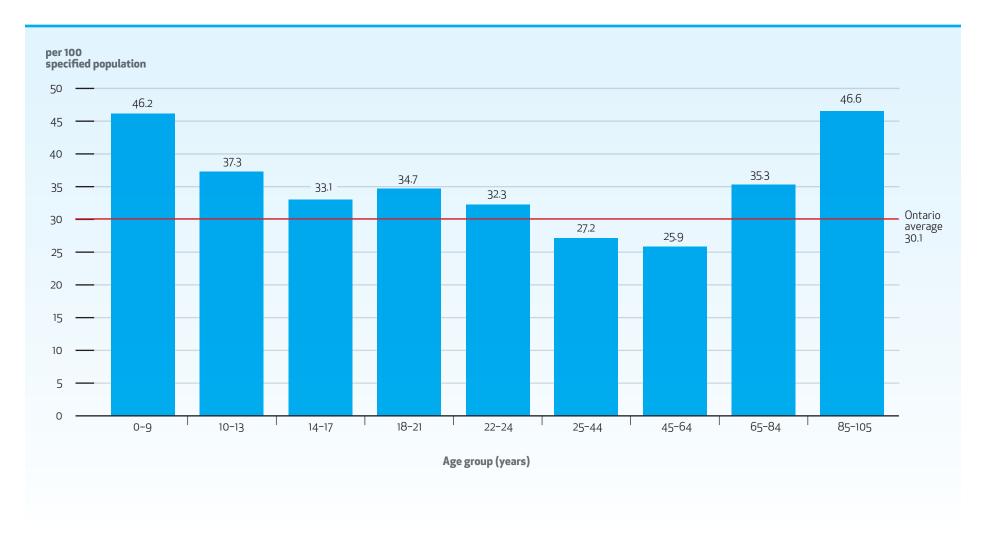
<sup>2.</sup> Deliberate self-harm refers to residual deliberate self-harm, i.e., the presence of a self-harm diagnosis where the main reason for the ED visit is non-MHA-related. Deliberate self-harm may be present as a secondary diagnosis in any of the other diagnostic types.

<sup>3.</sup> Rates for 2009 to 2016 are based on diagnostic categories in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders, and rates for 2017 are based on diagnostic categories in the 5th edition.

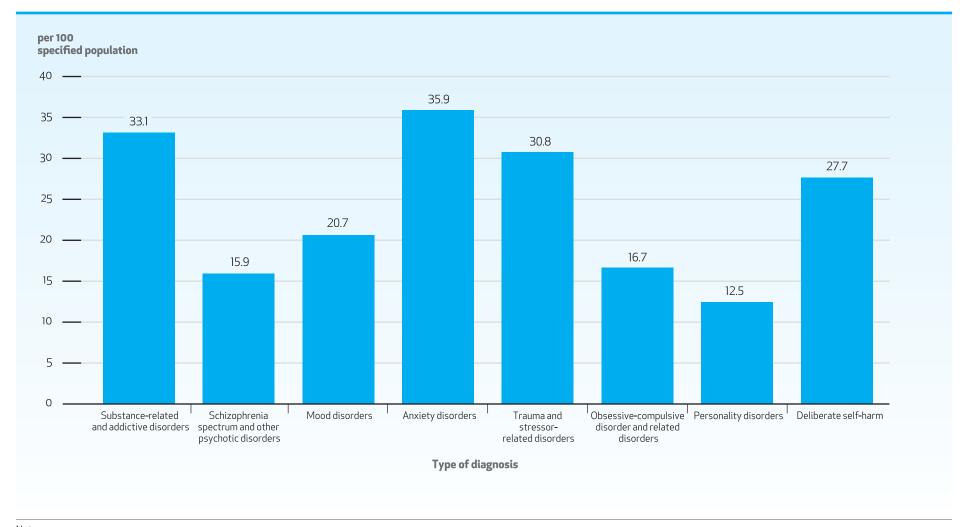
**EXHIBIT 5.4** Number of individuals for whom the emergency department was the first point of contact for mental health and addictions care per 100 population aged 0 to 105 years with an incident MHA-related ED visit, by sex, in Ontario, three-year average for 2015 to 2017



**EXHIBIT 5.5** Number of individuals for whom the emergency department was the first point of contact for mental health and addictions care per 100 population aged 0 to 105 years with an incident MHA-related ED visit, by age group, in Ontario, three-year average for 2015 to 2017



**EXHIBIT 5.6** Number of individuals for whom the emergency department was the first point of contact for mental health and addictions care per 100 population aged 0 to 105 years with an incident MHA-related ED visit, by type of diagnosis, in Ontario, 2017

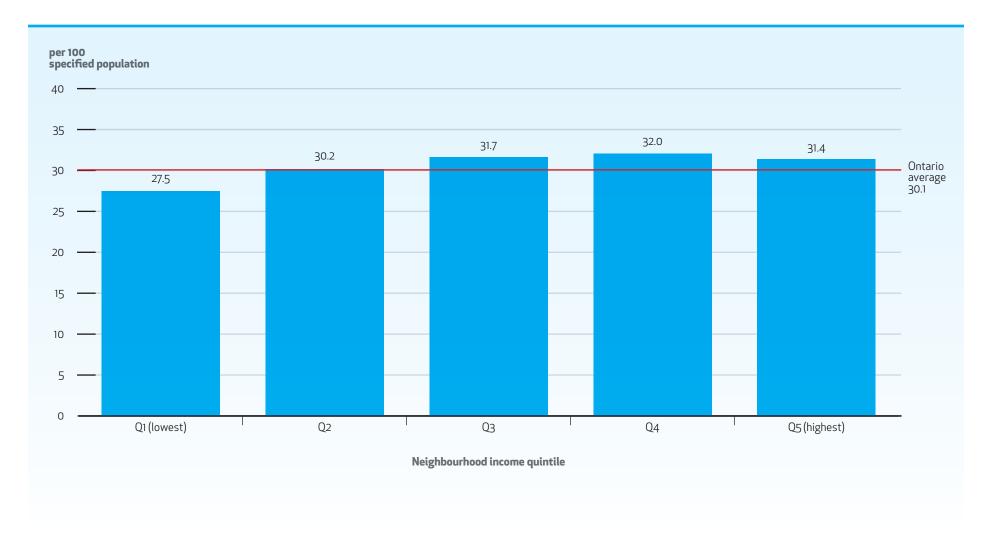


#### Notes:

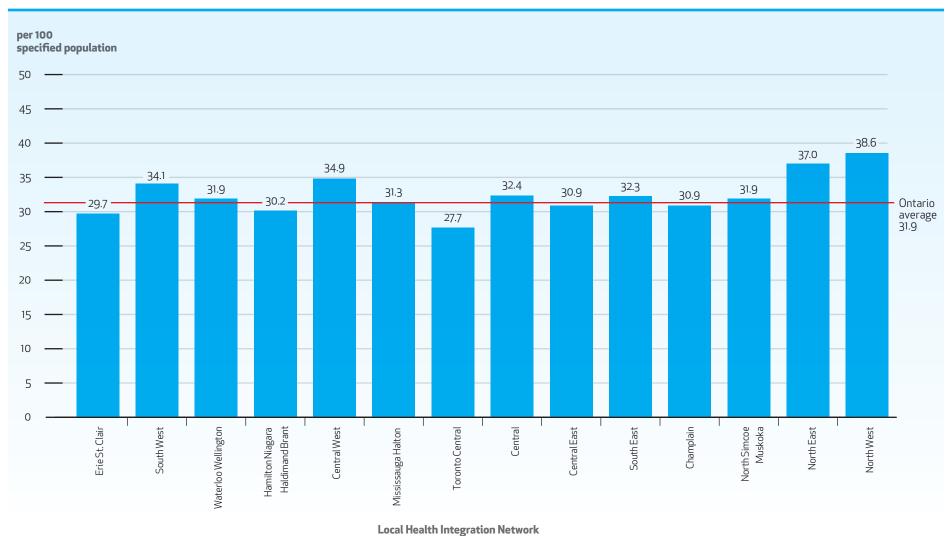
- $1.\,\mathrm{An}$  "other" group that captures less common mental health and addictions-related diagnoses is not shown.
- 2. Obsessive-compulsive disorder and related disorders includes body dysmorphic disorder and hoarding disorder.
- 3. Deliberate self-harm refers to residual deliberate self-harm, i.e., the presence of a self-harm diagnosis where the main reason for the ED visit is non-MHA-related. Deliberate self-harm may be present as a secondary diagnosis in any of the other diagnostic types.

4. Rates are based on diagnostic categories in the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition.

**EXHIBIT 5.7** Number of individuals for whom the emergency department was the first point of contact for mental health and addictions care per 100 population aged 0 to 105 years with an incident MHA-related ED visit, by neighbourhood income quintile, in Ontario, three-year average for 2015 to 2017



**EXHIBIT 5.8** Number of individuals for whom the emergency department was the first point of contact for mental health and addictions care per 100 population aged 0 to 105 years with an incident MHA-related ED visit, by Local Health Integration Network, in Ontario, three-year average for 2015 to 2017



Note: Rates are age- and sex-standardized.

### 6.0

Rates of outpatient visits within 7 days following a mental health and addictions—related hospital discharge

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

#### Rationale

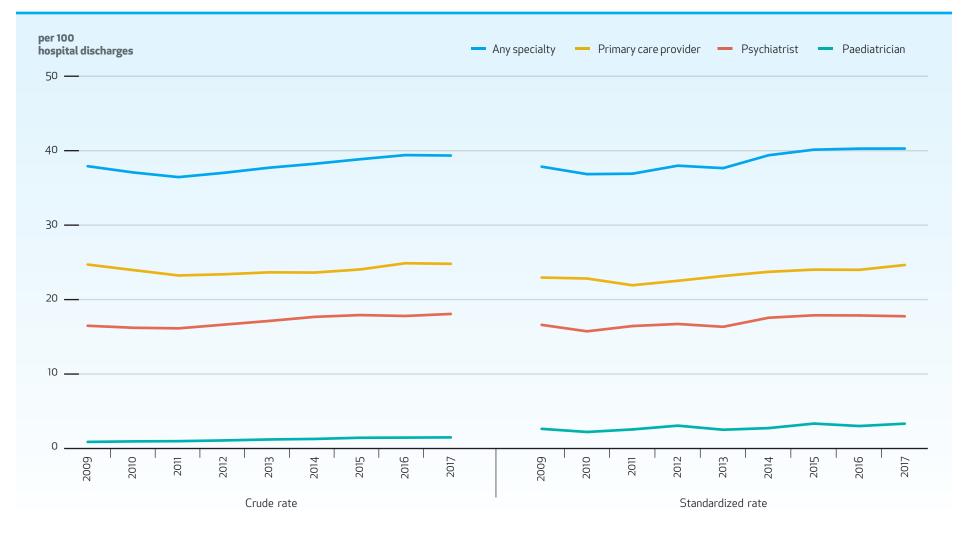
Early follow-up after hospital discharge, a universally reported performance indicator, likely helps to improve adherence to treatment and communication between health care providers and patients and may prevent hospital readmission.

#### Results

- Approximately 40% of mental health and addictions-related hospital discharges were followed by an outpatient visit within 7 days. This proportion increased slightly between 2009 and 2017. The bulk of outpatient follow-up care was delivered by primary care providers, followed by psychiatrists and paediatricians.
- Younger patients were more likely to visit
  psychiatrists and paediatricians within 7 days of
  an MHA-related hospital discharge, while older
  patients were more like to receive follow-up care
  from primary care providers.
- Between 2009 and 2016, the greatest increase in the 7-day outpatient follow-up rate was observed among individuals hospitalized for deliberate self-harm. This was driven primarily by an increase in psychiatrist follow-up. Overall, primary care provider follow-up rates were relatively stable over time for all diagnostic groups, while psychiatrist follow-up rates increased for deliberate self-harm, anxiety disorders and substance-related disorders.
- Residents of higher-income neighbourhoods and the Toronto Central LHIN were more likely to receive outpatient follow-up after an MHArelated hospital discharge.

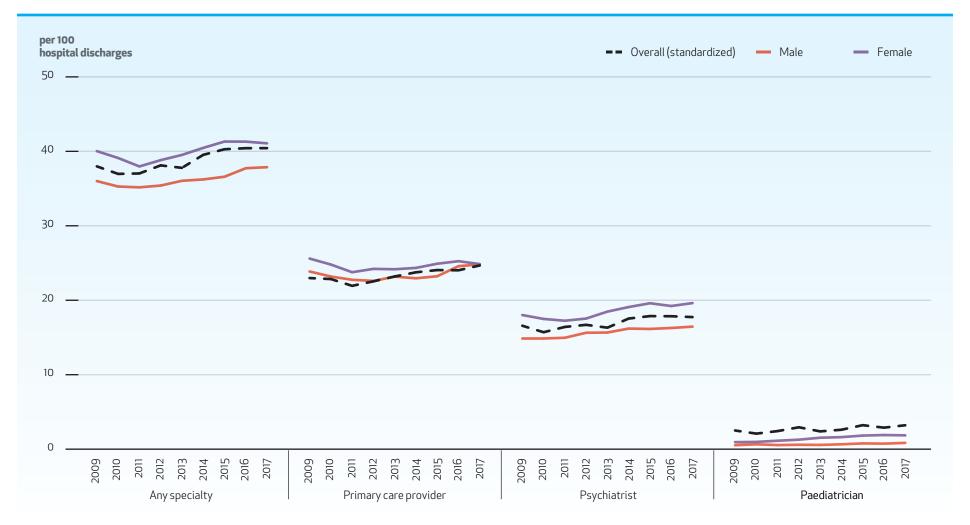
Note: Rates presented in the following exhibits are crude rates unless otherwise specified. Standardized rates are age- and sex- standardized.

**EXHIBIT 6.1** Number of mental health and addictions-related hospitalizations that were followed by an outpatient visit within 7 days per 100 hospital discharges among individuals aged 0 to 105 years, by provider specialty and type of rate, in Ontario, 2009 to 2017



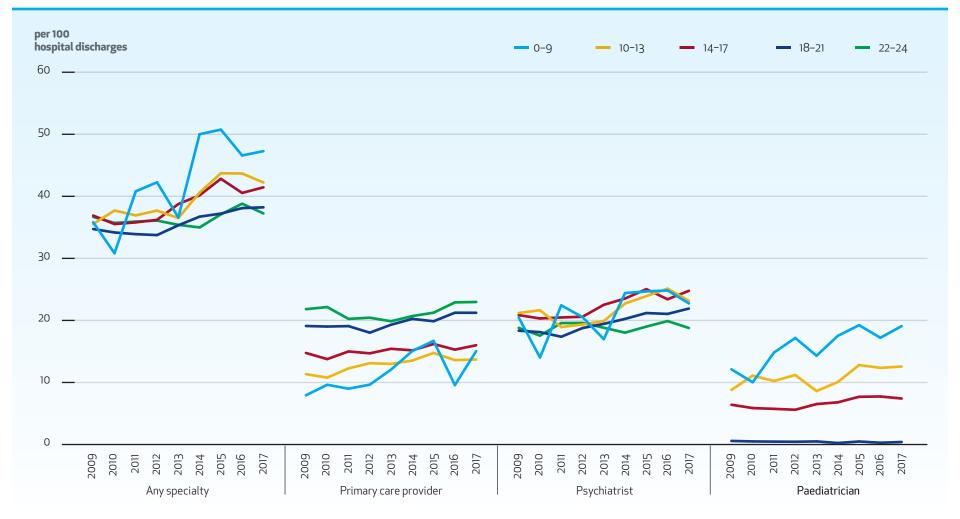
Year

**EXHIBIT 6.2** Number of mental health and addictions–related hospitalizations that were followed by an outpatient visit within 7 days per 100 hospital discharges among individuals aged 0 to 105 years, by provider specialty and type of rate, in Ontario, 2009 to 2017



Year and provider specialty

**EXHIBIT 6.3** Number of mental health and addictions–related hospitalizations that were followed by an outpatient visit within 7 days per 100 hospital discharges among individuals aged 0 to 24 years, by age group and provider specialty, in Ontario, 2009 to 2017



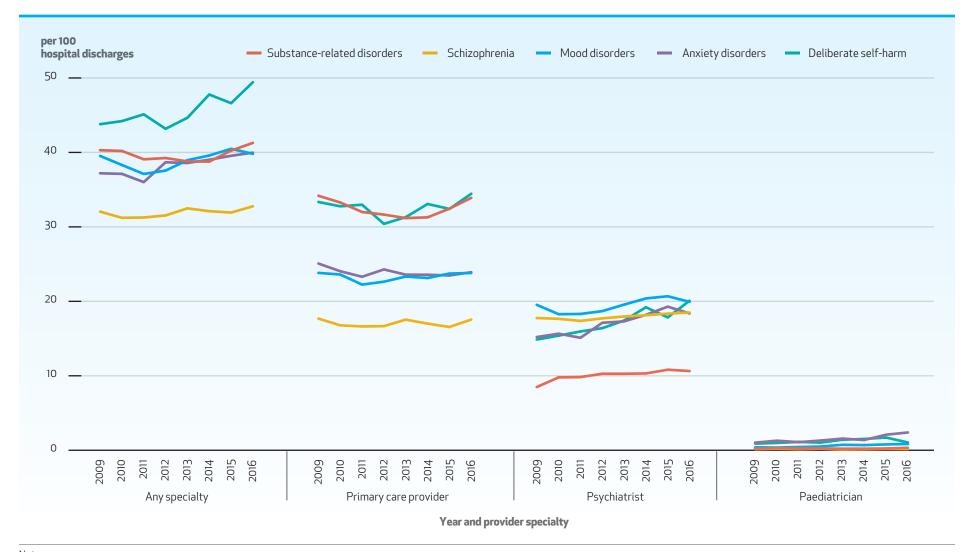
Year and provider specialty

**EXHIBIT 6.4** Number of mental health and addictions–related hospitalizations that were followed by an outpatient visit within 7 days per 100 hospital discharges among individuals aged 25 to 105 years, by age group and provider specialty, in Ontario, 2009 to 2017



Year and provider specialty

**EXHIBIT 6.5** Number of mental health and addictions–related hospitalizations that were followed by an outpatient visit within 7 days per 100 hospital discharges among individuals aged 0 to 105 years, by type of diagnosis and provider specialty, in Ontario, 2009 to 2016



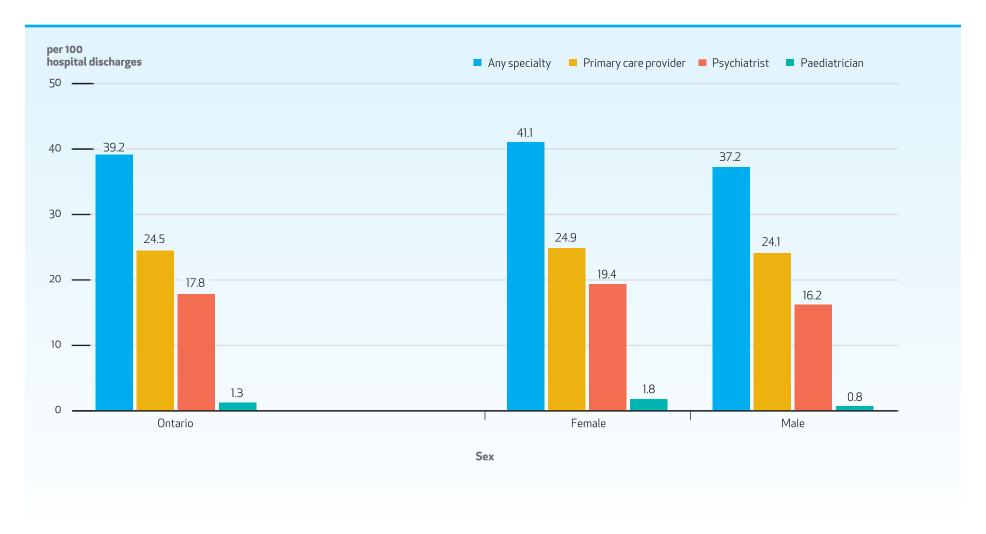
#### Notes:

 $<sup>1.\,\</sup>mathsf{An}\, \text{``other''}\,\mathsf{group}\,\mathsf{that}\,\mathsf{captures}\,\mathsf{less}\,\mathsf{common}\,\mathsf{mental}\,\mathsf{health}\,\mathsf{and}\,\mathsf{addictions-related}\,\mathsf{diagnoses}\,\mathsf{is}\,\mathsf{not}\,\mathsf{shown}$ 

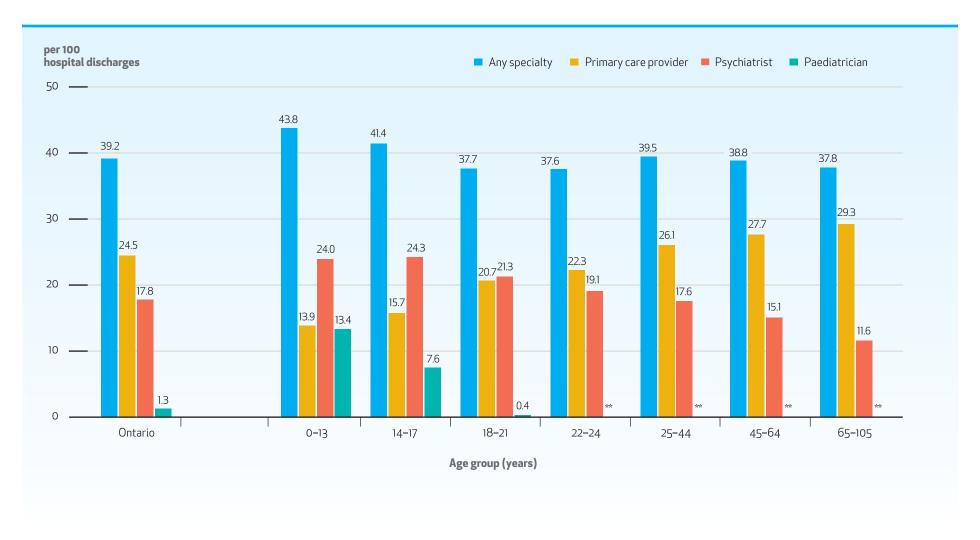
<sup>2.</sup> Deliberate self-harm refers to residual deliberate self-harm, i.e., the presence of a self-harm diagnosis where the main reason for the hospitalization is non-MHA-related. Deliberate self-harm may be present as a secondary diagnosis in any of the other diagnostic types.

<sup>3.</sup> Rates for 2009 to 2016 are based on diagnostic categories in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders, and rates for 2017 are based on diagnostic categories in the 5th edition.

