

Health System Resources for Mental Health and Addictions Care in Canada



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### Acknowledgements

This report represents a collaborative effort across many program areas at the Canadian Institute for Health Information (CIHI). We would like to thank the many individuals and teams who contributed their expertise and time, including the core team, the Health System Analysis and Emerging Issues branch, the Financial Standards and Information department, the Health Workforce Information department, the Physician Information department, the Specialized Care branch and all supporting areas.

### Introduction

- Given that 1 in 5 Canadians will experience a mental health or addictions (MHA) challenge and may require a range of services in the hospital and the community, it is important to understand what resources are available. As the data is not available for all provinces and territories in a consistent way, understanding the full picture and variations across Canada is difficult.
- This report outlines what we know about spending on publicly funded care for MHA, the professionals who work in this area and where we provide the care in Canada. This report aims to provide foundational information on MHA resources across Canada.
- The Canadian Institute for Health Information (CIHI) is working on Shared Health Priorities indicators selected jointly by federal, provincial and territorial governments in consultation with Canadians to measure access to MHA care. We are also working on collecting information on primary health care. These 2 efforts will help close information gaps.

### Mental health and addictions in Canada



## How many people are affected?

Each year, 1 in 5 Canadians experiences a mental health concern, making it a leading cause of disability in Canada.<sup>1, 2</sup>



## The Big 5 conditions in resource use

- Mood disorders
- Anxiety disorders
- Substance-related disorders
- Schizophrenic and psychotic disorders
- Other diagnoses such as behavioural and emotional disorders and eating disorders



### Who does it affect?

Poor mental health can affect people at any age or stage of their life, but about 38% of Canadians with a mental health concern or substance use disorder reported that their symptoms started before the age of 15.<sup>3</sup>



### What are the needs of individuals with MHA problems?

In addition to health care needs, individuals with MHA needs have social needs such as affordable housing, employment and peer support.<sup>4</sup>

#### References

- 1. Smetanin P, et al. The Life and Economic Impact of Major Mental Illnesses in Canada. 2011.
- 2. Centre for Addiction and Mental Health. Mental illness and addiction: Facts and statistics. Accessed March 15, 2019.
- 3. Public Health Agency of Canada. Data blog: Mental illness in Canada. Accessed March 6, 2019.
- 4. Mental Health Commission of Canada. Changing Directions, Changing Lives: The Mental Health Strategy for Canada. 2012.

### Mental health and addictions care in Canada

The focus of this report is on care available to individuals with mental health needs. Currently, a wide range of care exists for individuals with mental health needs, ranging from less intensive to more intensive services for severe and persistent mental health needs.<sup>5</sup> This care can be provided in the community or in hospital settings.<sup>5</sup>

### Continuum of mental health care

### **Community-based care**



This could include care provided in primary care clinics, social services, MHA service clinics, residential services, etc.

Community-based mental health care ranges from wellness and health promotion to recovery care, such as mental health assessment, treatment, education and supportive services.<sup>5</sup> Community MHA care extends beyond the health care sector to social services, with the provision of housing services, employment services, services provided through the criminal justice system, and child and family services.<sup>5</sup>





This includes emergency department (ED), inpatient or psychiatric services.

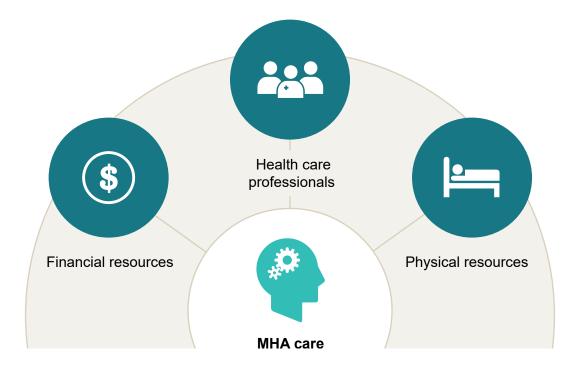
Acute care in general hospitals or psychiatric facilities are focused on stabilizing severe MHA conditions. Acute care may also be accessed when individuals have nowhere to go for mental health care in their community.<sup>6</sup>

#### References

- 5. Canadian Institute for Health Information. <u>Community Mental Health and Addiction Information: A Snapshot of Data Collection and Reporting</u> <u>in Canada</u>. 2017.
- 6. Canadian Institute for Health Information. Hospital Mental Health Services in Canada, 2009–2010. 2012.

### Health system resources for MHA care

Health system resources refer to the financial, human, physical, technical and informational inputs that are available to the health system.<sup>7</sup> This chartbook focuses on the financial resources, health care professionals and physical resources that are available for MHA care in the health care sector.