**EXHIBIT 6.6** Number of mental health and addictions-related hospitalizations that were followed by an outpatient visit within 7 days per 100 hospital discharges among individuals aged 0 to 105 years, by sex and provider specialty, in Ontario, 3-year average for 2015 to 2017

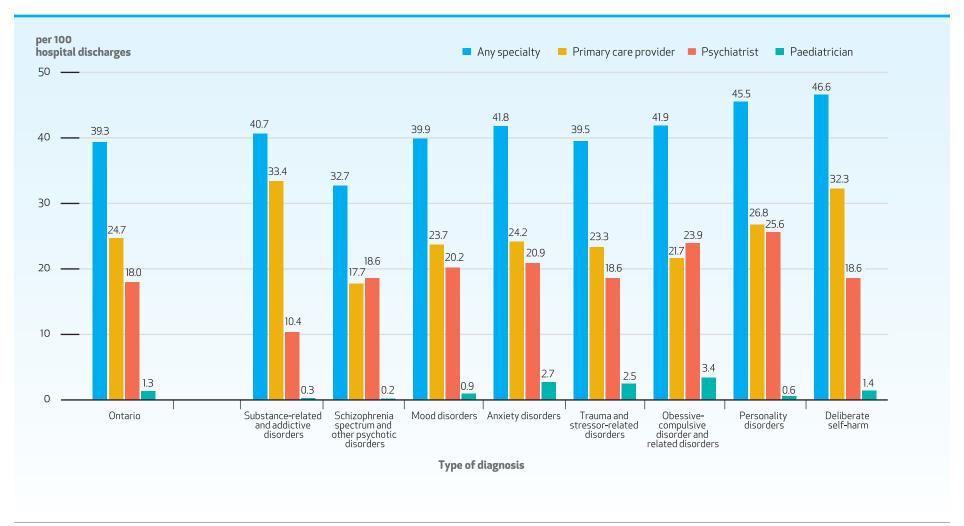


**EXHIBIT 6.7** Number of mental health and addictions-related hospitalizations that were followed by an outpatient visit within 7 days per 100 hospital discharges among individuals aged 0 to 105 years, by age group and provider specialty, in Ontario, three-year average for 2015 to 2017



<sup>\*\*</sup>For this age group, the numerator for the rate of paediatrician visits was ≤5 and therefore suppressed.

**EXHIBIT 6.8** Number of mental health and addictions-related hospitalizations that were followed by an outpatient visit within 7 days per 100 hospital discharges among individuals aged 0 to 105 years, by type of diagnosis and provider specialty, in Ontario, 2017

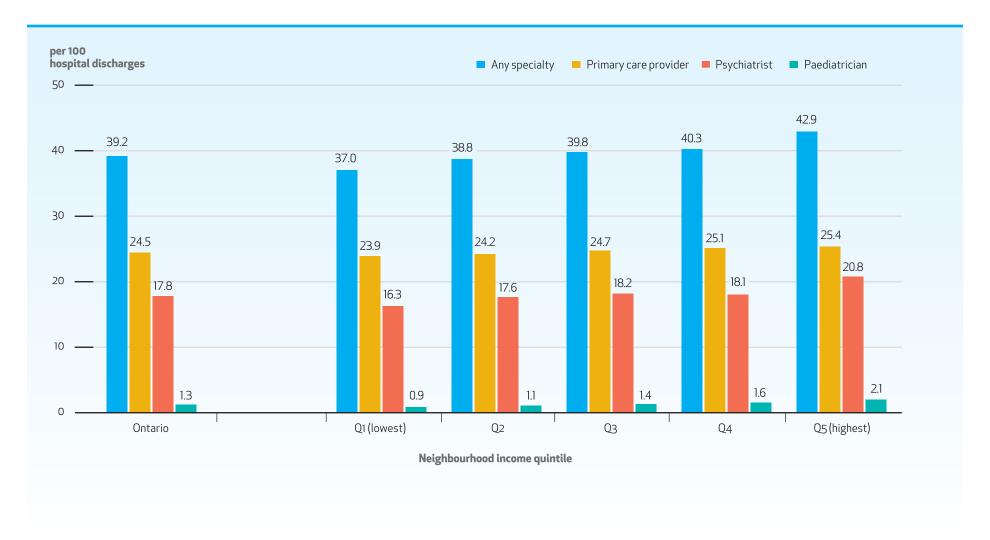


#### Notes:

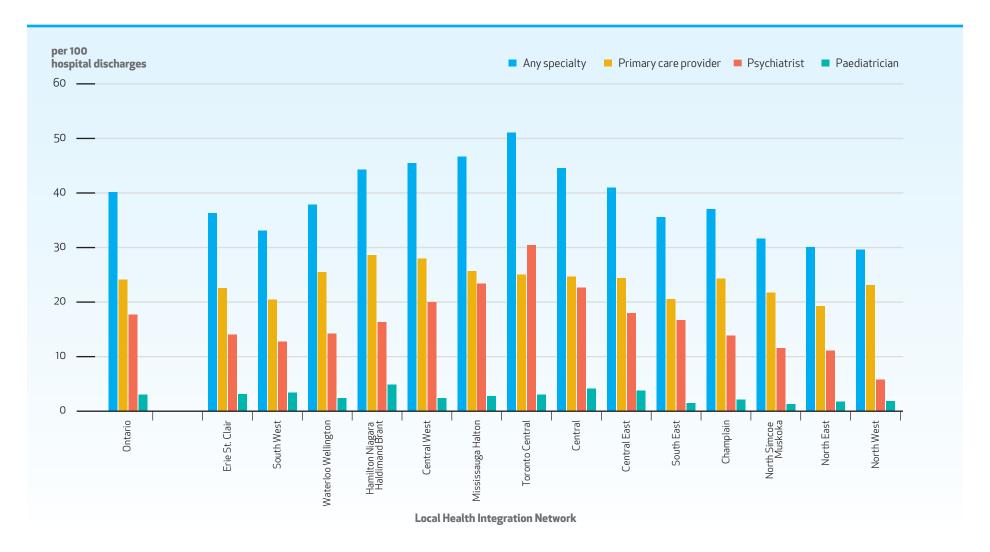
- $1.\,\mathrm{An}$  "other" group that captures less common mental health and addictions-related diagnoses is not shown.
- 2. Obsessive-compulsive disorder and related disorders includes body dysmorphic disorder and hoarding disorder.
- 3. Deliberate self-harm refers to residual deliberate self-harm, i.e., the presence of a self-harm diagnosis where the main reason for the hospitalization is non-MHA-related. Deliberate self-harm may be present as a secondary diagnosis in any of the other diagnostic types.

4. Rates are based on diagnostic categories in the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition.

**EXHIBIT 6.9** Number of mental health and addictions hospitalizations that were followed by an outpatient visit within 7 days per 100 hospital discharges among individuals aged 0 to 105 years, by neighbourhood income quintile and provider specialty, in Ontario, three-year average for 2015 to 2017



**EXHIBIT 6.10** Number of mental health and addictions-related hospitalizations that were followed by an outpatient visit within 7 days per 100 hospital discharges among individuals aged 0 to 105 years, by Local Health Integration Network and provider specialty, in Ontario, three-year average for 2015 to 2017



Note: Rates are age- and sex-standardized.

## 7.0

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

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

#### Rationale

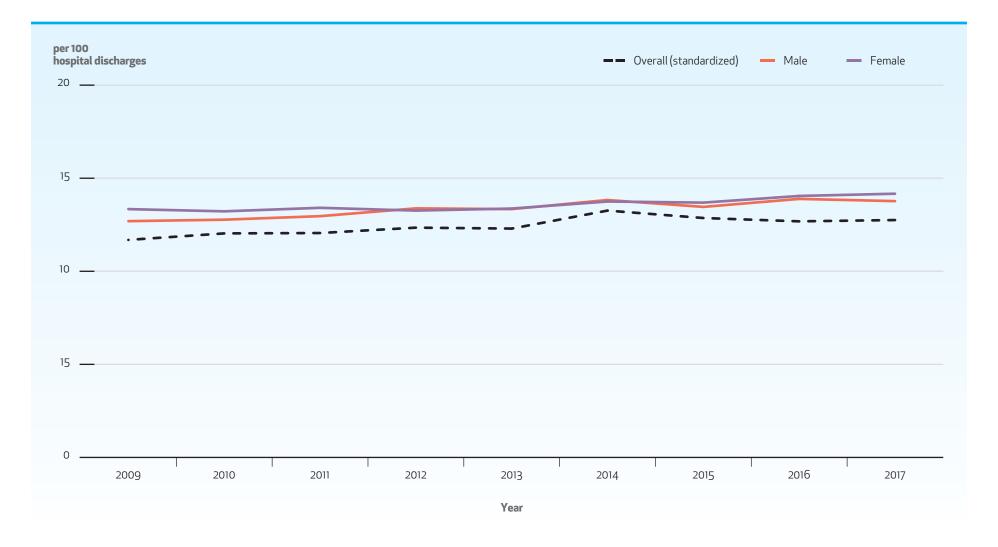
The rate of inpatient readmissions within 30 days of discharge, a universally reported performance indicator, could reflect inadequate community support and outpatient physician-based mental health and addictions (MHA) services.

#### **Results**

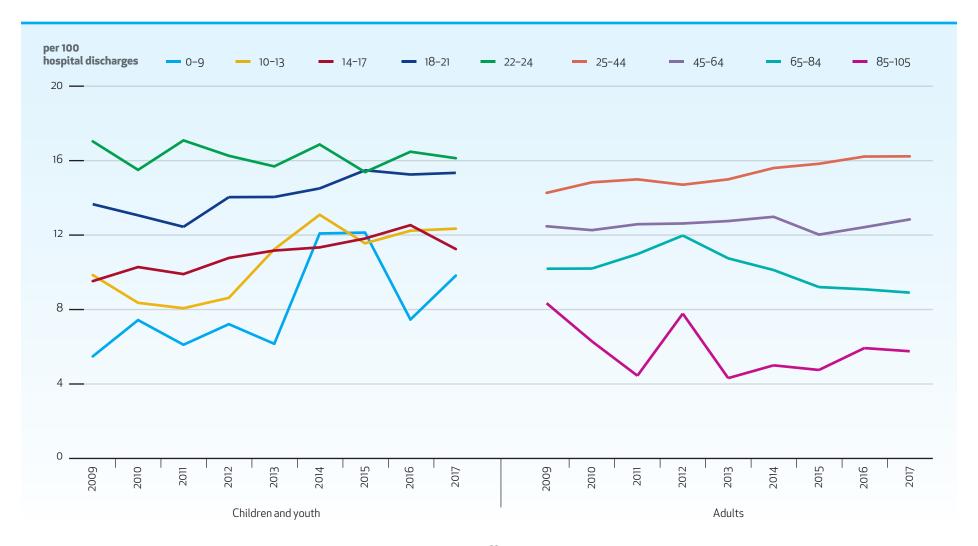
- Approximately 12% of MHA-related hospital discharges were followed by an MHA-related hospital admission within 30 days. This proportion remained relatively stable between 2009 and 2017; however, rate increases were observed among individuals aged 0–17 and 25–44 years, with the highest readmission rate observed for those aged 22–44 years.
- Over time, hospital readmission rates increased for individuals diagnosed with anxiety disorders and substance use disorders. In 2017, 30-day readmission rates were highest among individuals diagnosed with personality disorders or schizophrenia and least common among those diagnosed with deliberate self-harm or anxiety disorders.
- MHA-related hospital readmissions were highest among residents of lower-income neighborhoods and the North East and Toronto Central LHINs.

Note: Rates presented in the following exhibits are crude rates unless otherwise specified. Standardized rates are age- and sex- standardized.

**EXHIBIT 7.1** Number of mental health and addictions-related hospital readmissions within 30 days per 100 hospital discharges among individuals aged 0 to 105 years, overall and by sex, in Ontario, 2009 to 2017

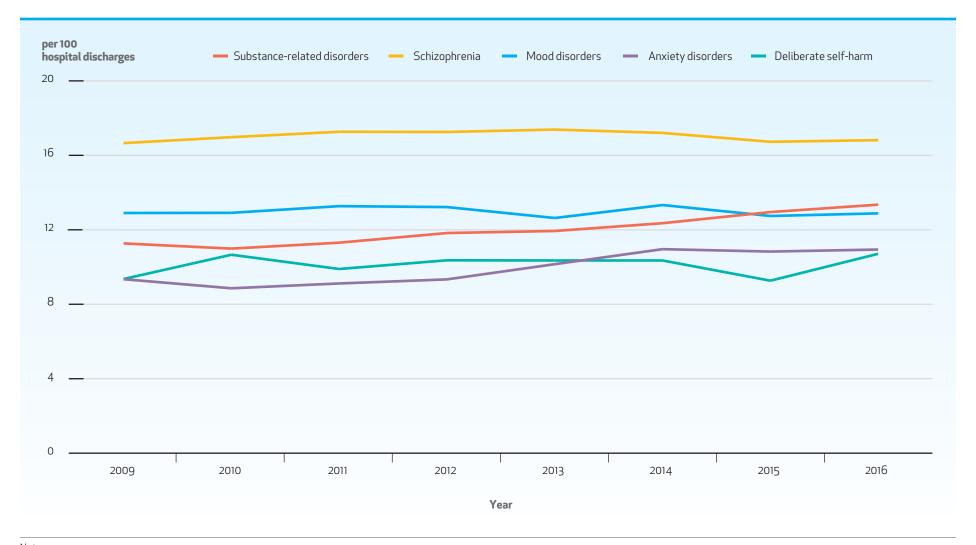


**EXHIBIT 7.2** Number of mental health and addictions–related hospital readmissions within 30 days per 100 hospital discharges among individuals aged 0 to 105 years, by age group, in Ontario, 2009 to 2017



Year

**EXHIBIT 7.3** Number of mental health and addictions-related hospital readmissions within 30 days per 100 hospital discharges among individuals aged 0 to 105 years, by type of diagnosis, in Ontario, 2009 to 2016



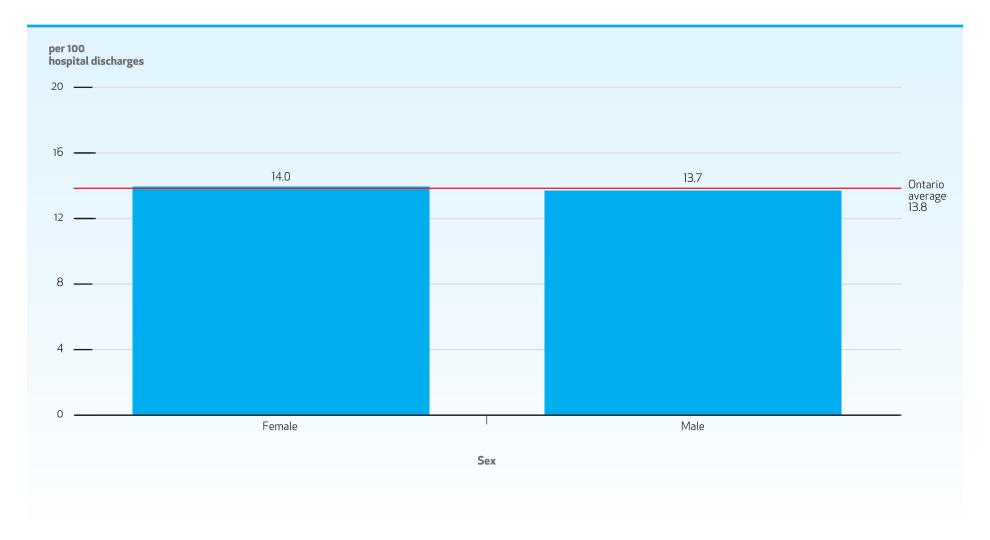
#### Notes:

 $<sup>1.\,\</sup>mathsf{An}\, \text{``other''}\,\mathsf{group}\,\mathsf{that}\,\mathsf{captures}\,\mathsf{less}\,\mathsf{common}\,\mathsf{mental}\,\mathsf{health}\,\mathsf{and}\,\mathsf{addictions-related}\,\mathsf{diagnoses}\,\mathsf{is}\,\mathsf{not}\,\mathsf{shown}.$ 

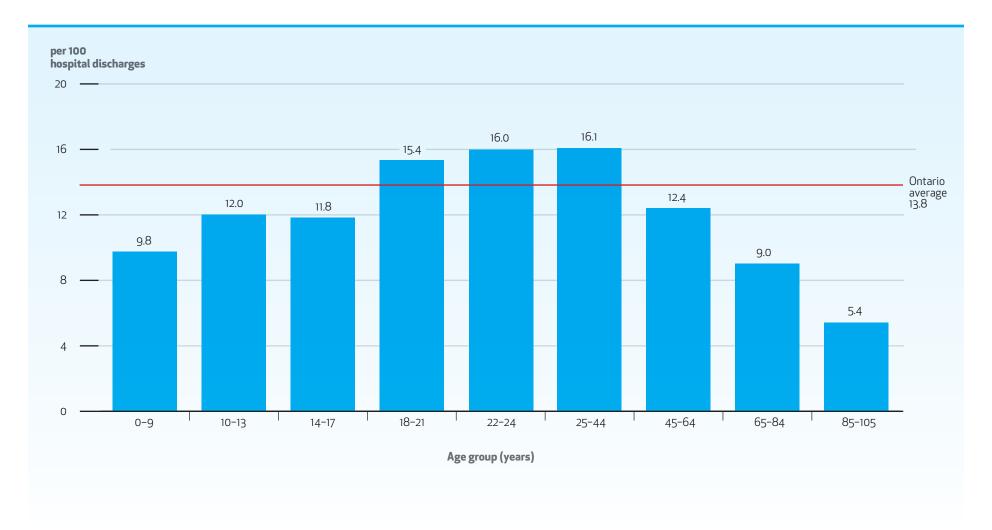
<sup>2.</sup> Deliberate self-harm refers to residual deliberate self-harm, i.e., the presence of a self-harm diagnosis where the main reason for the hospitalization is non-MHA-related. Deliberate self-harm may be present as a secondary diagnosis in any of the other diagnostic types.

<sup>3.</sup> Rates for 2009 to 2016 are based on diagnostic categories in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders, and rates for 2017 are based on diagnostic categories in the 5th edition.

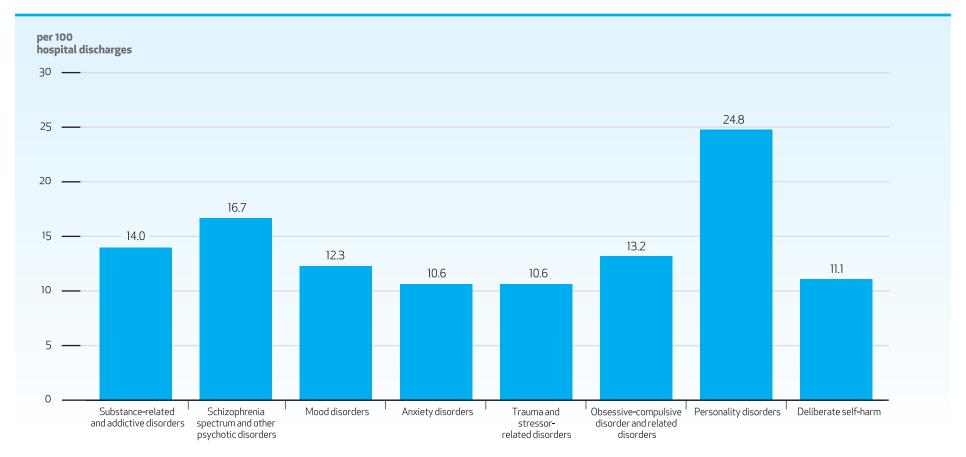
**EXHIBIT 7.4** Number of mental health and addictions-related hospital readmissions within 30 days per 100 hospital discharges among individuals aged 0 to 105 years, by sex, in Ontario, three-year average for 2015 to 2017



**EXHIBIT 7.5** Number of mental health and addictions–related hospital readmissions within 30 days per 100 hospital discharges among individuals aged 0 to 105 years, by age group, in Ontario, three-year average for 2015 to 2017



**EXHIBIT 7.6** Number of mental health and addictions-related hospital readmissions within 30 days per 100 hospital discharges among individuals aged 0 to 105 years, by type of diagnosis, in Ontario, 2017



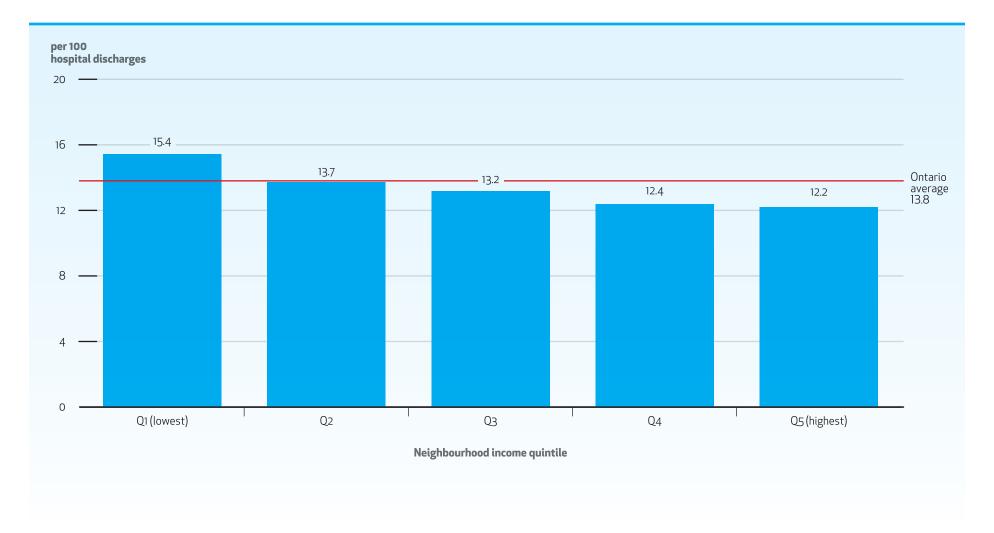
Type of diagnosis

#### Notes:

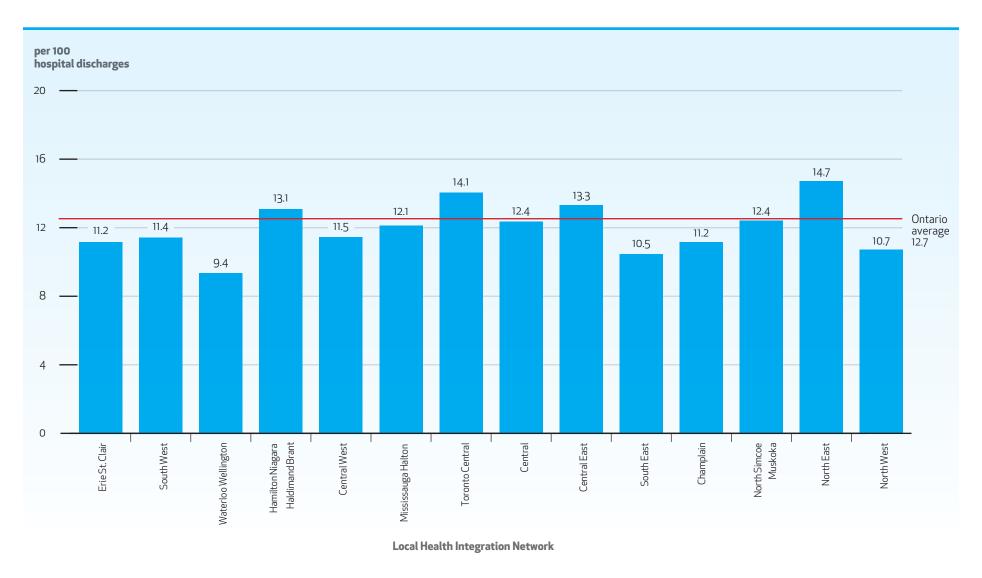
- $1.\,\mathrm{An}$  "other" group that captures less common mental health and addictions-related diagnoses is not shown.
- 2. Obsessive-compulsive disorder and related disorders includes body dysmorphic disorder and hoarding disorder.
- 3. Deliberate self-harm refers to residual deliberate self-harm, i.e., the presence of a self-harm diagnosis where the main reason for the hospitalization is non-MHA-related. Deliberate self-harm may be present as a secondary diagnosis in any of the other diagnostic types.

4. Rates are based on diagnostic categories in the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition.

**EXHIBIT 7.7** Number of mental health and addictions-related hospital readmissions within 30 days per 100 hospital discharges among individuals aged 0 to 105 years, by neighbourhood income quintile, in Ontario, three-year average for 2015 to 2017



**EXHIBIT 7.8** Number of mental health and addictions-related hospital readmissions within 30 days per 100 hospital discharges among individuals aged 0 to 105 years, by Local Health Integration Network, in Ontario, three-year average for 2015 to 2017



Note: Rates are age- and sex-standardized.

### 8.0

Rates of 30-day emergency department revisits following a mental health and addictions-related hospital discharge

# 8.0 Rates of 30-day emergency department revisits following a mental health and addictions-related hospital discharge

#### Rationale

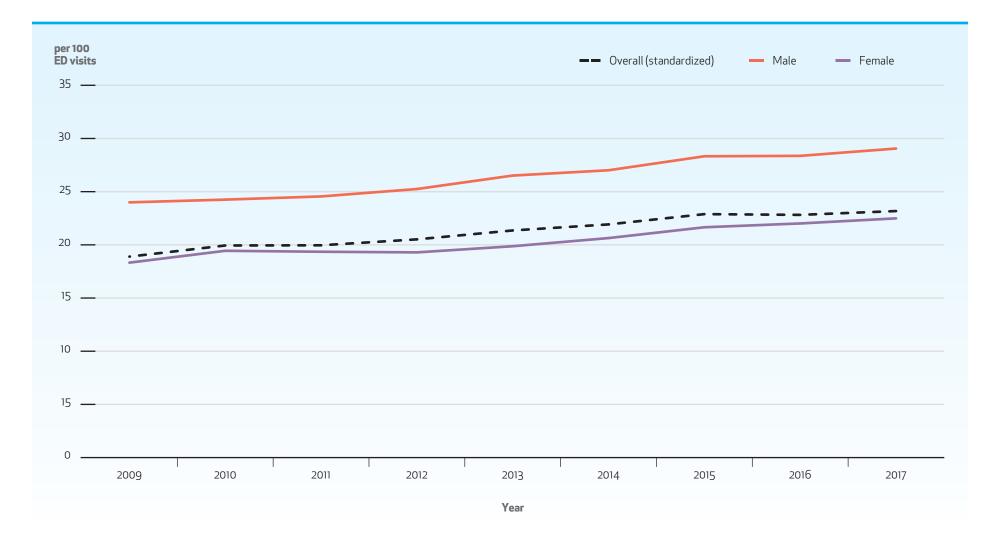
Repeat unscheduled emergency department visits for mental health and addictions (MHA) care could signal inadequate transitions in care between hospital or emergency department (ED) settings and outpatient or community settings.

#### **Results**

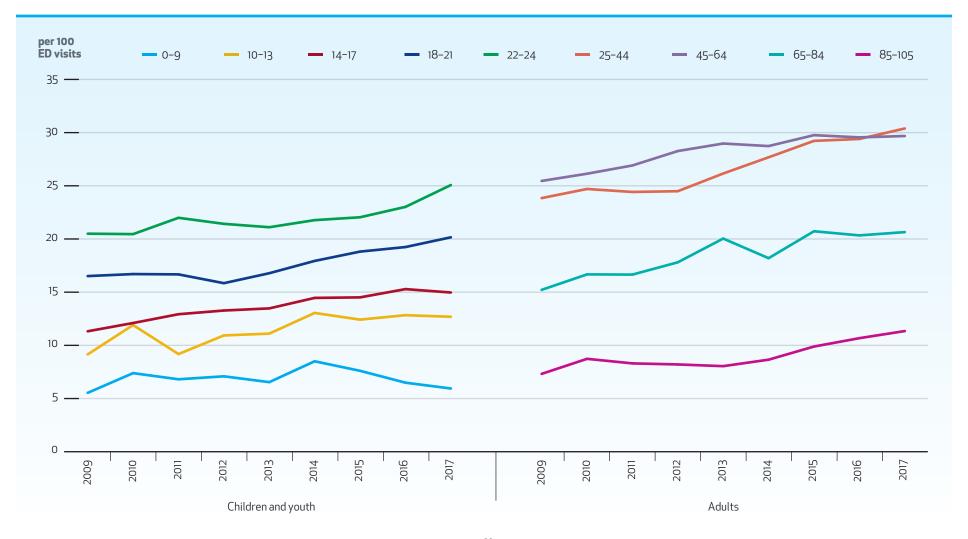
- About 20% of MHA-related ED visits were followed by another MHA-related ED visit within 30 days. This proportion increased between 2009 and 2017 and was highest among males and individuals aged 25–64.
- Thirty-day ED revisits were most common among individuals diagnosed with schizophrenia, personality disorders or substance-related disorders. Revisit rates increased between 2009 and 2017 for all diagnostic groups except mood disorders.
- ED revisit rates were highest among residents of lower-income neighborhoods and the Toronto Central and North West LHINs.

Note: Rates presented in the following exhibits are crude rates unless otherwise specified. Standardized rates are age- and sex- standardized.

**EXHIBIT 8.1** Number of mental health and addictions-related ED revisits within 30 days per 100 emergency department visits by individuals aged 0 to 105 years, overall and by sex, in Ontario, 2009 to 2017

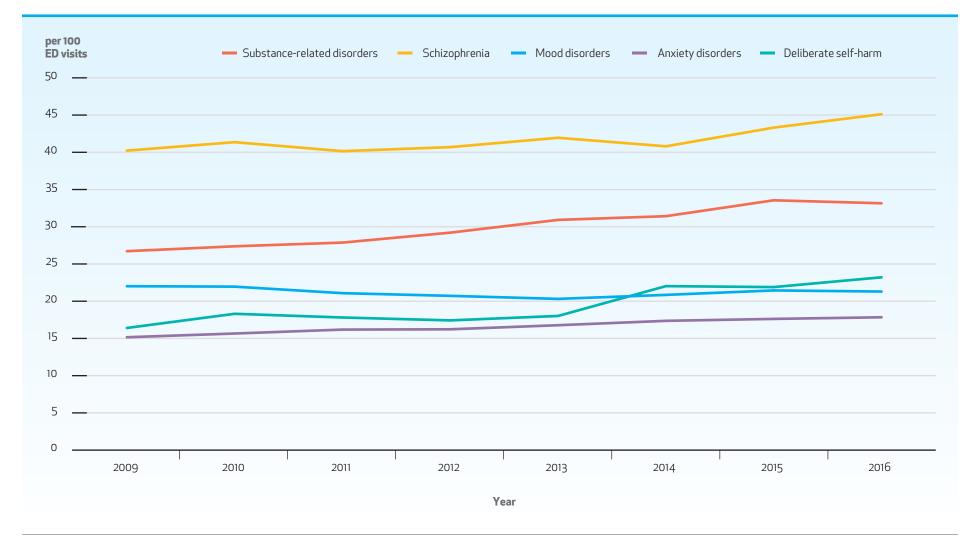


**EXHIBIT 8.2** Number of mental health and addictions-related emergency department revisits within 30 days per 100 ED visits by individuals aged 0 to 105 years, by age group, in Ontario, 2009 to 2017



Year

**EXHIBIT 8.3** Number of mental health and addictions-related emergency department revisits within 30 days per 100 ED visits by individuals aged 0 to 105 years, by type of diagnosis, in Ontario, 2009 to 2016



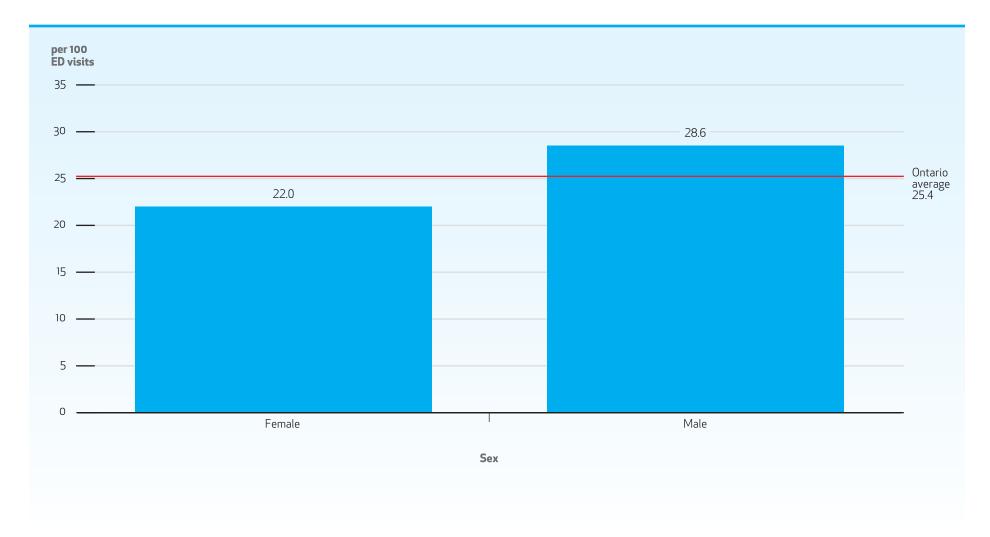
#### Notes

 $<sup>1.\,\</sup>mathsf{An}\, \text{``other''}\,\mathsf{group}\,\mathsf{that}\,\mathsf{captures}\,\mathsf{less}\,\mathsf{common}\,\mathsf{mental}\,\mathsf{health}\,\mathsf{and}\,\mathsf{addictions-related}\,\mathsf{diagnoses}\,\mathsf{is}\,\mathsf{not}\,\mathsf{shown}.$ 

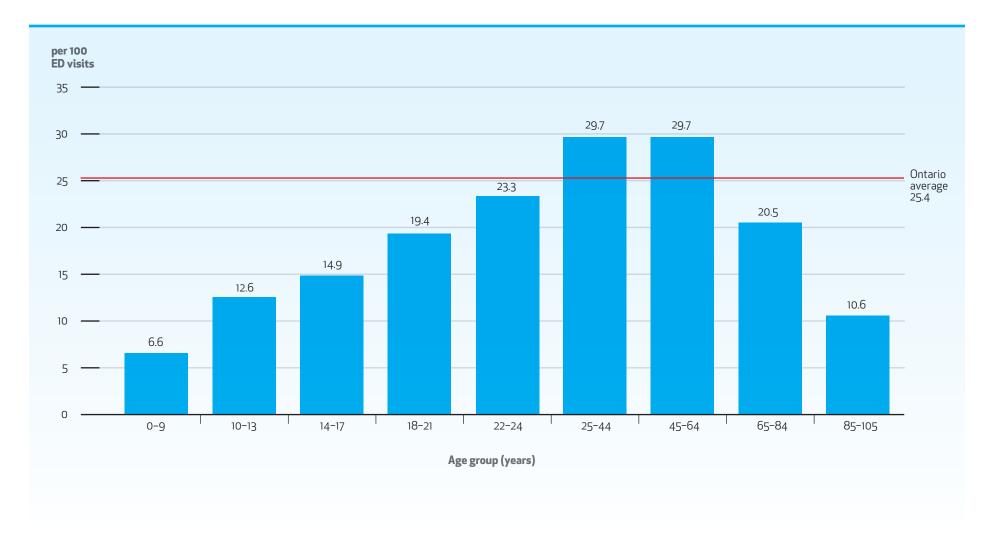
<sup>2.</sup> Deliberate self-harm refers to residual deliberate self-harm, i.e., the presence of a self-harm diagnosis where the main reason for the ED visit is non-MHA-related. Deliberate self-harm may be present as a secondary diagnosis in any of the other diagnostic types.

<sup>3.</sup> Rates for 2009 to 2016 are based on diagnostic categories in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders, and rates for 2017 are based on diagnostic categories in the 5th edition.

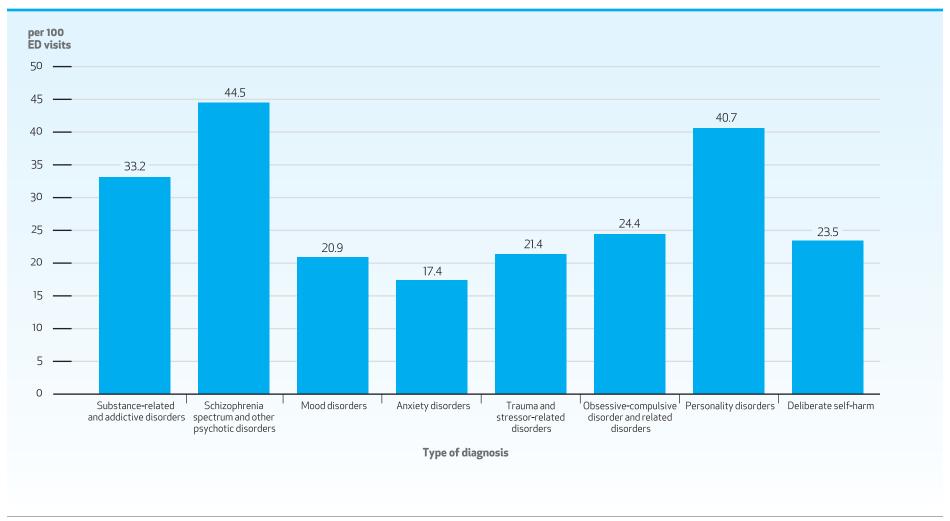
**EXHIBIT 8.4** Number of mental health and addictions—related emergency department revisits within 30 days per 100 ED visits by individuals aged 0 to 105 years, by sex, in Ontario, three-year average for 2015 to 2017



**EXHIBIT 8.5** Number of mental health and addictions–related emergency department revisits within 30 days per 100 ED visits by individuals aged 0 to 105 years, by age group, in Ontario, three-year average for 2015 to 2017



**EXHIBIT 8.6** Number of mental health and addictions-related emergency department revisits within 30 days per 100 ED visits by individuals aged 0 to 105 years, by type of diagnosis, in Ontario, 2017

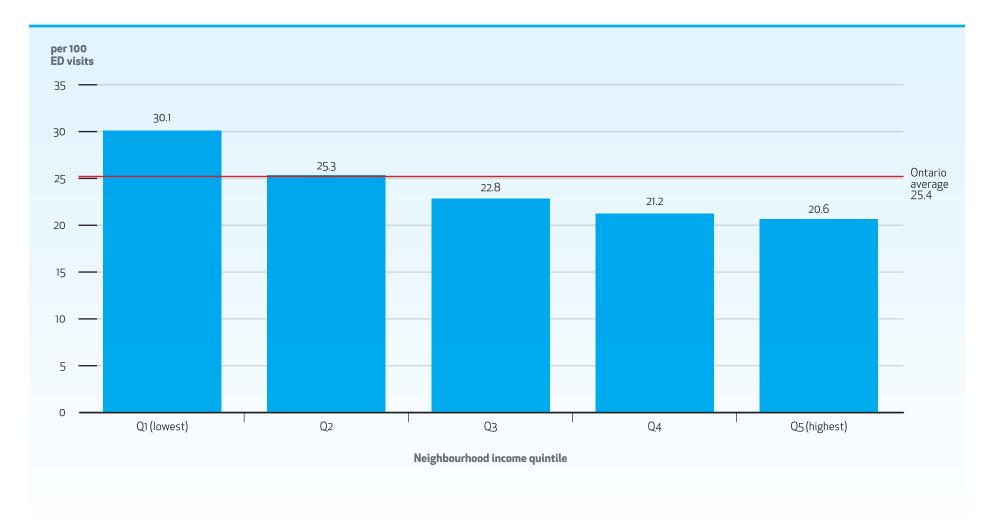


#### Notes:

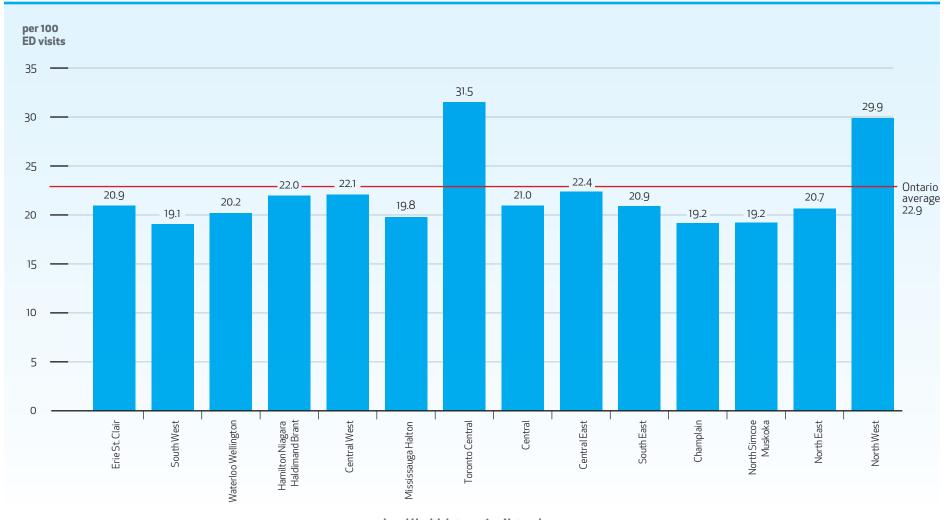
- $1.\,\mathsf{An}\, \text{``other''}\,\mathsf{group}\,\mathsf{that}\,\mathsf{captures}\,\mathsf{less}\,\mathsf{common}\,\mathsf{mental}\,\mathsf{health}\,\mathsf{and}\,\mathsf{addictions-related}\,\mathsf{diagnoses}\,\mathsf{is}\,\mathsf{not}\,\mathsf{shown}.$
- 2. Obsessive-compulsive disorder and related disorders includes body dysmorphic disorder and hoarding disorder.
- 3. 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. Deliberate self-harm may be present as a secondary diagnosis in any of the other diagnostic types.

4. Rates are based on diagnostic categories in the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition.

**EXHIBIT 8.7** Number of mental health and addictions-related emergency department revisits within 30 days per 100 ED visits among individuals aged 0 to 105 years, by neighbourhood income quintile, in Ontario, three-year average for 2015 to 2017



**EXHIBIT 8.8** Number of mental health and addictions-related emergency department revisits within 30 days per 100 ED visits by individuals aged 0 to 105 years, by Local Health Integration Network, in Ontario, three-year average for 2015 to 2017



**Local Health Integration Network** 

Note: Rates are age- and sex-standardized.

9.0
Rates of mental health and addictions—related outpatient visits

## 9.0 Rates of mental health and addictions related outpatient visits

#### Rationale

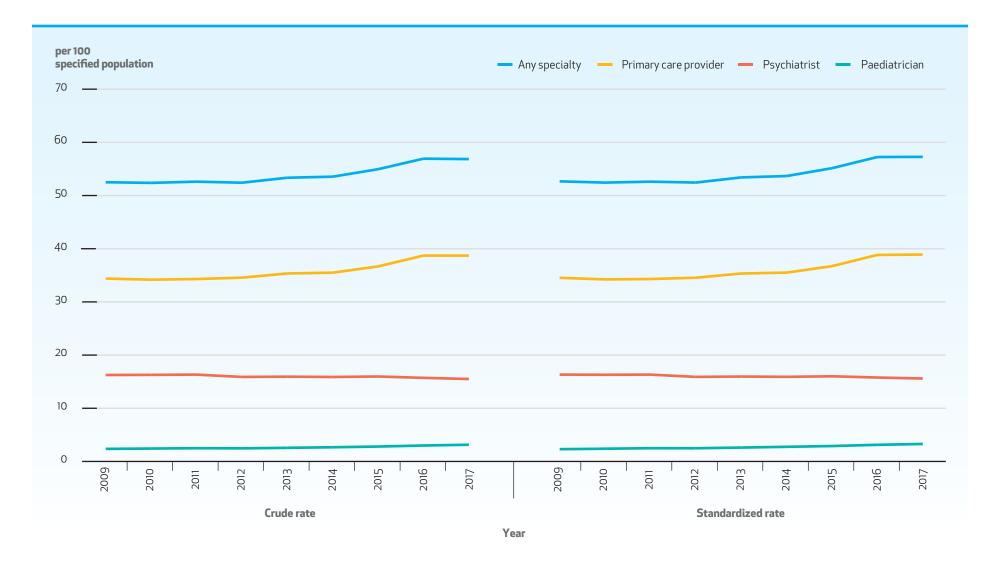
The use of outpatient services for mental health and addictions (MHA) problems provides a measure of service needs. Knowledge of the rate of and trends for outpatient visits according to physician type may help in human resource planning.