#### Reference

7. Canadian Institute for Health Information. <u>A Performance Measurement Framework for the Canadian Health System</u>. 2012.

### Legend



### **Contextual information**

This is additional information that is relevant to the understanding of the data being presented.



### Provincial and territorial strategic plans

Additional information has been summarized from publicly available provincial and territorial strategic plans that address mental health and addictions in their regions.



## **Financial resources**

This section outlines mental health spending by sectors of care utilized by individuals with MHA needs.

### Canada's estimated mental health expenditure

### Estimated *public* and *private* mental health expenditure<sup>8</sup>

\$15.8 B

## Proportion of total health expenditure on mental health



10-year target recommended by the Mental Health Commission of Canada



### Community

Spending **increased** the most in **community programs** compared with residential and ambulatory services.



### **Hospitals**

ED visit costs are largely driven by **substance use-related visits**.

While the cost per day in designated mental health beds is higher in general hospitals, longer hospital stays increased the cost per stay in psychiatric hospitals.

#### References

8. Mental Health Commission of Canada. Strengthening the Case for Investing in Canada's Mental Health System: Economic Considerations. 2017.

9. Mental Health Commission of Canada. Changing Directions, Changing Lives: The Mental Health Strategy for Canada. 2012.



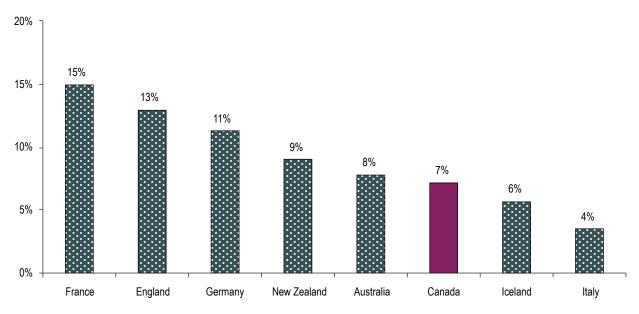
### Data sources

Financial information in this section includes costs for MHA care, reported by health ministries across Canada. Services provided by other provincial or territorial ministries, federal departments and private sector entities are not included. Data sources used in this section are outlined below.

Database	Information collected	Considerations
<u>Canadian MIS</u> <u>Database (CMDB)</u>	Spending on MHA in acute inpatient care, including community-level care	<ol> <li>In most jurisdictions, data provided to the CMDB reflects spending by health authorities. While this will account for most health spending in the jurisdiction, any additional amounts spent by the ministry separate from health authority funding will generally not be included in the CMDB.</li> <li>Data is not available for Quebec and Nunavut. Data is not available for community care in Yukon.</li> <li>Physician compensation was excluded from the analysis and spending on MHA could be underestimated.</li> <li>Cost data is collected in aggregate form based on the service type and not by the specific services provided. This means it will not be possible to calculate direct costs for each patient.</li> </ol>
National Ambulatory Care Reporting System (NACRS)	Cost information related to ED visits using Resource Intensity Weights (RIWs) as proxy	<ol> <li>ED costs were estimated using <u>RIWs</u> and <u>Cost of a Standard Hospital Stay</u>.</li> <li>Only jurisdictions reporting comprehensive ED data were included in this analysis: Ontario, Alberta and Yukon.</li> </ol>
Discharge Abstract Database (DAD)	Cost information related to hospital visits using RIWs as proxy	<ol> <li>Costs for hospital stays were estimated using the <u>Cost of a Standard Hospital</u> <u>Stay</u> and <u>RIWs</u>.</li> <li>Quebec and Nunavut were excluded. Stand-alone psychiatric facilities in Ontario were also excluded as they do not submit data to the DAD.</li> </ol>
Hospital Mental Health Database (HMHDB) See <u>Appendix A</u> for details.	Mental health service utilization as a proxy for costs for service use	<ol> <li>This includes hospitalizations in both psychiatric and general hospitals. Hospitalizations in general hospitals are included only if the patient had a main diagnosis of MHA.</li> </ol>



### Canada spends less on mental health compared with most Organisation for Economic Co-operation and Development (OECD) countries



### Proportion of total health expenditure on mental health, by OECD country (2017)

#### Note

The data year for Canada is 2015 and the data year for England is 2014.

#### Sources

Canada: Mental Health Commission of Canada. <u>Strengthening the Case for Investing in Canada's Mental Health System: Economic</u> <u>Considerations</u>. 2017.