#### Results

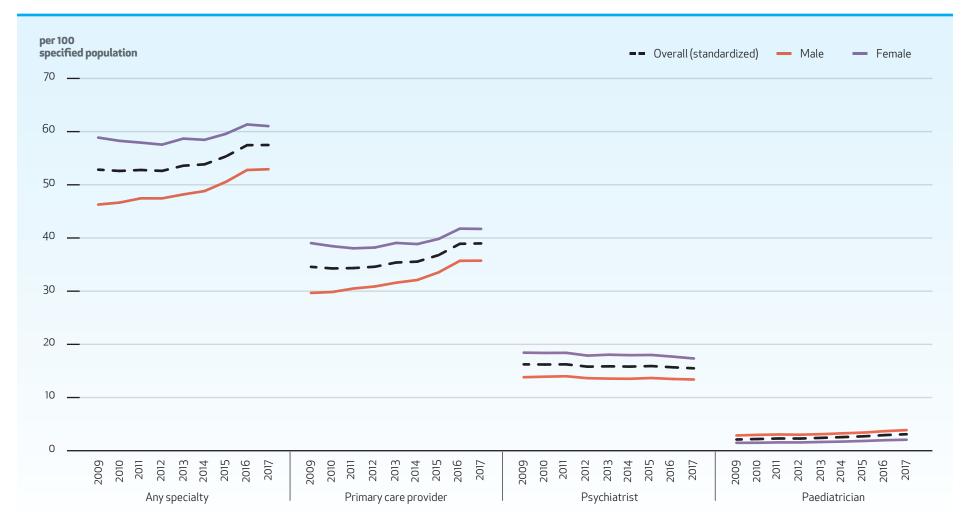
- Most MHA-related outpatient physician care was delivered by primary care providers, followed by psychiatrists and paediatricians. Between 2009 and 2017, rates of MHA-related outpatient visits to primary care providers and paediatricians increased, while the rate of visits to psychiatrists decreased.
- Between 2009 and 2017, outpatient visit rates increased for those aged 0–44 years, with the most marked increased observed among individuals aged 14–24 years. This increase was driven by visits to primary care providers but was also observed for psychiatrists and paediatricians. Primary care provider visits were most common among those aged 25–44, psychiatrist visits among those aged 45–64 and paediatrician visits among those aged 10–13.
- Residents of lower-income neighbourhoods had more MHA-related outpatient visits than residents of higher-income neighbourhoods. Rates of psychiatrist and paediatrician visits were highest for residents of the lowest- and highest-income neighbourhoods and those living in the Toronto Central LHIN.

Note: Rates presented in the following exhibits are crude rates unless otherwise specified. Standardized rates are age- and sex-standardized. Rates are for all physician specialties.

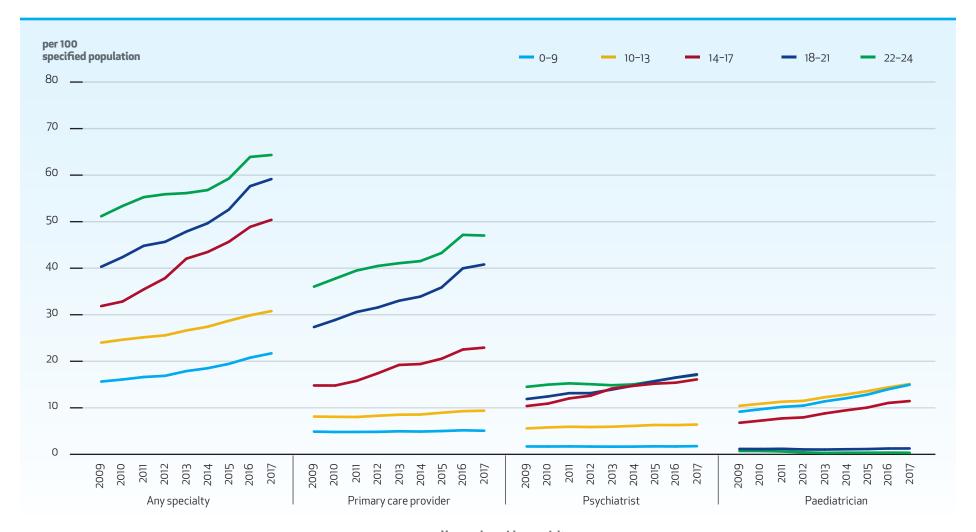
**EXHIBIT 9.1** Number of outpatient visits related to mental health and addictions per 100 population aged 0 to 105 years, by type of rate and provider specialty, in Ontario, 2009 to 2017



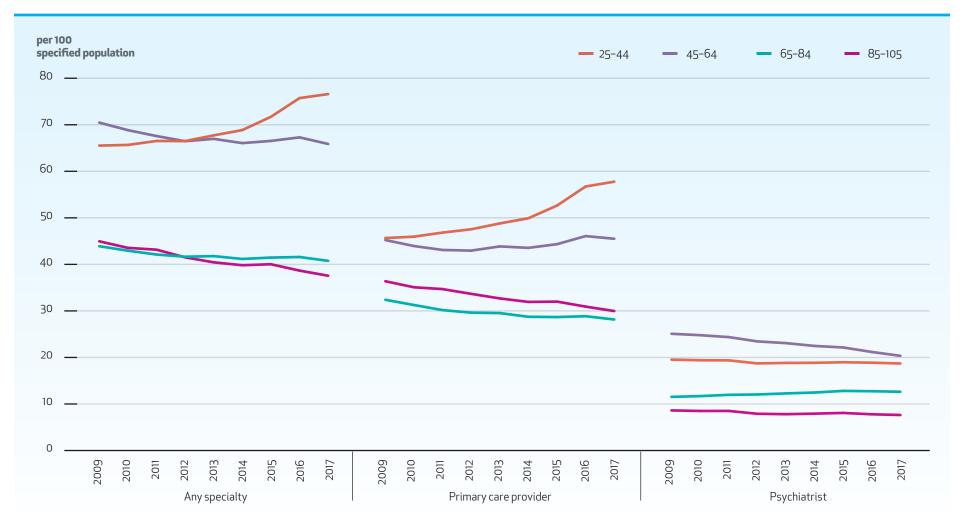
**EXHIBIT 9.2** Number of outpatient visits related to mental health and addictions per 100 population aged 0 to 105 years, overall and by sex and provider specialty, in Ontario, 2009 to 2017



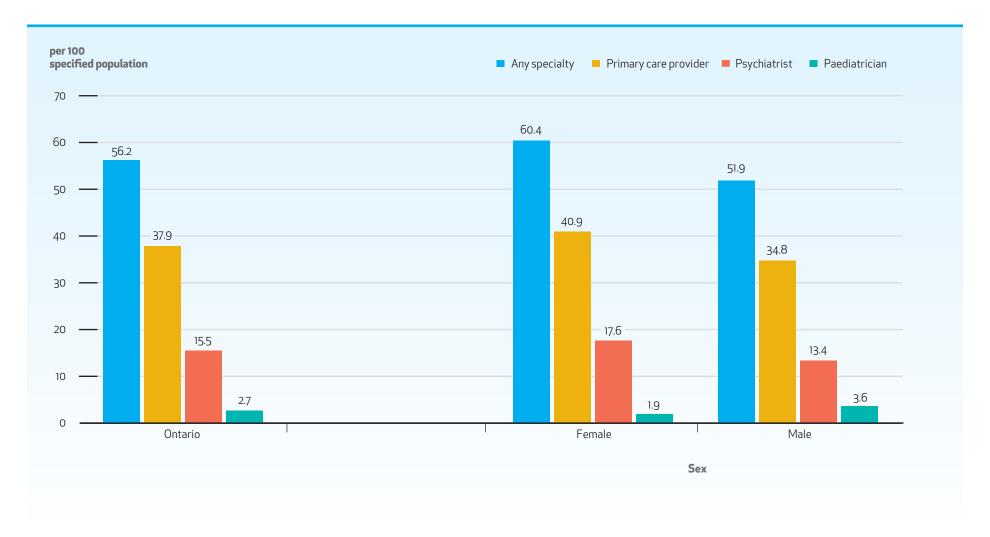
**EXHIBIT 9.3** Number of outpatient visits related to mental health and addictions per 100 population aged 0 to 24 years, by age group and provider specialty, in Ontario, 2009 to 2017



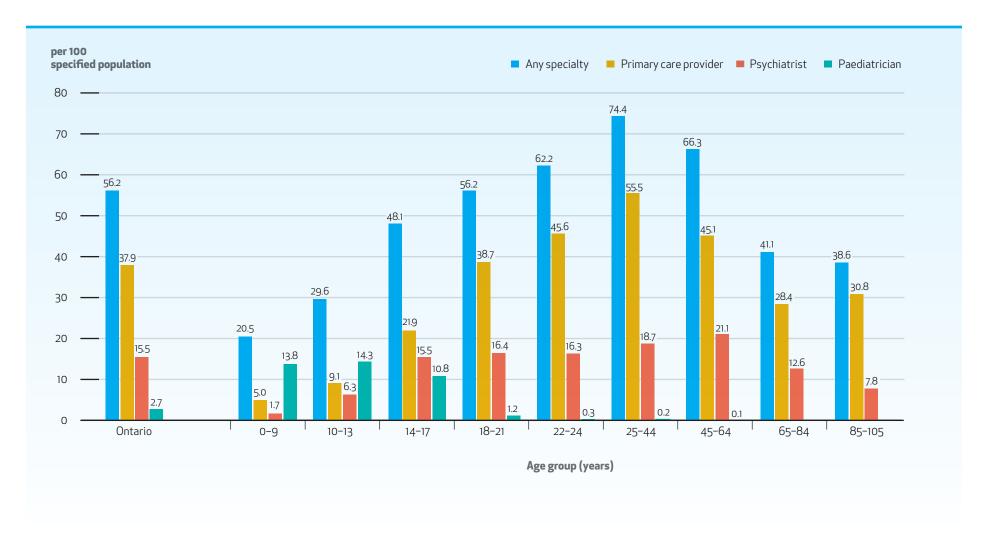
**EXHIBIT 9.4** Number of outpatient visits related to mental health and addictions per 100 population aged 25 to 105 years, by age group and provider specialty, in Ontario, 2009 to 2017



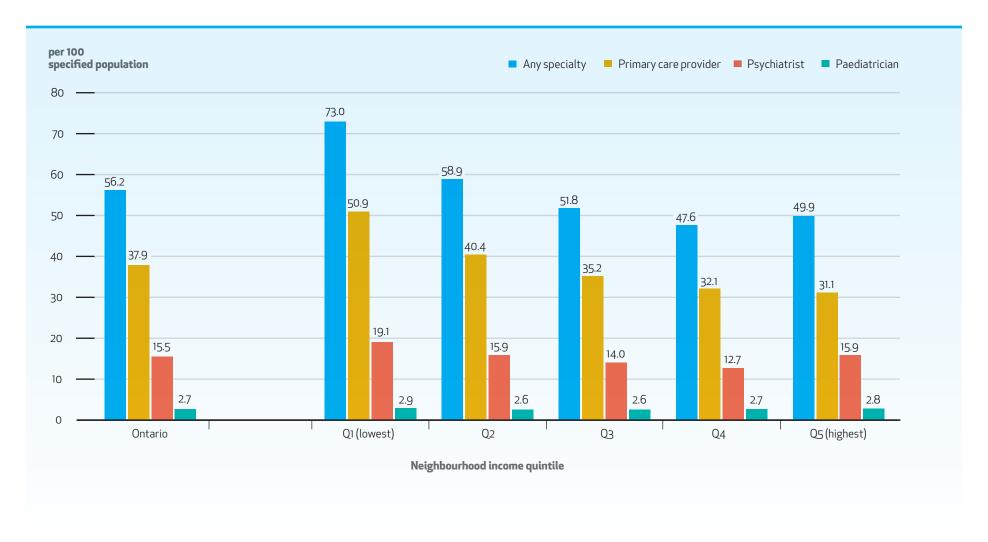
**EXHIBIT 9.5** Number of outpatient visits related to mental health and addictions per 100 population aged 0 to 105 years, by sex and provider specialty, in Ontario, three-year average for 2015 to 2017



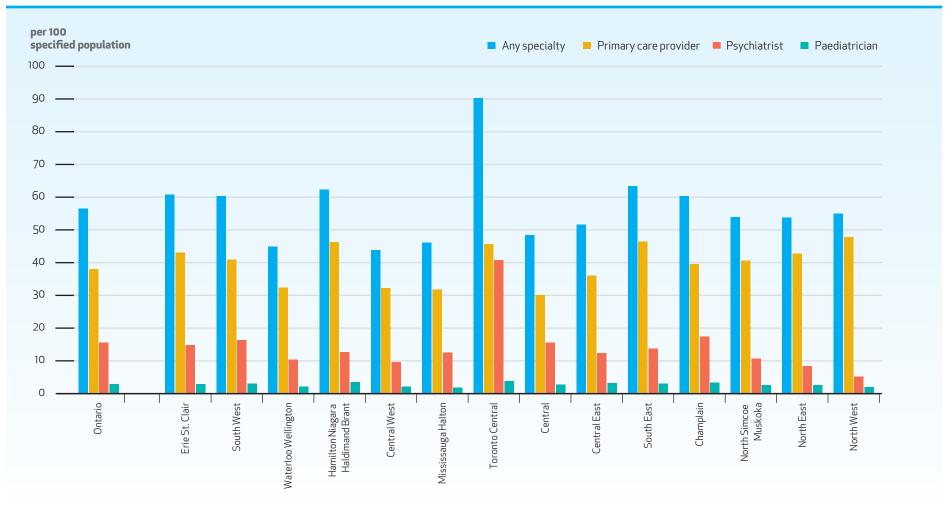
**EXHIBIT 9.6** Number of outpatient visits related to mental health and addictions per 100 population aged 0 to 105 years, by age group and provider specialty, in Ontario, three-year average for 2015 to 2017



**EXHIBIT 9.7** Number of outpatient visits related to mental health and addictions per 100 population aged 0 to 105 years, by neighbourhood income quintile and provider specialty, in Ontario, three-year average for 2015 to 2017



**EXHIBIT 9.8** Number of outpatient visits related to mental health and addictions per 100 population aged 0 to 105 years, by Local Health Integration Network and provider specialty, in Ontario, three-year average for 2015 to 2017



**Local Health Integration Network** 

### 10.0

Rates at which individuals were seen by a psychiatrist, primary care provider or paediatrician

## 10.0 Rates at which individuals were seen by a psychiatrist, primary care provider or paediatrician

#### Rationale

Psychiatrists are physicians who specialize in mental health and addictions (MHA) care. Their services are funded through the Ontario Health Insurance Plan (OHIP) and require a referral from another physician. Measuring the number of indivdiuals who are seen by a psychiatrist or paediatrician is one measure of access to specialized care.

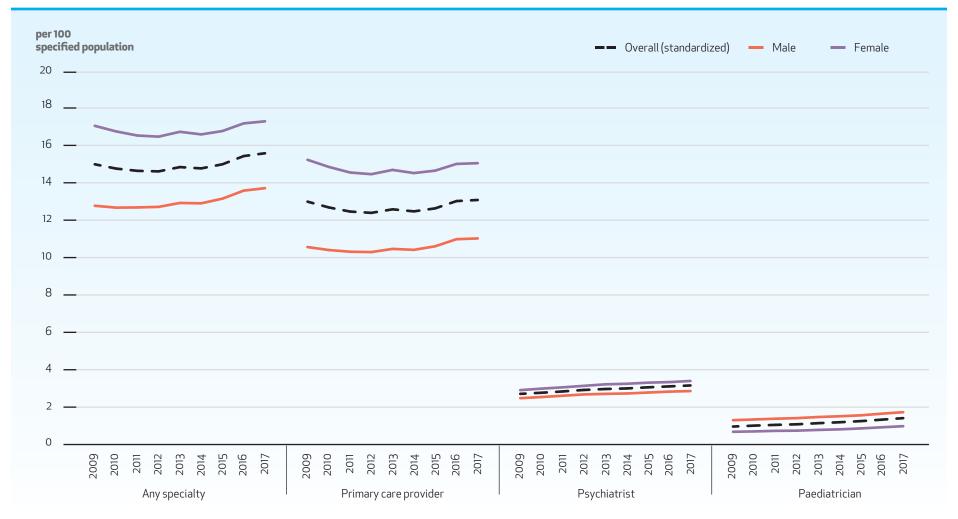
Primary care providers, such as general practitioners and family physicians (GP/FPs), provide variable amounts of MHA services in addition to general health care, depending on the case-mix of their practice. The rate of visits to GP/FPs, in addition to being a measure of access to MHA care, can help with human resource planning.

#### Results

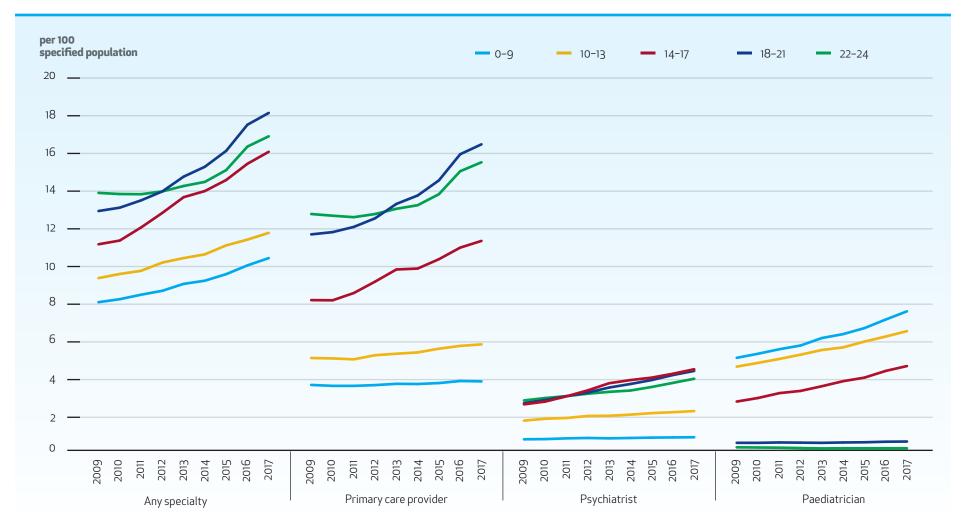
- Approximately 15% of Ontario residents received MHA care in outpatient settings, most commonly from primary care providers. This proportion increased between 2009 and 2017 for all physician specialties. The rate increased from 3.5 visits per person (about 7 million visits) in 2009 to 3.7 visits per person (about 8 million visits) in 2017.
- Between 2009 and 2017, the rate at which individuals were seen for MHA care increased among those aged 0–24 years and decreased among those aged 45–105 years; this trend was driven by primary care providers delivering more MHA care. There was also an increase in the rate at which individuals aged 14–24 years were seen by a psychiatrist. The rate at which individuals were seen for MHA care was highest for 18–21 year-olds.
- Individuals in lower-income neighbourhoods were more likely to be seen for MHA care by a psychiatrist or a primary care provider. No income gradient was observed for individuals visiting paediatricians.

Note: Rates presented in the following exhibits are crude rates unless otherwise specified. Standardized rates are age- and sex-standardized. Rates are for all physician specialties.

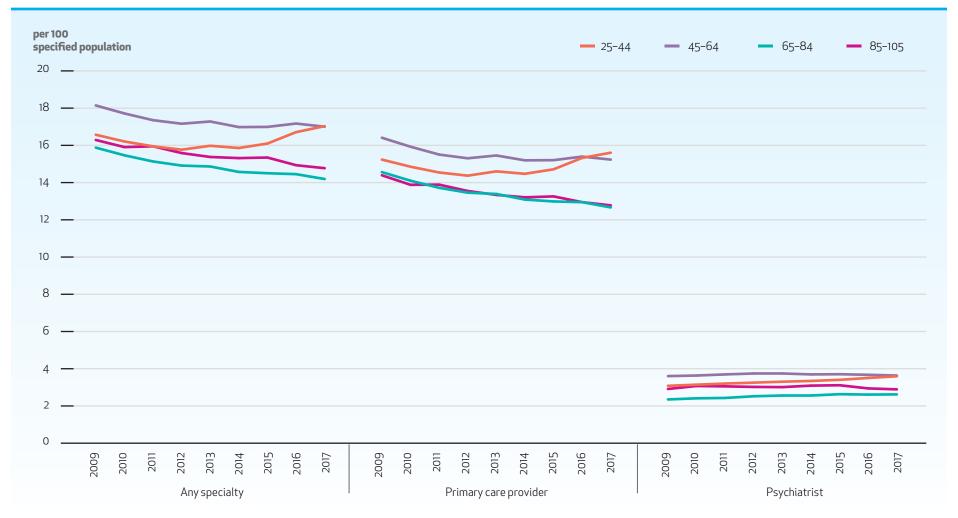
**EXHIBIT 10.1** Number of individuals seen by a psychiatrist, primary care provider or paediatrician for mental health and addictions care per 100 population aged 0 to 105 years, overall and by sex and provider specialty, in Ontario, 2009 to 2017



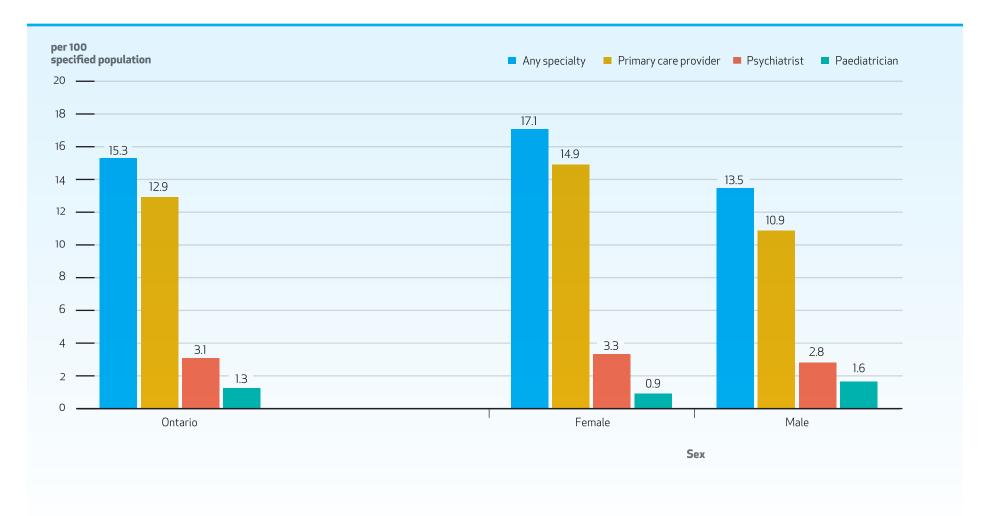
**EXHIBIT 10.2** Number of individuals seen by a psychiatrist, primary care provider or paediatrician for mental health and addictions care per 100 population aged 0 to 24 years, by age group and provider specialty, in Ontario, 2009 to 2017



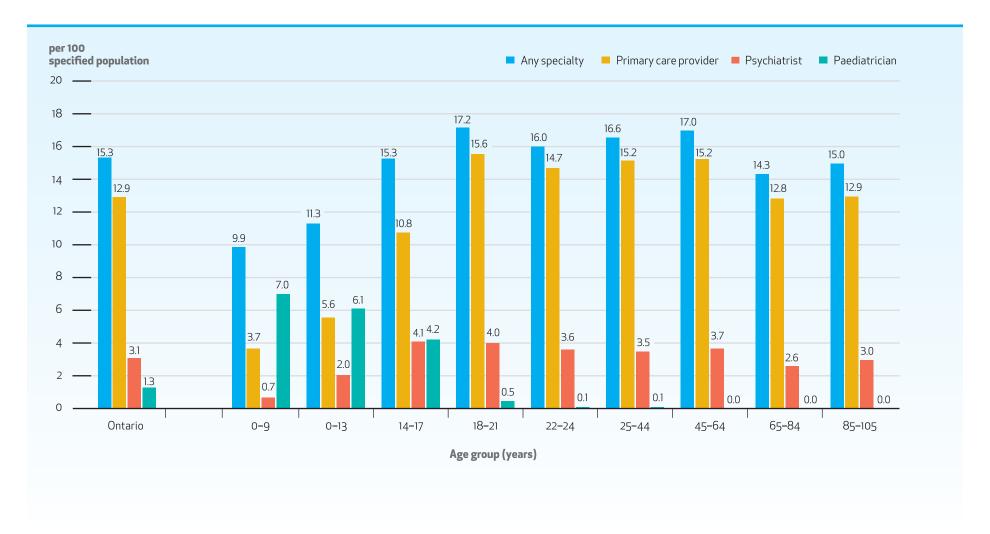
**EXHIBIT 10.3** Number of individuals seen by a psychiatrist or primary care provider for mental health and addictions care per 100 population aged 25 to 105 years, by age group and provider specialty, in Ontario, 2009 to 2017



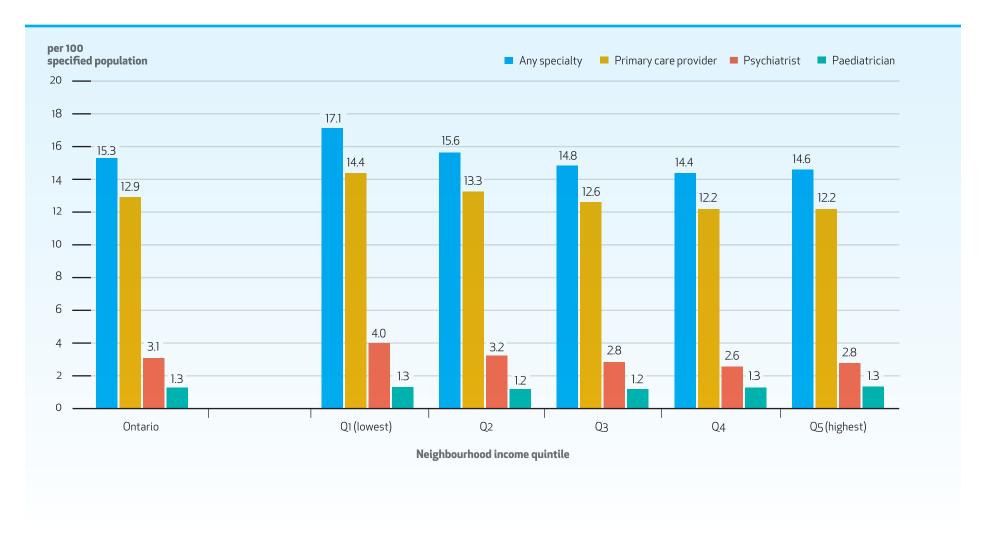
**EXHIBIT 10.4** Number of individuals seen by a psychiatrist, primary care provider or paediatrician for mental health and addictions care per 100 population aged 0 to 105 years, by sex and provider specialty, in Ontario, three-year average for 2015 to 2017



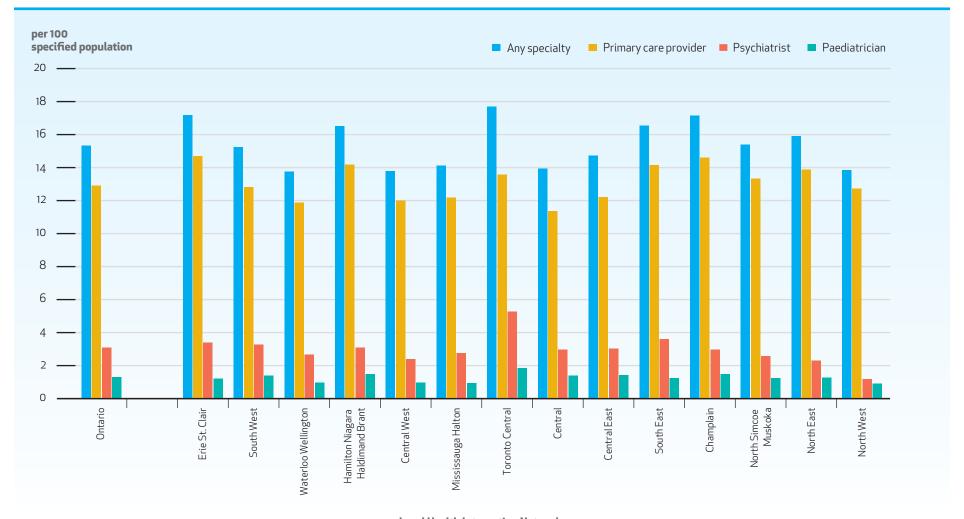
**EXHIBIT 10.5** Number of individuals seen by a psychiatrist, primary care provider or paediatrician for mental health and addictions care per 100 population aged 0 to 105 years, by age group and provider specialty, in Ontario, three-year average for 2015 to 2017



**EXHIBIT 10.6** Number of individuals seen by a psychiatrist, primary care provider or paediatrician for mental health and addictions care per 100 population aged 0 to 105 years, by neighbourhood income quintile and provider specialty, in Ontario, three-year average for 2015 to 2017



**EXHIBIT 10.7** Number of individuals seen by a psychiatrist, primary care provider or paediatrician for mental health and addictions care per 100 population aged 0 to 105 years, by Local Health Integration Network and provider specialty, in Ontario, three-year average for 2015 to 2017



**Local Health Integration Network** 

### 11.0

Rates of mental health and addictions-related emergency department visits

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

#### Rationale

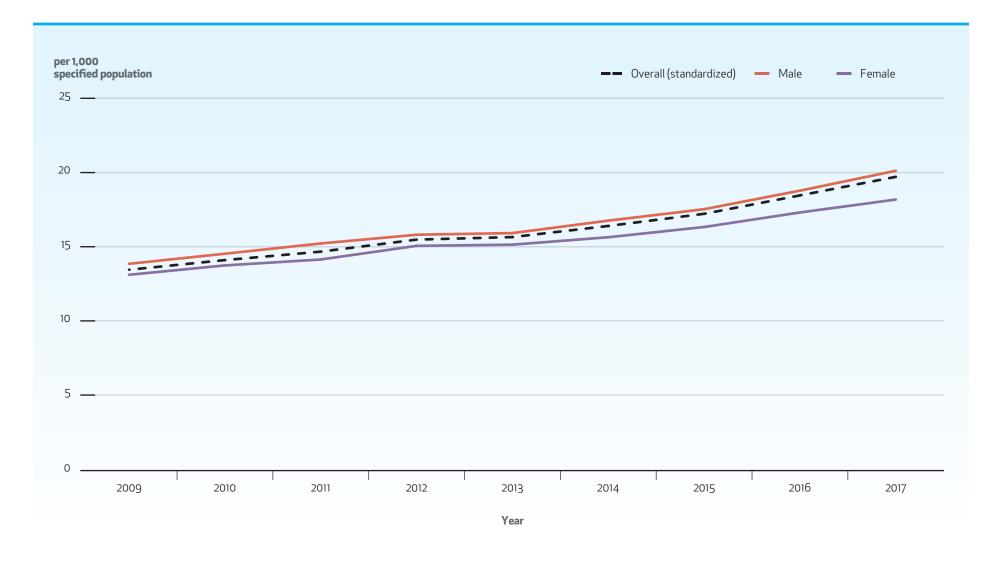
The emergency department (ED) is an important mental health and addictions access point, particularly for presentations with high acuity or safety concerns and for individuals in crisis. The ED may also be the only access point for individuals who have difficulty accessing appropriate or timely care in outpatient and community settings.

#### **Results**

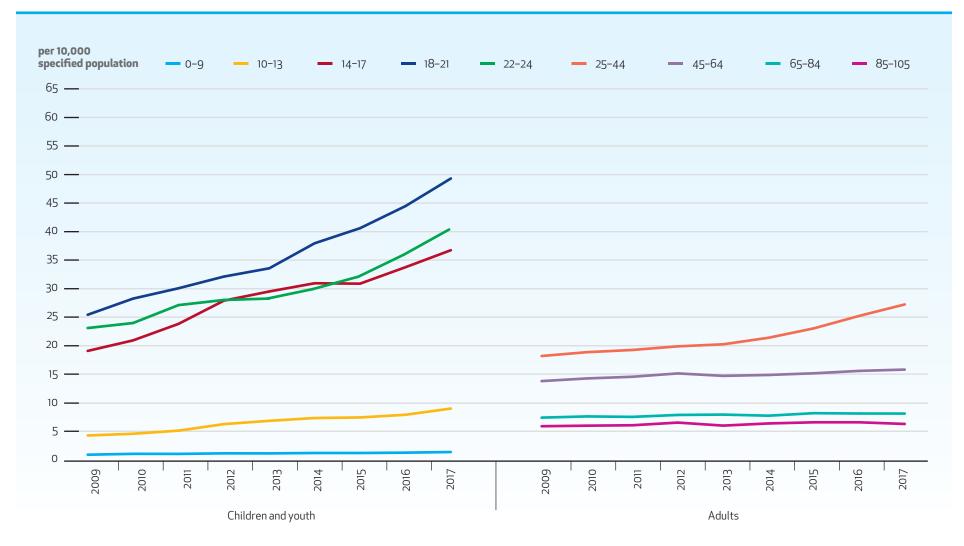
- Rates of MHA-related ED visits increased significantly in Ontario over time. The highest rates of MHA-related ED visits were among 14–24 year olds and those diagnosed with substance-related or anxiety disorders.
- Among the lowest-income group, the rate of MHA-related ED visits was almost 3 times that of the highest-income group.
- MHA-related ED visit rates were highest in the North West and North East LHINs and lowest in the Central West, Mississauga Halton and Central LHINs.

Note: Rates presented in the following exhibits are crude rates unless otherwise specified. Standardized rates are age- and sex- standardized.

**EXHIBIT 11.1** Number of mental health and addictions-related emergency department visits per 1,000 population aged 0 to 105 years, overall and by sex, in Ontario, 2009 to 2017

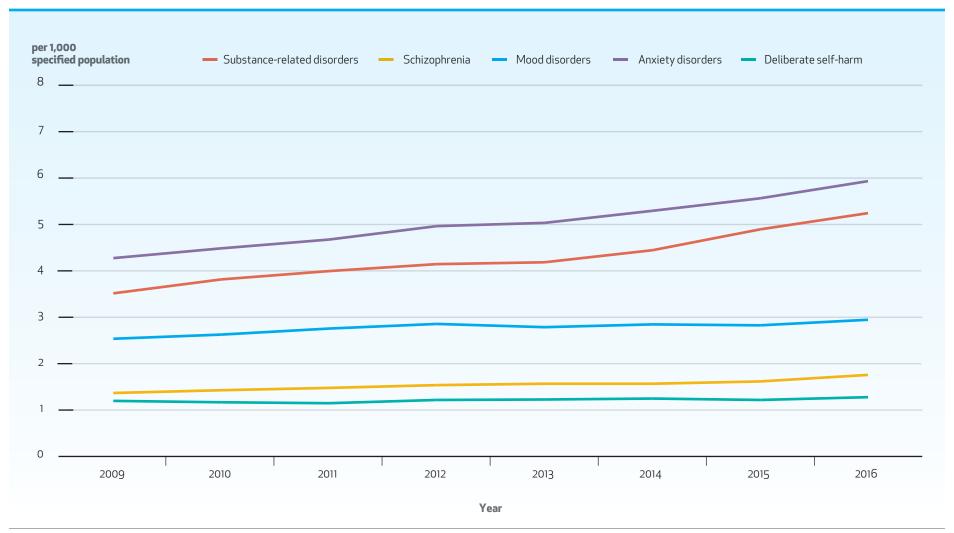


**EXHIBIT 11.2** Number of mental health and addictions-related emergency department visits per 1,000 population aged 0 to 105 years, by age group, in Ontario, 2009 to 2017



Year

**EXHIBIT 11.3** Number of mental health and addictions-related emergency department visits per 1,000 population aged 0 to 105 years, by type of diagnosis, in Ontario, 2009 to 2016



#### Notes

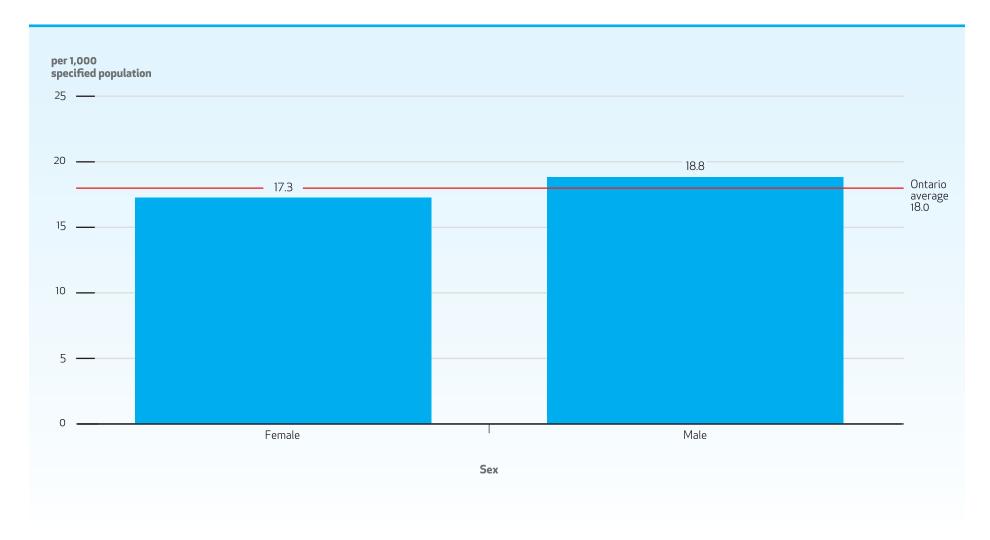
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<sup>1.</sup> An "other" group that captures less common mental health and addictions-related diagnoses is not shown.

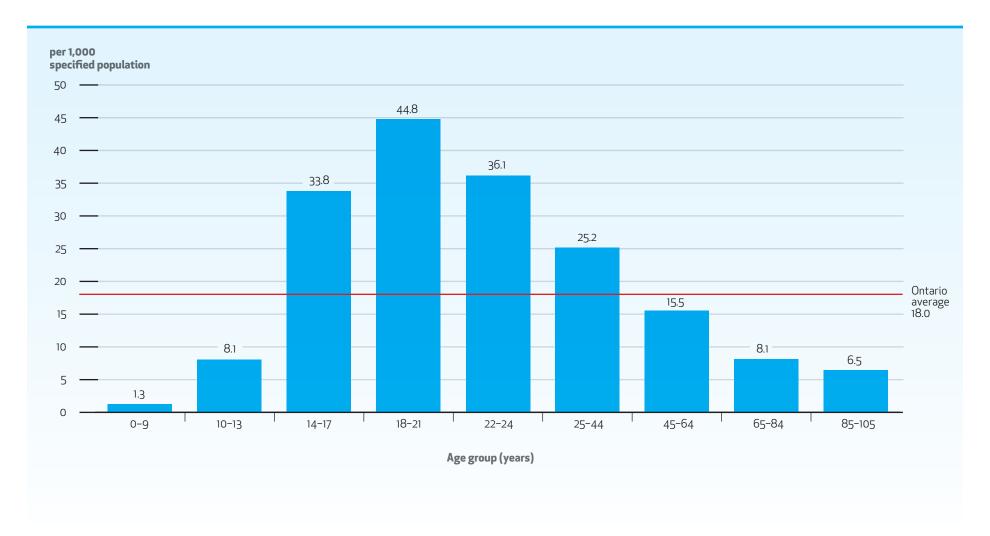
<sup>2.</sup> Deliberate self-harm refers to residual deliberate self-harm, i.e., the presence of a self-harm diagnosis where the main reason for the ED visit is non-MHA-related. Deliberate self-harm may be present as a secondary diagnosis in any of the other diagnostic types.

<sup>3.</sup> Rates for 2009 to 2016 are based on diagnostic categories in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders, and rates for 2017 are based on diagnostic categories in the 5th edition.

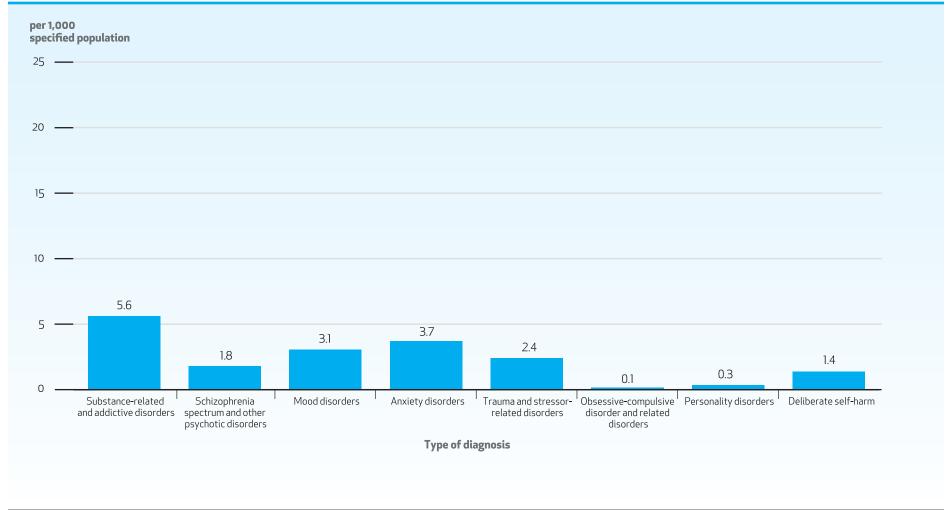
**EXHIBIT 11.4** Number of mental health and addictions—related emergency department visits per 1,000 population aged 0 to 105 years, by sex, in Ontario, three-year average for 2015 to 2017



**EXHIBIT 11.5** Number of mental health and addictions-related emergency department visits per 1,000 population aged 0 to 105 years, by age group, in Ontario, three-year average for 2015 to 2017



**EXHIBIT 11.6** Number of mental health and addictions-related emergency department visits per 1,000 population aged 0 to 105 years, by type of diagnosis, in Ontario, 2017

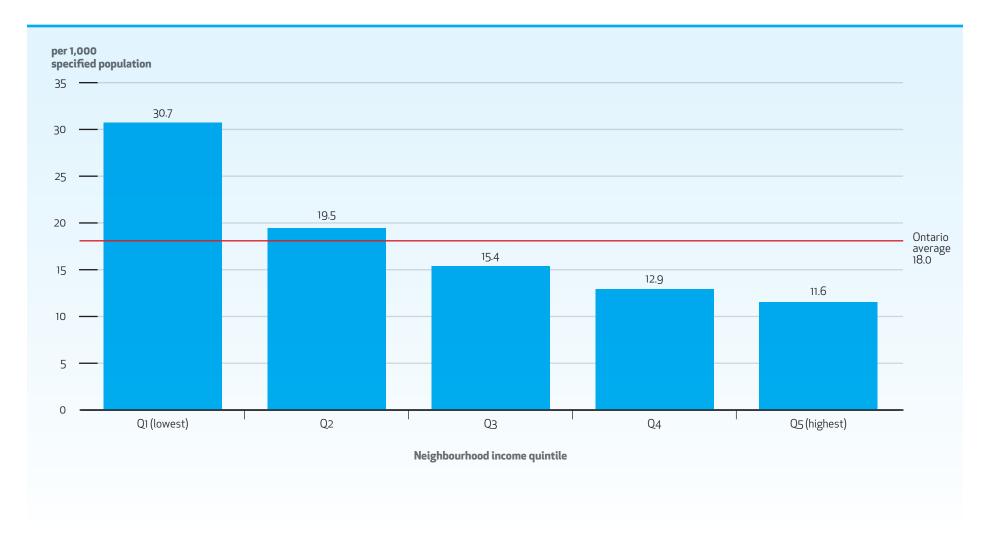


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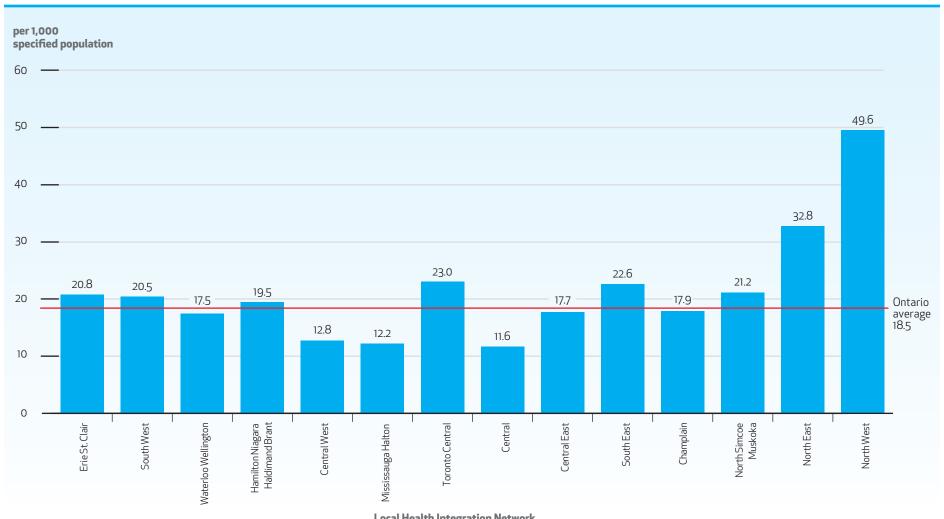
- 1. An "other" group that captures less common mental health and addictions-related diagnoses is not shown.
- 2. Obsessive-compulsive disorder and related disorders includes body dysmorphic disorder and hoarding disorder.
- 3. Deliberate self-harm refers to residual deliberate self-harm, i.e., the presence of a self-harm diagnosis where the main reason for the ED visit is non-MHA-related. Deliberate self-harm may be present as a secondary diagnosis in any of the other diagnostic types.

4. Rates are based on diagnostic categories in the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition.

**EXHIBIT 11.7** Number of mental health and addictions—related emergency department visits per 1,000 population aged 0 to 105 years, by neighbourhood income quintile, in Ontario, three-year average for 2015 to 2017



**EXHIBIT 11.8** Number of mental health and addictions-related emergency department visits per 1,000 population aged 0 to 105 years, by Local Health Integration Network, in Ontario, three-year average for 2015 to 2017



**Local Health Integration Network** 

Note: Rates are age- and sex-standardized.