England: Organisation for Economic Co-operation and Development. <u>Making Mental Health Count</u>. 2014. Other countries: World Health Organization. <u>Mental Health Atlas — 2017 country profiles</u>. Accessed April 4, 2019.



# Funding and delivery of community mental health and addictions services

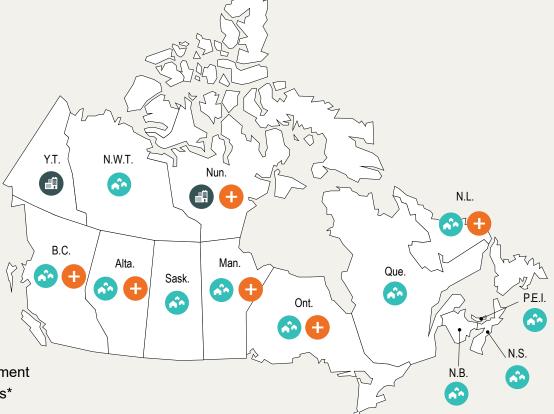
Mental health services are organized differently across Canada. MHA services are delivered by different organizations, and CIHI collects data for only those provided by local health authorities and health ministries.

### Spending data submitted to CIHI

MHA services primarily delivered by local health authorities, either directly or contracted through organizations

### Spending data not submitted to CIHI

MHA services primarily delivered through ministries of health



### **Other ministries**

N.L.: Department of Children, Seniors and Social Development

Ont.: Ministry of Children, Community and Social Services\*

Man.: Manitoba Families and Healthy Child Manitoba

Alta.: Ministry of Children's Services and Ministry of Community and Social Services

B.C.: Ministry of Mental Health and Addictions and Ministry of Children and Family Development

Nun.: Department of Health — provides funding to travel to Ontario, Manitoba and the Northwest Territories for services;

other departments, such as Education and Justice, may also be involved

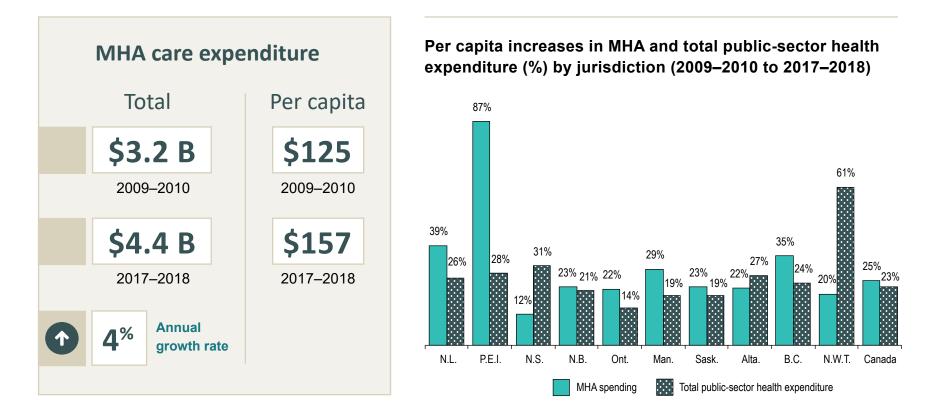
### Note

\* The Ministry of Children, Community and Social Services in Ontario was formerly known as the Ministry of Children and Youth Services.

#### Source

Canadian Institute for Health Information. Selecting Pan-Canadian Indicators for Access to Mental Health and Addiction Services, and to Home and Community Care: Progress Report. 2018.

## Increases in mental health spending outstrip total health expenditure



#### Notes

The total MHA services expenditure for fiscal years 2009–2010 and 2017–2018 was calculated using direct costs reported in the Canadian MIS Database. Data is not available for Quebec and Nunavut in the Canadian MIS Database. Data is not available for community care in Yukon.

Physician compensation was excluded from the analysis and spending on MHA could be underestimated.

#### Sources

Canadian MIS Database and National Health Expenditure Database, Canadian Institute for Health Information.

### Mental health care by settings

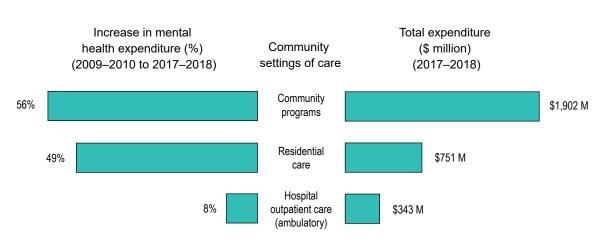
Mental health care spans multiple care settings. The table below describes the types of services in each setting, reported by health ministries to CIHI. Service or care provided by other provincial or territorial ministries, federal departments and private sector entities are not included in CIHI's data.