## 12.0

Rates of mental health and addictions-related hospitalizations

## 12.0 Rates of mental health and addictions-related hospitalizations

#### Rationale

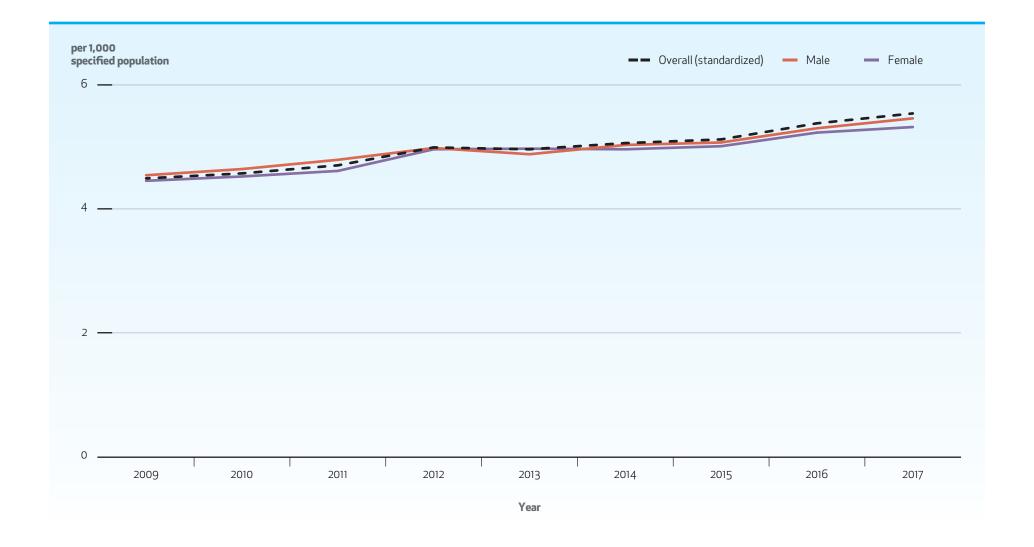
The rate of hospitalizations for mental health and addictions (MHA) care is an aggregate measure of several processes, including population-based illness burden requiring psychiatric hospitalization, regional availability of hospital beds, adequacy of community resources to provide timely access to care, and other factors.

#### Results

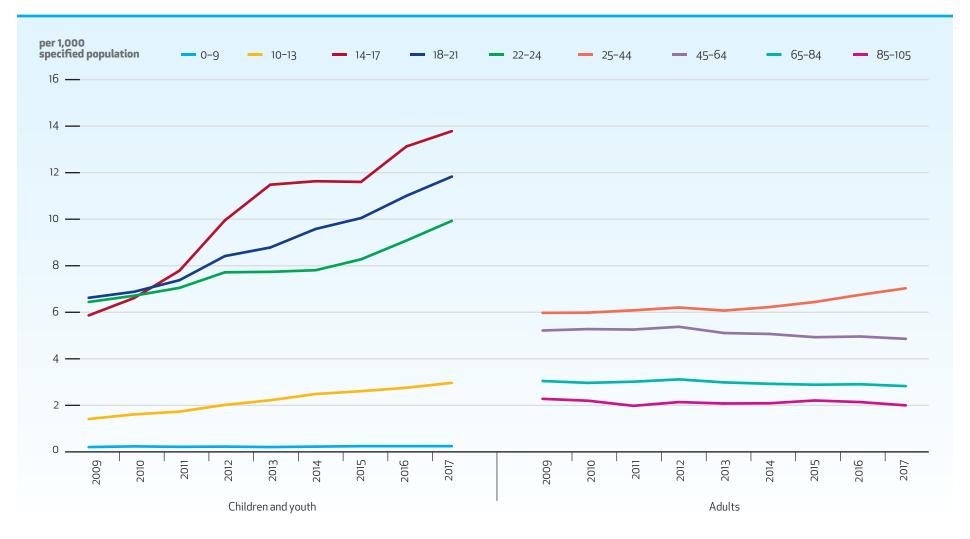
- Rates of MHA-related hospitalizations in Ontario remained stable for most age groups, except among those aged 14–24 for whom the rates were highest and increased over time.
- Rates of MHA-related hospitalizations were highest among residents of lower-income neighbourhoods.
- MHA-related hospitalization rates were highest in the North East, North West and North Simcoe Muskoka LHINs.

Note: Rates presented in the following exhibits are crude rates unless otherwise specified. Standardized rates are age- and sex- standardized.

**EXHIBIT 12.1** Number of mental health and addictions-related hospitalizations per 1,000 population aged 0 to 105 years, overall and by sex, in Ontario, 2009 to 2017

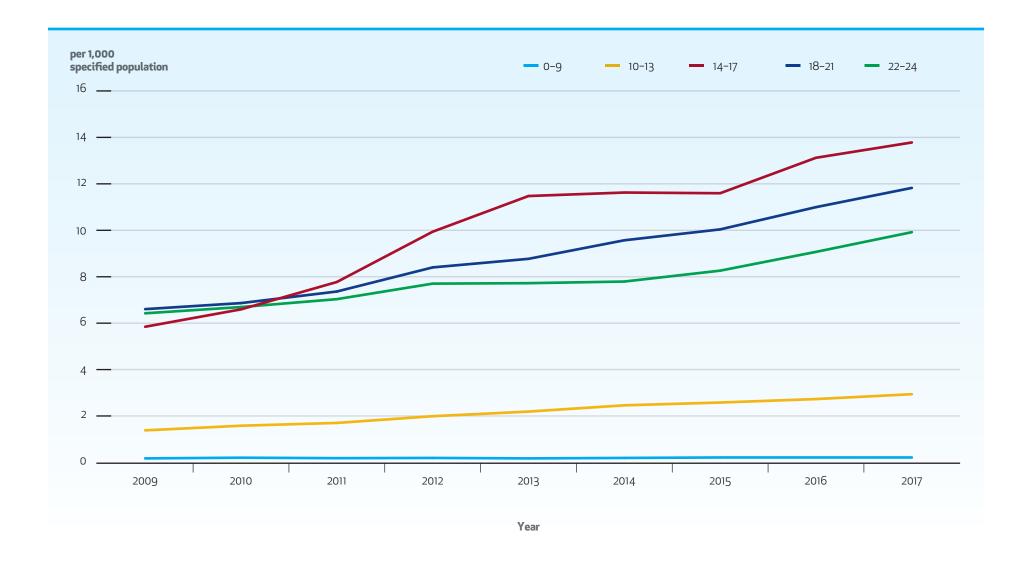


**EXHIBIT 12.2** Number of mental health and addictions-related hospitalizations per 1,000 population aged 0 to 105 years, by age group, in Ontario, 2009 to 2017

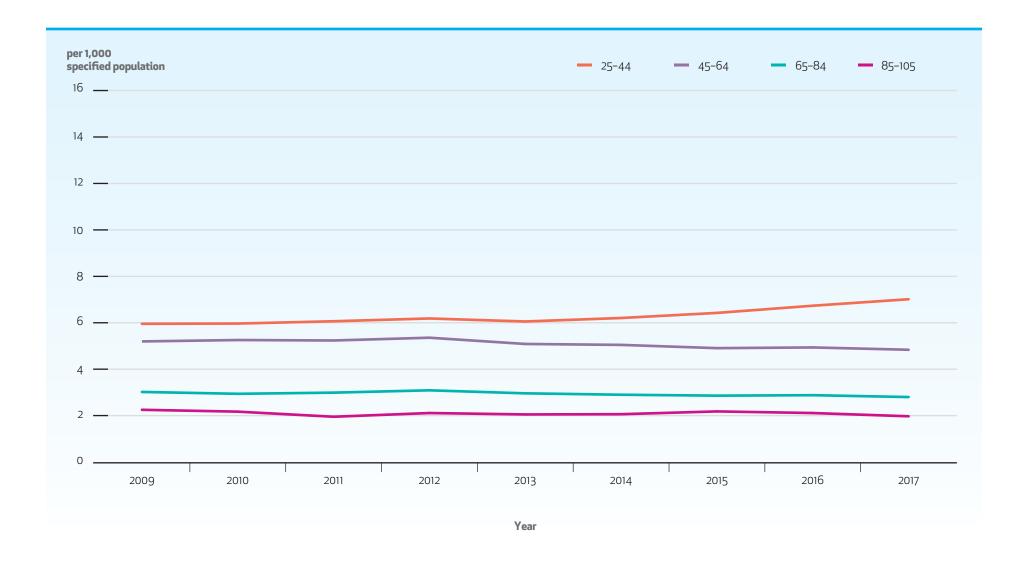


Year

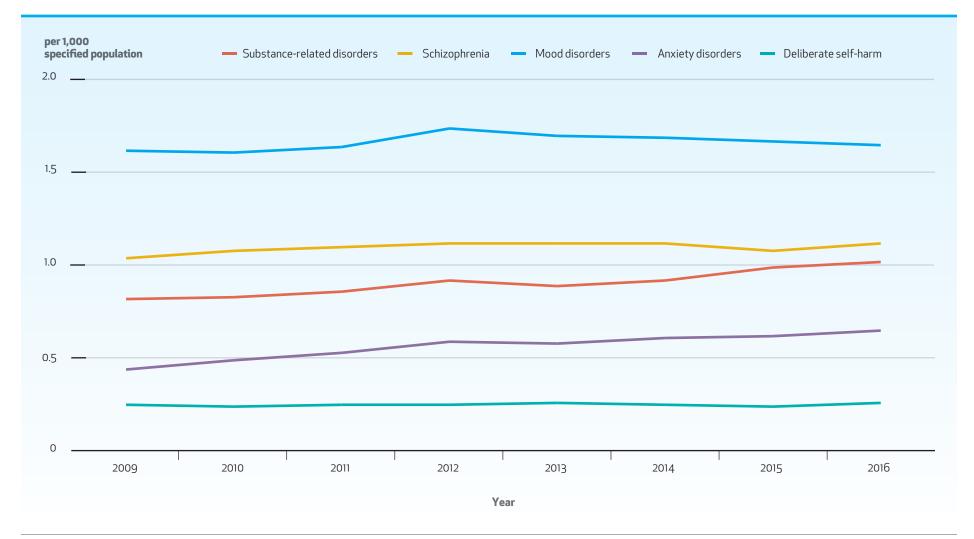
**EXHIBIT 12.3** Number of mental health and addictions-related hospitalizations per 1,000 population aged 0 to 24 years, by age group, in Ontario, 2009 to 2017



**EXHIBIT 12.4** Number of mental health and addictions-related hospitalizations per 1,000 population aged 25 to 105 years, by age group, in Ontario, 2009 to 2017



**EXHIBIT 12.5** Number of mental health and addictions-related hospitalizations per 1,000 population aged 0 to 105 years, by type of diagnosis, in Ontario, 2009 to 2016



#### Notes

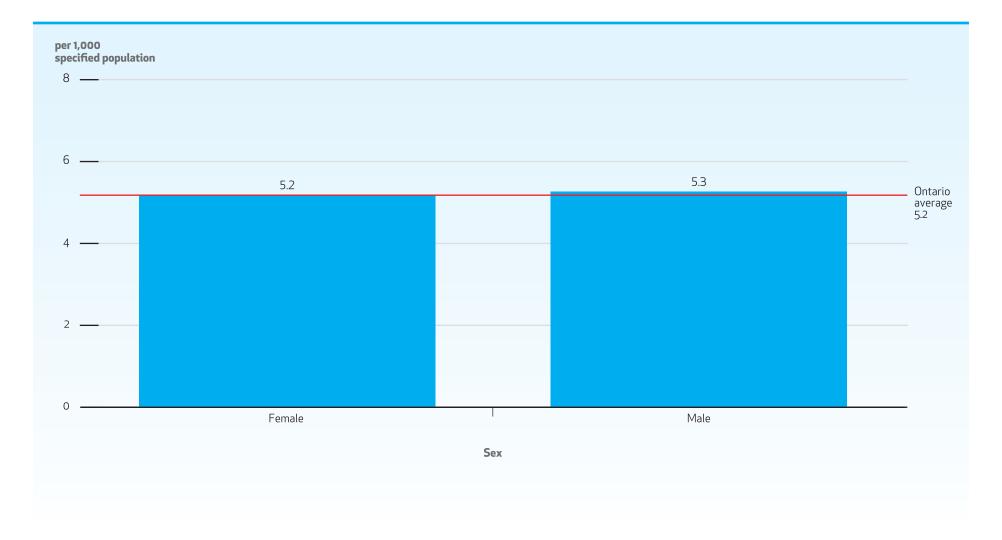
109

<sup>1.</sup> An "other" group that captures less common mental health and addictions-related diagnoses is not shown.

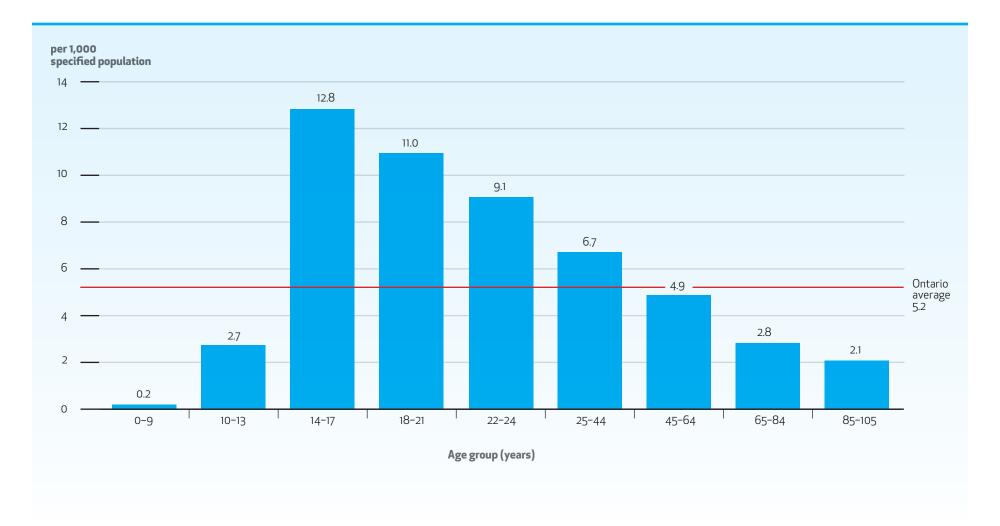
<sup>2.</sup> Deliberate self-harm refers to residual deliberate self-harm, i.e., the presence of a self-harm diagnosis where the main reason for the hospitalization is non-MHA-related. Deliberate self-harm may be present as a secondary diagnosis in any of the other diagnostic types.

<sup>3.</sup> Rates for 2009 to 2016 are based on diagnostic categories in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders, and rates for 2017 are based on diagnostic categories in the 5th edition.

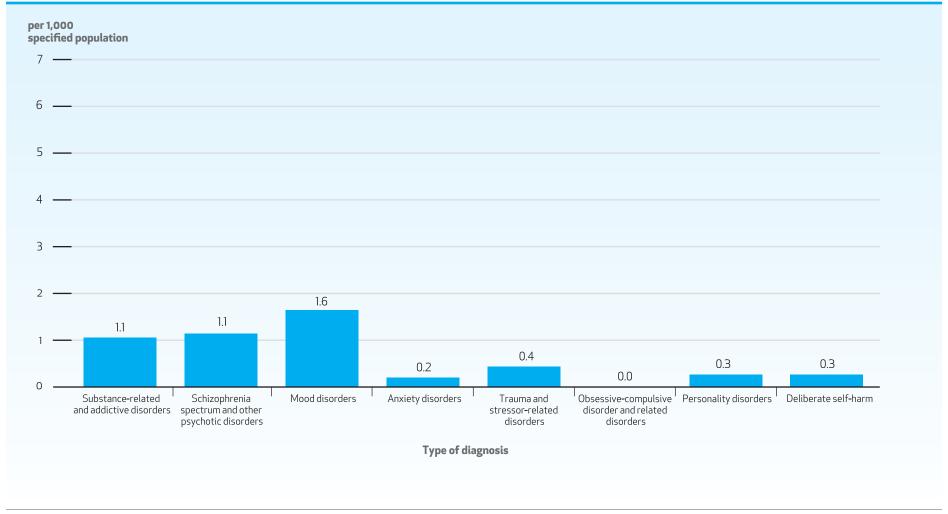
**EXHIBIT 12.6** Number of mental health and addictions—related hospitalizations per 1,000 population aged 0 to 105 years, by sex, in Ontario, three-year average for 2015 to 2017



**EXHIBIT 12.7** Number of mental health and addictions—related hospitalizations per 1,000 population aged 0 to 105 years, by age group, in Ontario, three-year average for 2015 to 2017



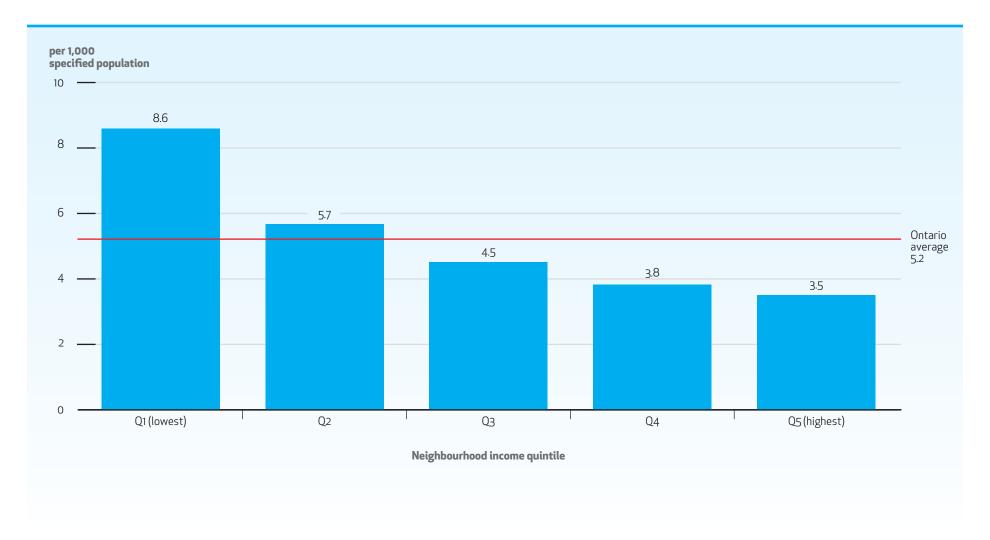
**EXHIBIT 12.8** Number of mental health and addictions-related hospitalizations per 1,000 population aged 0 to 105 years, by type of diagnosis, in Ontario, 2017



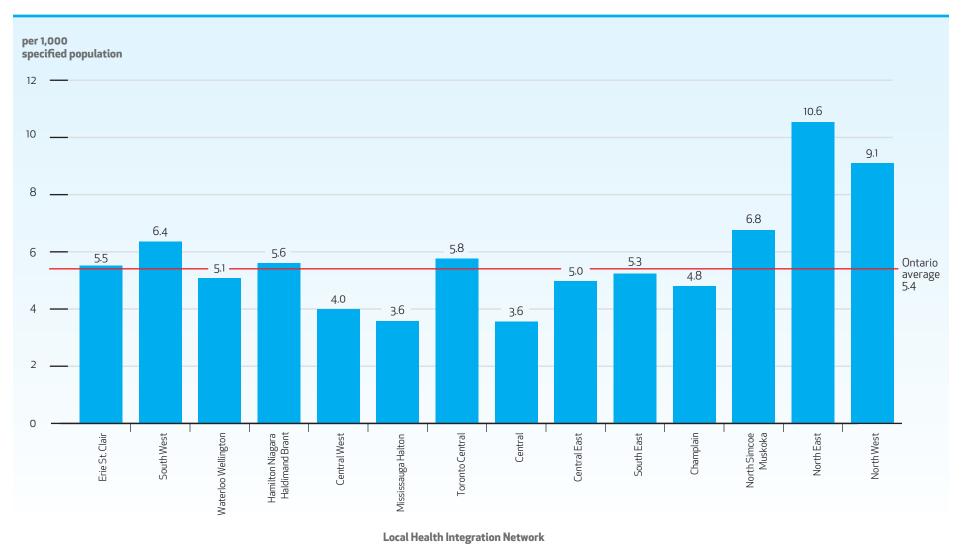
#### Notes:

- 1. An "other" group that captures less common mental health and addictions-related diagnoses is not shown.
- 2. Obsessive-compulsive disorder and related disorders includes body dysmorphic disorder and hoarding disorder.
- 3. 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. Deliberate self-harm may be present as a secondary diagnosis in any of the other diagnostic types.
- 4. Rates are based on diagnostic categories in the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition.

**EXHIBIT 12.9** Number of mental health and addictions-related hospitalizations per 1,000 population aged 0 to 105 years, by neighbourhood income quintile, in Ontario, three-year average for 2015 to 2017



**EXHIBIT 12.10** Number of mental health and addictions-related hospitalizations per 1,000 population aged 0 to 105 years, by Local Health Integration Network, in Ontario, three-year average for 2015 to 2017



# 13.0 Length of stay for psychiatric hospitalizations

## 13.0 Length of stay for psychiatric hospitalizations

#### Rationale

The length of psychiatric hospitalization can be affected by illness severity at admission, discharge planning and other care processes at the hospital, and the availability of resources to support discharge in the community.

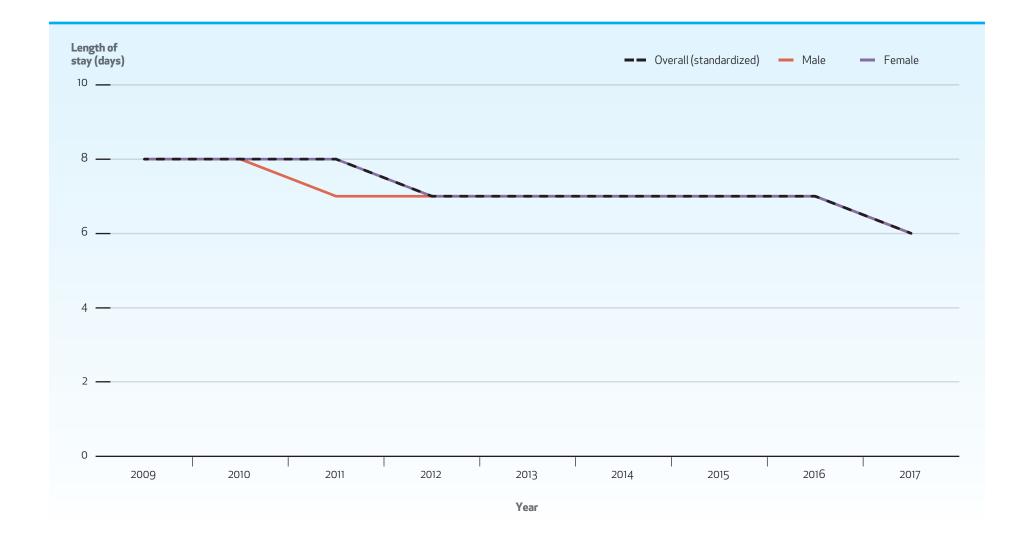
Along with patterns of hospitalization prevalence, trends in length of stay could reflect the efficiency of the mental health and addictions care system.

#### Results

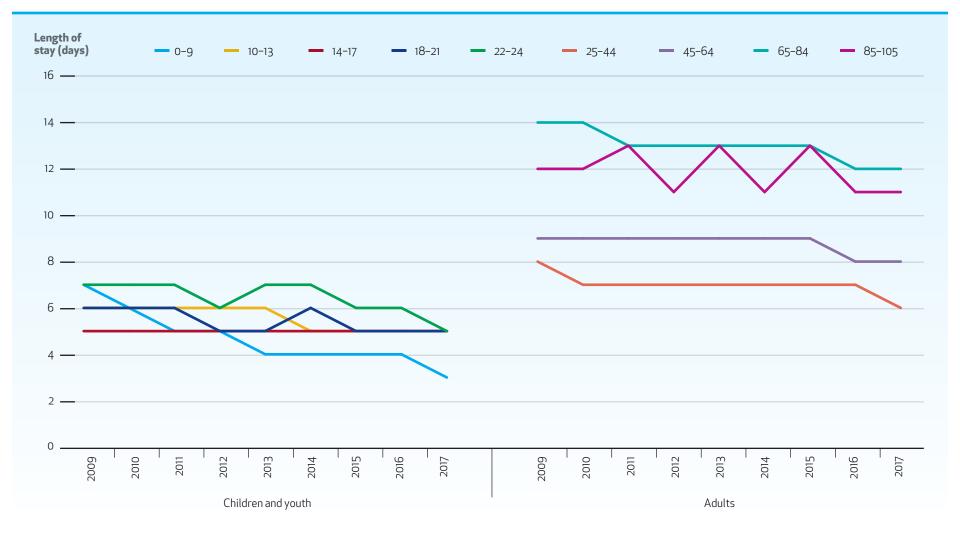
- Median length of stay for psychiatric hospitalizations decreased from 8 days to 6 days between 2009 and 2017.
- Median length of stay was longest among adults in the 65–84 and 85–105-year age groups.
- Median length of stay was longest for patients with schizophrenia (about 14 days) and mood disorders (about 9 days).

Note: Rates presented in the following exhibits are crude rates unless otherwise specified. Standardized rates are age- and sex- standardized.

**EXHIBIT 13.1** Median length of stay for psychiatric hospitalizations among individuals aged 0 to 105 years, overall and by sex, in Ontario, 2009 to 2017

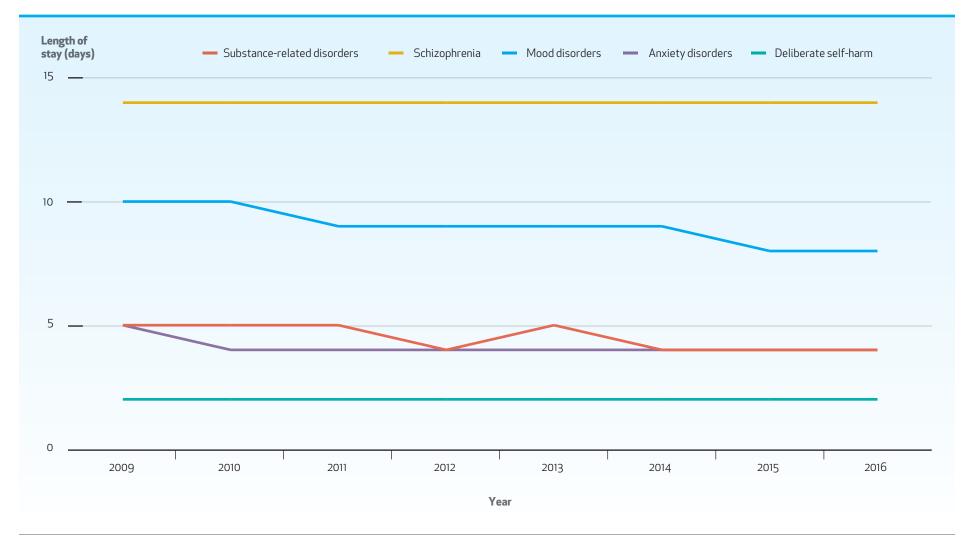


**EXHIBIT 13.2** Median length of stay for psychiatric hospitalizations among individuals aged 0 to 105 years, by age group, in Ontario, 2009 to 2017



Year

**EXHIBIT 13.3** Median length of stay for psychiatric hospitalizations among individuals aged 0 to 105 years, by type of diagnosis, in Ontario, 2009 to 2016



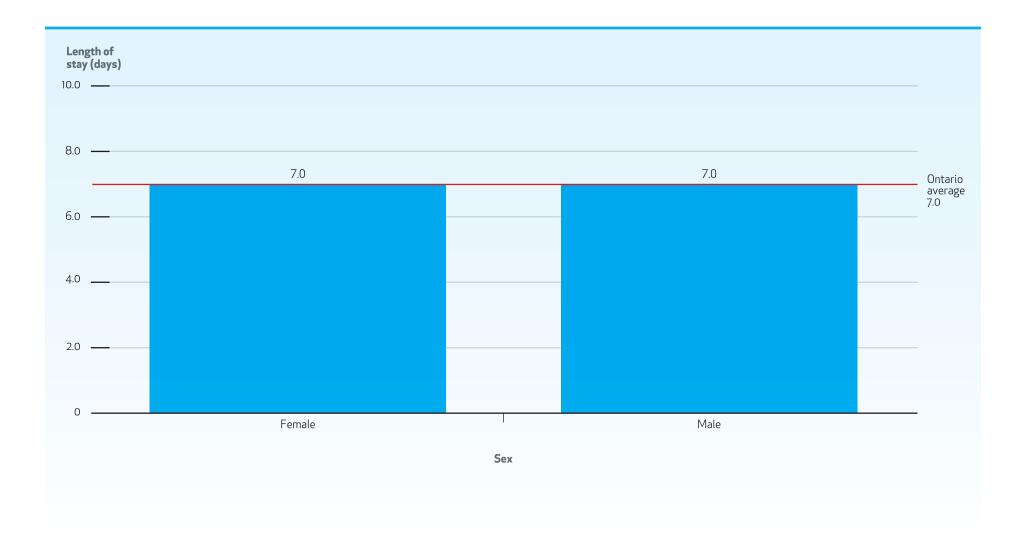
#### Notes

<sup>1.</sup> An "other" group that captures less common mental health and addictions-related diagnoses is not shown.

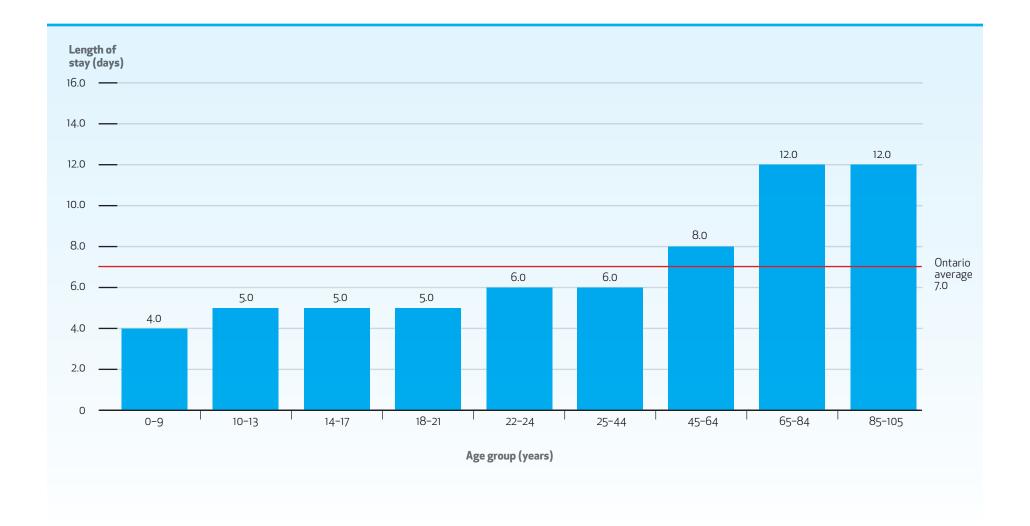
<sup>2.</sup> Deliberate self-harm refers to residual deliberate self-harm, i.e., the presence of a self-harm diagnosis where the main reason for the hospitalization is non-MHA-related. Deliberate self-harm may be present as a secondary diagnosis in any of the other diagnostic types.

<sup>3.</sup> Rates for 2009 to 2016 are based on diagnostic categories in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders, and rates for 2017 are based on diagnostic categories in the 5th edition.

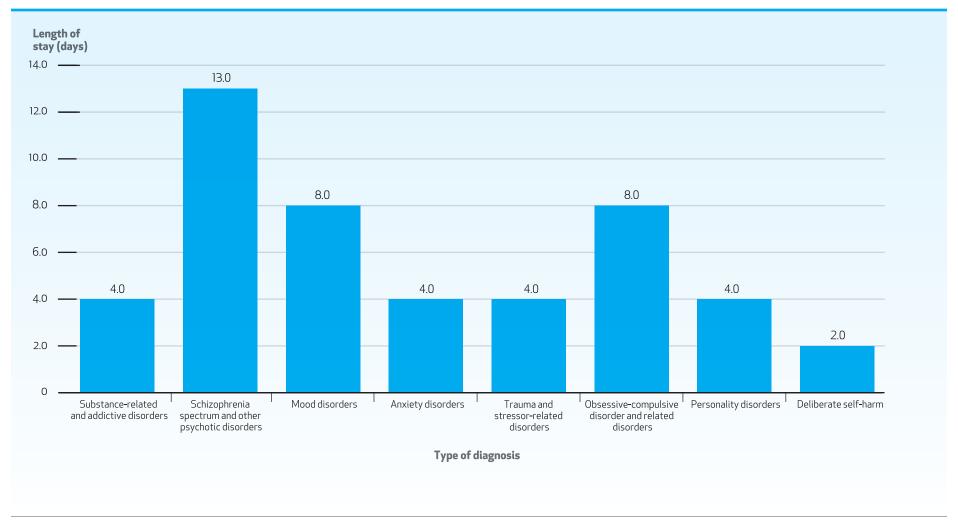
**EXHIBIT 13.4** Median length of stay for psychiatric hospitalizations among individuals aged 0 to 105 years, by sex, in Ontario, three-year average for 2015 to 2017



**EXHIBIT 13.5** Median length of stay for psychiatric hospitalizations among individuals aged 0 to 105 years, by age group, in Ontario, three-year average for 2015 to 2017



**EXHIBIT 13.6** Median length of stay for psychiatric hospitalizations among individuals aged 0 to 105 years, by type of diagnosis, in Ontario, 2017

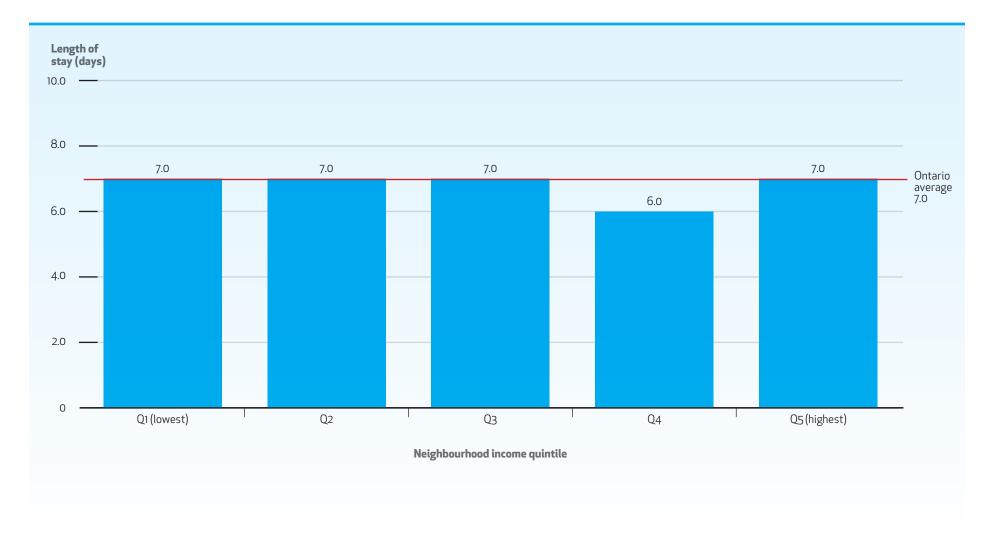


#### Notes:

- 1. An "other" group that captures less common mental health and addictions-related diagnoses is not shown.
- 2. Obsessive-compulsive disorder and related disorders includes body dysmorphic disorder and hoarding disorder.
- 3. 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. Deliberate self-harm may be present as a secondary diagnosis in any of the other diagnostic types.

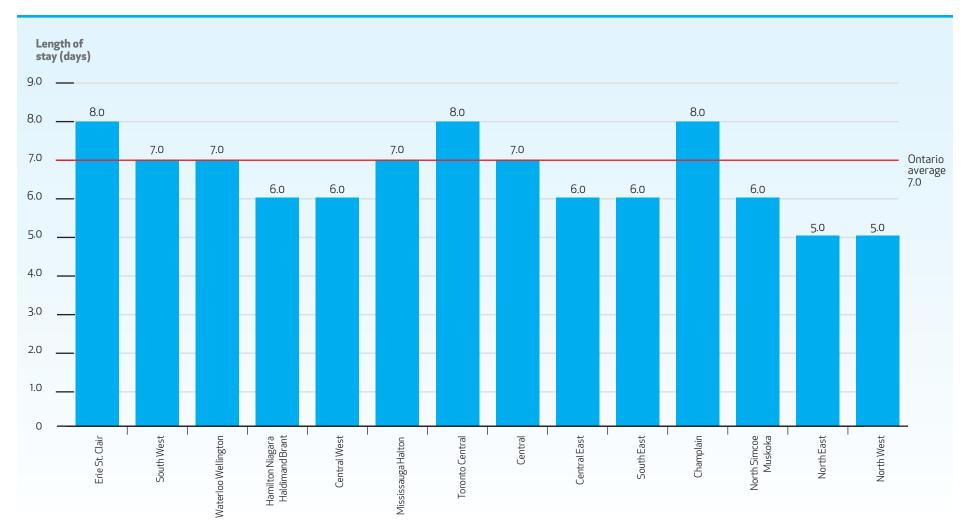
4. Rates are based on diagnostic categories in the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition.

**EXHIBIT 13.7** Median length of stay for psychiatric hospitalizations among individuals aged 0 to 105 years, by neighbourhood income quintile, in Ontario, three-year average for 2015 to 2017



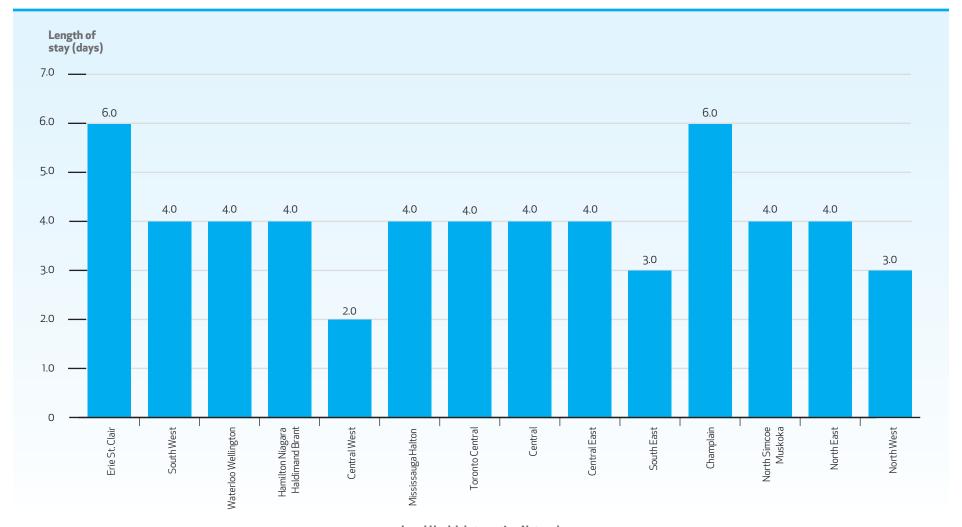
123

**EXHIBIT 13.8** Median length of stay for psychiatric hospitalizations among individuals aged 0 to 105 years, by Local Health Integration Network, in Ontario, 3-year average for 2015 to 2017



**Local Health Integration Network** 

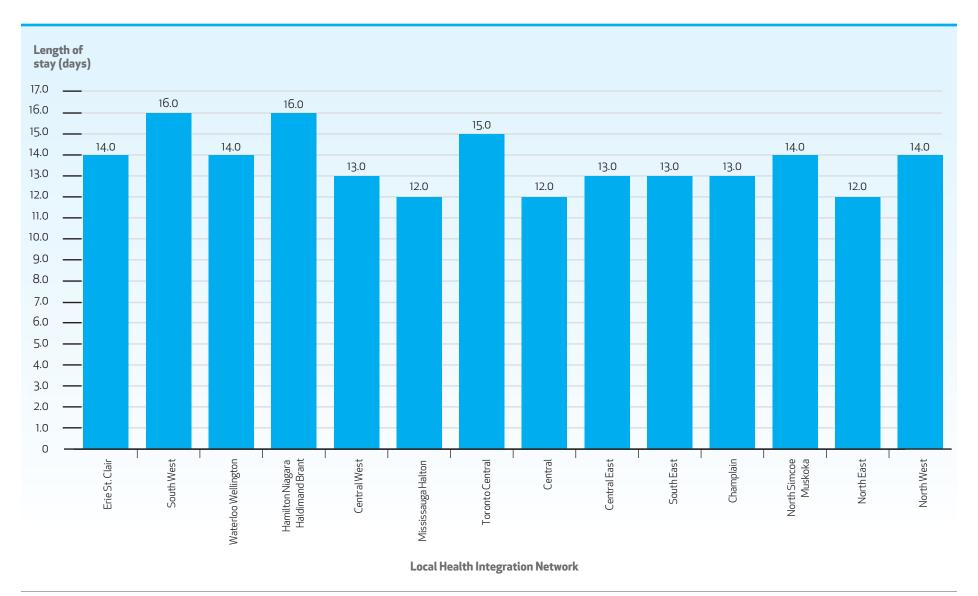
**EXHIBIT 13.9A** Median length of stay for psychiatric hospitalizations for substance-related and addictive disorders among individuals aged 0 to 105 years, by Local Health Integration Network, in Ontario, 3-year average for 2015 to 2017



**Local Health Integration Network** 

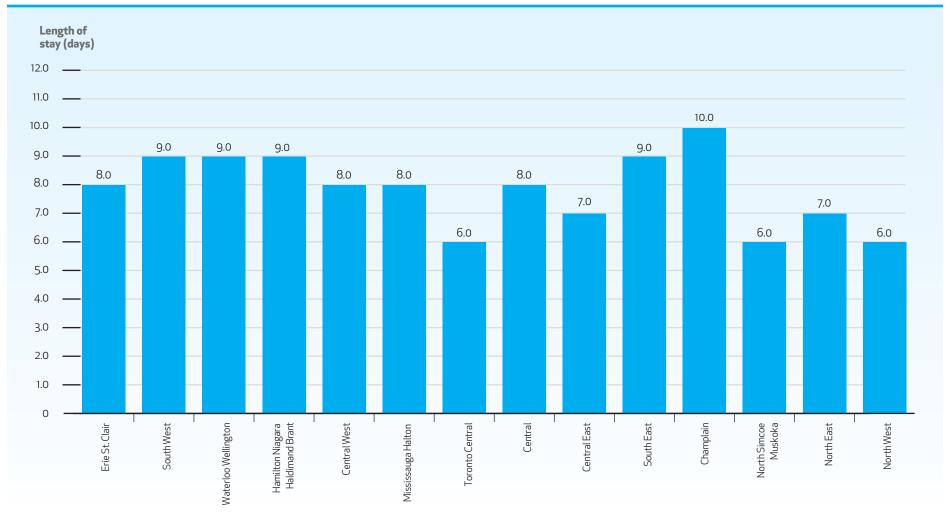
Note: An "other" group that captures less common mental health and addictions-related diagnoses is not shown.

**EXHIBIT 13.9B** Median length of stay for psychiatric hospitalizations for schizophrenia among individuals aged 0 to 105 years, by Local Health Integration Network, in Ontario, 3-year average for 2015 to 2017



Note: An "other" group that captures less common mental health and addictions-related diagnoses is not shown.

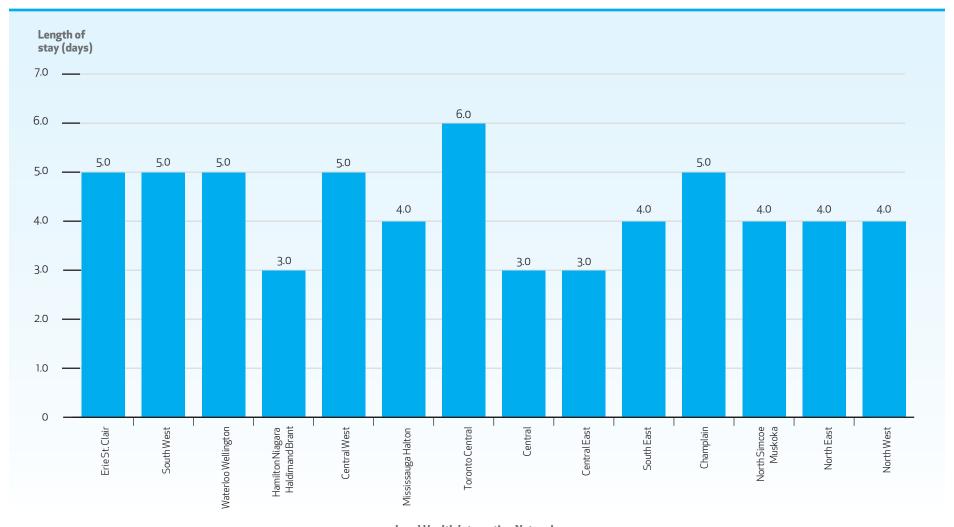
**EXHIBIT 13.9C** Median length of stay for psychiatric hospitalizations for mood disorders among individuals aged 0 to 105 years, by Local Health Integration Network, in Ontario, 3-year average for 2015 to 2017



**Local Health Integration Network** 

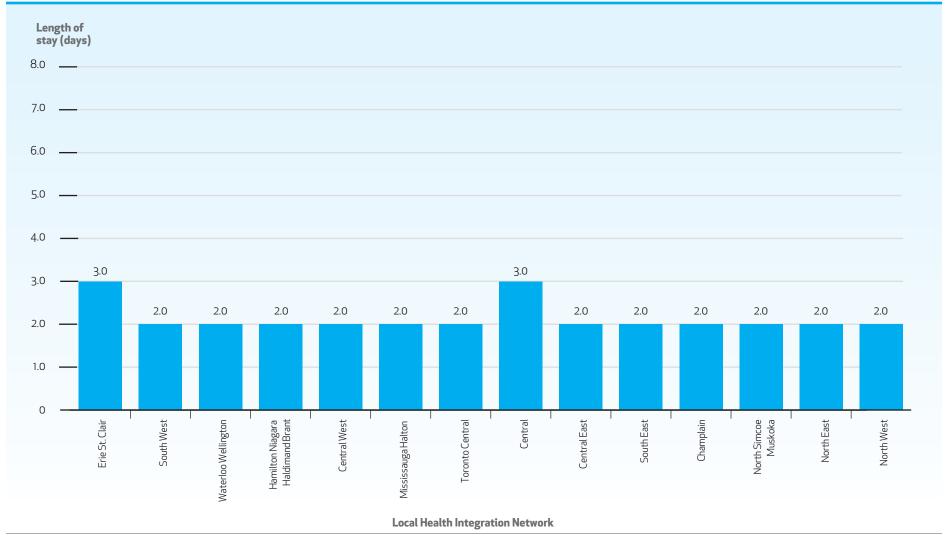
Note: An "other" group that captures less common mental health and addictions-related diagnoses is not shown.

**13.9D** Median length of stay for psychiatric hospitalizations for anxiety disorders among individuals aged 0 to 105 years, by Local Health Integration Network, in Ontario, 3-year average for 2015 to 2017



**Local Health Integration Network** 

**13.9E** Median length of stay for psychiatric hospitalizations for deliberate self-harm among individuals aged 0 to 105 years, by Local Health Integration Network, in Ontario, 3-year average for 2015 to 2017



#### Notes

<sup>1.</sup> An "other" group that captures less common mental health and addictions-related diagnoses is not shown.

<sup>2.</sup> 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. Deliberate self-harm may be present as a secondary diagnosis in any of the other diagnostic types.

### 14.0

Rates of prenatal opioid exposure and neonatal abstinence syndrome

## 14.0 Rates of prenatal opioid exposure and neonatal abstinence syndrome

#### Rationale

This indicator measures live births in which there was maternal opioid use, including chronic use of prescription opioids for pain, opioid agonists for maintenance treatment of opioid use disorder or possible illicit use. We describe infants born with neonatal abstinence syndrome, which often reflects opioid use in pregnancy but for which the long-term consequences are unknown.

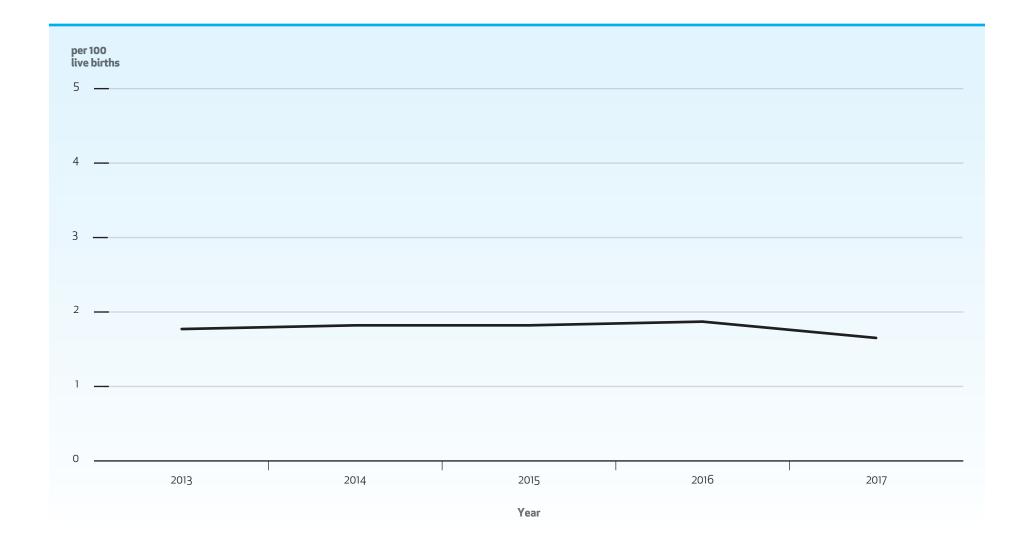
This indicator points to the need for addictions services for pregnant women and ongoing care for families.

#### **Results**

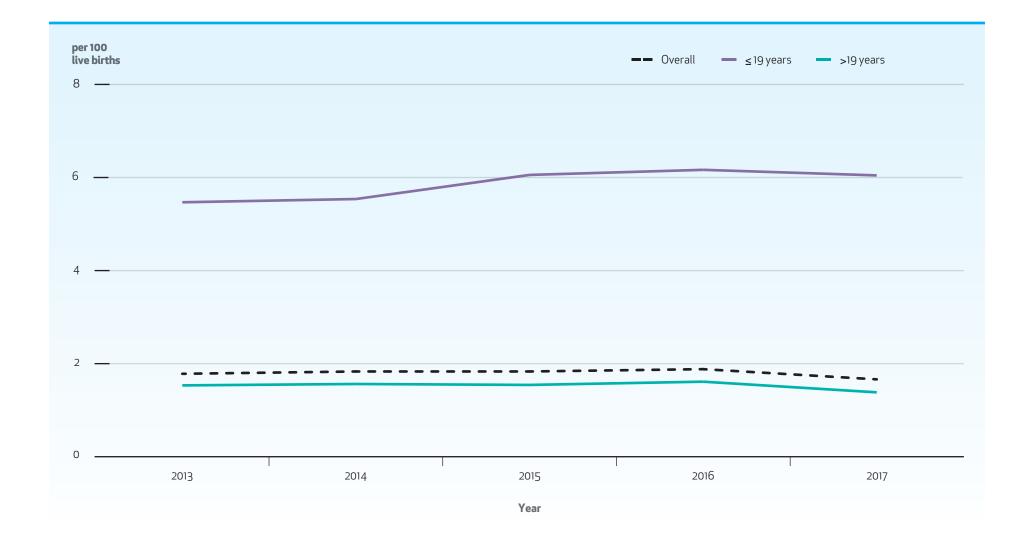
- From 2013 to 2017, the rate of prenatal opioid exposure declined slightly among mothers in Ontario (from 1.8% to 1.6%), and the rate of neonatal abstinence syndrome increased slightly among infants (from 0.7% to 0.8%).
- Three-year average rates of prenatal opioid exposure were highest among mothers who were 19 years or younger at first delivery and mothers who lived in the lowest-income areas.
- The rate of prenatal opioid exposure was significantly higher in the North West LHIN.
- Among mothers with prenatal prescription opioid exposure, the proportion receiving opioid maintenance therapy increased over time.

Note: Rates presented in the following exhibits are crude rates unless otherwise specified. Standardized rates are age- and sex-standardized. Rates are for all physician specialties.

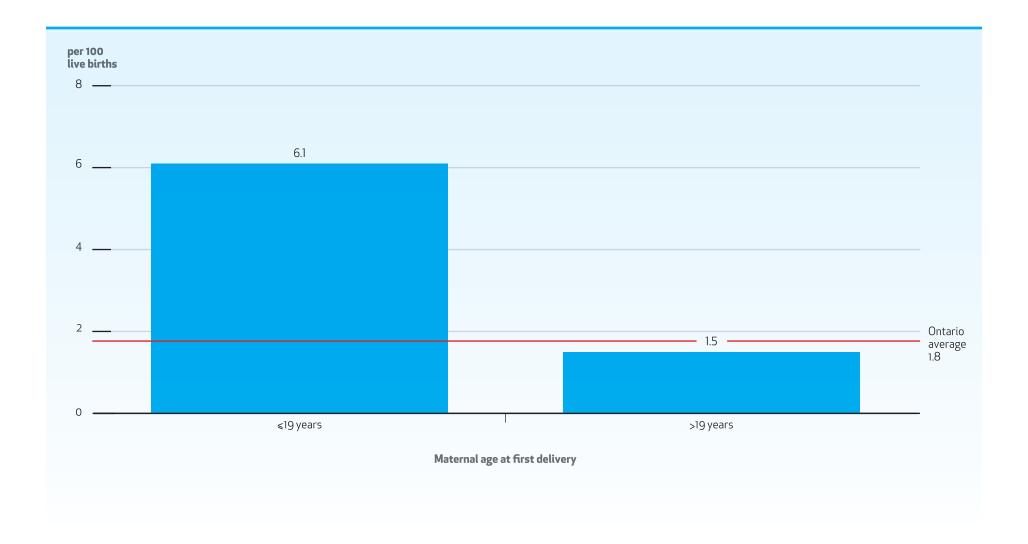
**EXHIBIT 14.1** Number of births with prenatal opioid exposure per 100 live births, in Ontario, 2013 to 2017



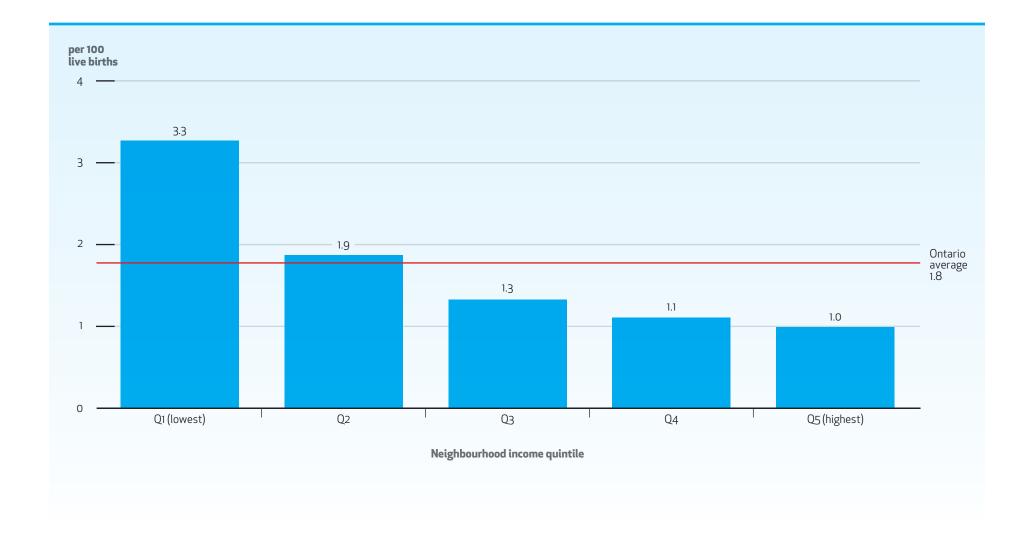
**EXHIBIT 14.2** Number of births with prenatal opioid exposure per 100 live births, overall and by maternal age at first delivery, in Ontario, 2013 to 2017



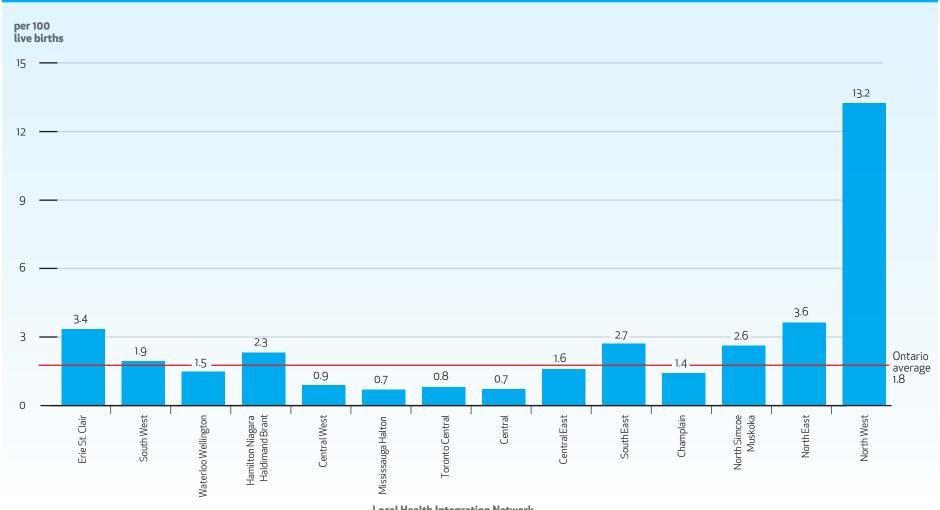
**EXHIBIT 14.3** Number of births with prenatal opioid exposure per 100 live births, by maternal age at first delivery, in Ontario, three-year average for 2015 to 2017



**EXHIBIT 14.4** Number of births with prenatal opioid exposure per 100 live births, by neighbourhood income quintile, in Ontario, three-year average for 2015 to 2017

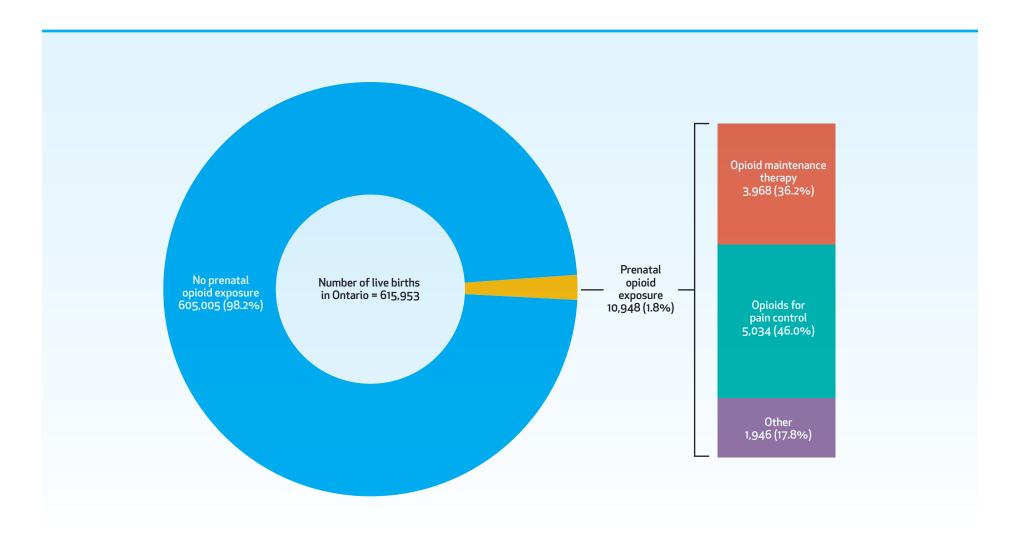


**EXHIBIT 14.5** Number of births with prenatal opioid exposure per 100 live births, by Local Health Integration Network, in Ontario, three-year average for 2015 to 2017



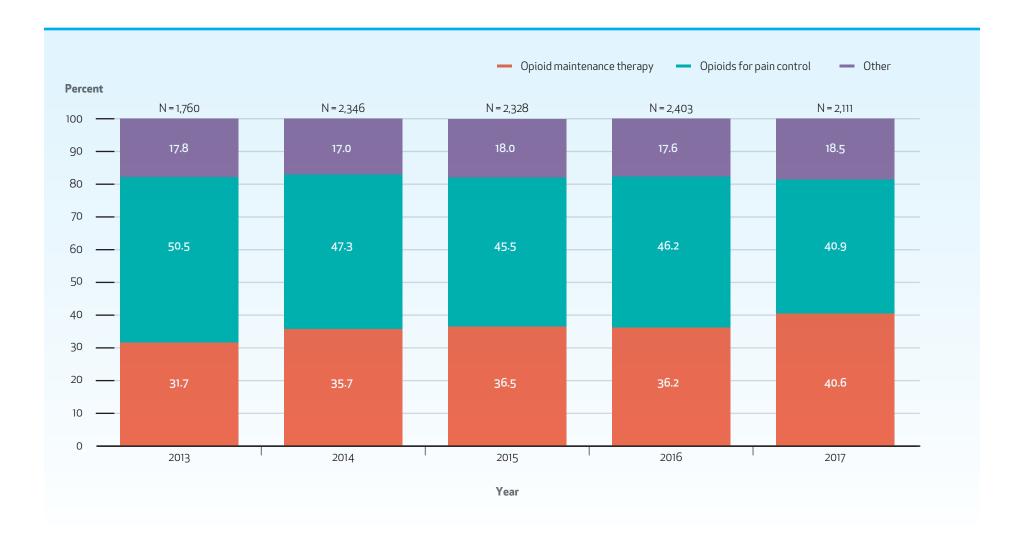
**Local Health Integration Network** 

**EXHIBIT 14.6** Number and percentage of births with prenatal opioid exposure, overall and by type of exposure, in Ontario, 2013 to 2017



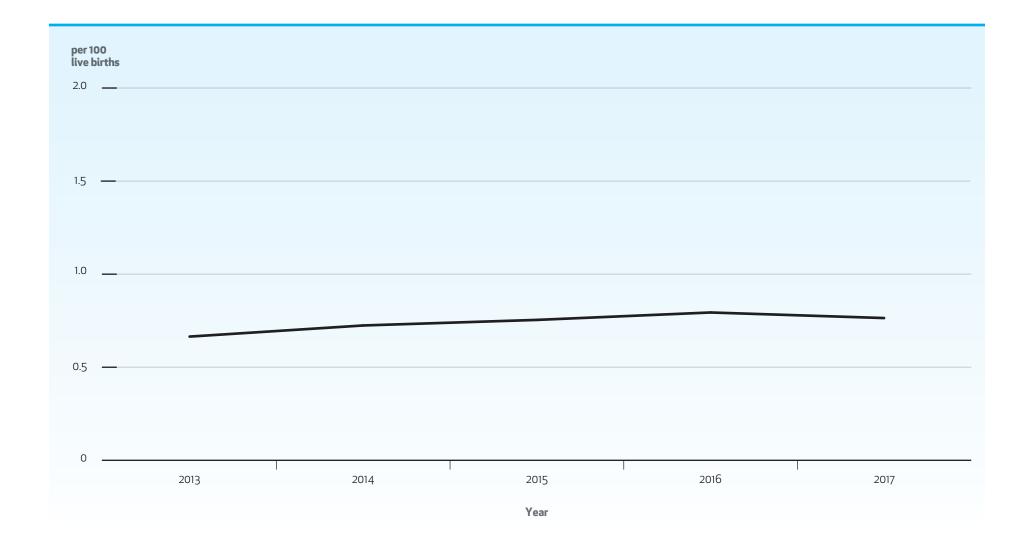
Note: The "Other" category includes either maternal health care encounters for opioid addiction during pregnancy or neonatal abstinence syndrome in infants without associated maternal prescription use of opioids.

**EXHIBIT 14.7** Percentage of each type of prenatal opioid exposure, by year, in Ontario, 2013 to 2017



Note: The "Other" category includes either maternal health care encounters for opioid addiction during pregnancy or neonatal abstinence syndrome in infants without associated maternal prescription use of opioids.

**EXHIBIT 14.8** Number of births with neonatal abstinence syndrome per 100 live births, in Ontario, 2013 to 2017



# 15.0 Indicators by Local Health Integration Network

**EXHIBIT 15.1** Performance indicators for the mental health and addictions system, by Local Health Integration Network, in Ontario, three-year average for 2015 to 2017 Lowestrate

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Performance Indicator <sup>1</sup>	Ontario	Erie St. Clair	South West	Waterloo Wellington	Hamilton Niagara Haldimand Brant	Central West	Mississauga Halton	Toronto Central	Central	Central East	South East	Champlain	North Simcoe Muskoka	North East	North West
Quality Dimension Indicator: Safe															
Number of mental health and addictions-related hospitalizations where physical restraints were used per 100 MHA-related hospitalizations of individuals aged 16 to 105 years	4.0	3.6	4.4	3.1	2.5	4.0	4.3	5.1	4.6	4.3	2.6	4.6	3.5	3.4	5.5
Quality Dimension Indicator: Effective															
Number of emergency department visits for deliberate self-harm per $10,\!000$ population aged $10$ to $105$ years	17.8	17.2	24.3	22.1	19.4	11.4	11.9	16.2	8.7	17.2	25.5	19.5	22.9	28.4	55.1
Number of deaths by suicide per $100,000$ population aged $10$ to $105$ years	10.0	9.7	12.1	11.6	11.0	6.9	6.6	11.0	8.1	8.8	12.5	8.4	14.0	16.3	19.8
Quality Dimension Indicator: Timely															
Number of individuals for whom the emergency department was the first point of contact for mental health and addictions care per $100$ population aged $0$ to $105$ years with an incident MHA-related ED visit	31.9	29.7	34.1	31.9	30.2	34.9	31.3	27.7	32.4	30.9	32.3	30.9	31.9	37.0	38.6
Quality Dimension Indicator: Efficient															
Number of mental health and addictions–related hospitalizations that were followed by an outpatient visit within 7 days per 100 hospital discharges among individuals aged 0 to 105 years $^2$	40.2	36.4	33.2	37.9	44.3	45.5	46.7	51.1	44.6	41.0	35.6	37.1	31.7	30.1	29.6
Number of mental health and addictions–related hospital readmissions within 30 days, per 100 hospital discharges among individuals aged 0 to 105 years	12.7	11.2	11.4	9.4	13.1	11.5	12.1	14.1	12.4	13.3	10.5	11.2	12.4	14.7	10.7
Number of mental health and addictions-related emergency department revisits within 30 days per $100$ emergency department visits among individuals aged $0$ to $105$ years	22.9	20.9	19.1	20.2	22.0	22.1	19.8	31.5	21.0	22.4	20.9	19.2	19.2	20.7	29.9
Health Service Use Indicators															
Number of outpatient visits related to mental health and addictions per $100\text{population}$ aged 0 to $105\text{years}^2$	56.5	60.8	60.3	44.9	62.4	43.8	46.2	90.3	48.5	51.7	63.4	60.4	53.9	53.7	54.9
Number of individuals seen by a psychiatrist, primary care provider or paediatrician for mental health and addictions care per $100\text{population}$ aged $0\text{to}105\text{years}^2$	15.3	17.2	15.3	13.8	16.5	13.8	14.1	17.7	14.0	14.7	16.5	17.2	15.4	15.9	13.8
Number of mental health and addictions-related emergency department visits per 1,000 population aged 0 to 105 years	18.5	20.8	20.5	17.5	19.5	12.8	12.2	23.0	11.6	17.7	22.6	17.9	21.2	32.8	49.6
Number of mental health and addictions-related hospitalizations per 1,000 population aged 0 to 105 years	5.4	5.8	6.6	5.2	5.9	4.0	3.6	5.8	3.6	5.1	5.6	4.9	7.1	11.3	9.6
Opioid-Related Indicator															
Number of births with prenatal opioid exposure per 100 live births (crude rate)	1.8	3.4	1.9	1.5	2.3	0.9	0.7	0.8	0.7	1.6	2.7	1.4	2.6	3.6	13.2

#### Notes:

 $<sup>1.\,\</sup>text{Rates}$  are age- and sex-standardized unless otherwise specified.  $2.\,\text{Rates}$  are for any physician specialty.

## Data Discovery Better Health