Settings of care	Service facilities or areas of care				
Community MHA care					
Community programs	This includes care from community-based MHA clinics or programs, day or night care, home health services, health promotion and education activities.				
Residential	This includes supportive living arrangements provided to clients with mental health needs or addictions-based conditions, in a community-based residential or group home setting.				
Hospital outpatient care (ambulatory)	This includes psychological services assessing and treating behavioural problems among individuals. Diagnostic, consultative, treatment and teaching services are also part of this sector of care. Services are also provided in MHA clinics.				
Hospital services for MHA					
Emergency care	This includes care received in EDs. Jurisdictions reporting information from all EDs have been included in this chartbook. These include Ontario, Alberta and Yukon.				
Inpatient care	This includes services provided for beds designated for inpatients with MHA needs in general facilities and in psychiatric facilities (e.g., nursing care, teaching, counselling services).				



# In community care settings, spending in community programs increased the most

Since the 1970s, there has been an emphasis on moving care from hospitals to the community.<sup>10</sup> Community care covers a range of activities and is organized differently across jurisdictions.<sup>11</sup>



#### Notes

Data is not available for Quebec and Nunavut. Data is not available for community care in Yukon.

Physician compensation was excluded from the analysis and spending on MHA could be underestimated.

#### Source

Canadian MIS Database, Canadian Institute for Health Information.

#### References

- 10. Bartram M. A targeted federal transfer for mental health: Are prospects better under the Trudeau Liberals? In: Doern B, Stoney C, eds. *How Ottawa Spends 2016–2017: The Trudeau Liberals in Power*. 2016.
- 11. Canadian Institute for Health Information. <u>Community Mental Health and Addiction Information: A Snapshot of Data</u> <u>Collection and Reporting in Canada</u>. 2017.



### Spending by jurisdiction in community settings

Average per capita spending on community MHA care by jurisdiction (2017–2018)

N.L.	P.E.I.	N.S.	N.B.	Ont.	Man.	Sask.	Alta.	B.C.	N.W.T.	Canada
\$128	\$121	\$117	\$107	\$89	\$88	\$86	\$117	\$146	\$196	\$106

#### Notes

Data is not available for Quebec and Nunavut. Data is not available for community care in Yukon.

Average per capita spending on community resources includes community, residential and ambulatory expenses.

Physician compensation was excluded from the analysis and spending on MHA could be underestimated.

#### Source

Canadian MIS Database, Canadian Institute for Health Information.



### ED costs are largely driven by substance use-related visits



81% of those who were admitted to a general hospital with MHA conditions were **admitted through the ED** in 2017–2018.

Source

Hospital Mental Health Database, Canadian Institute for Health Information.

## Average costs per visit to the ED (2017–2018)



Non-mental health

\$396

### Mental health

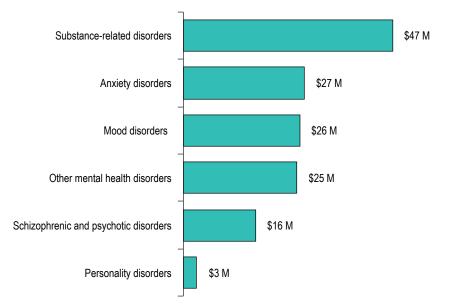
#### Notes

Data is only available for Ontario, Alberta and Yukon.

ED costs were estimated using <u>RIWs</u> and <u>Cost of a Standard Hospital Stay</u>. **Source** 

National Ambulatory Care Reporting System, Canadian Institute for Health Information.

### Total ED cost by diagnosis (2017-2018)



#### Notes

Data is only available for Ontario, Alberta and Yukon.

ED costs were estimated using <u>RIWs</u> and <u>Cost of a Standard Hospital Stay</u>. **Source** National Ambulatory Care Reporting System, Canadian Institute for Health Information.

### Acute inpatient mental health care

People with MHA needs may be admitted to a specialized bed or unit in a general hospital or psychiatric hospital. At other times, people with the same care needs are admitted to a regular bed. The information in this report captures these services in multiple settings, including the terms used.

In psychiatric hospitals, all beds are used for patients with MHA conditions. In general hospitals, some beds are assigned for MHA treatment while other beds are assigned for treatment not related to mental health and addictions.

The term "designated mental health beds" includes all beds in psychiatric hospitals and beds in the mental health units in general hospitals. "Non-designated mental health beds" include beds in medical, surgical, intensive care, obstetric, pediatric and palliative units in general hospitals.

Data is collected in 2 ways: 1 is by type of bed and 1 is by diagnosis. Direct cost information is available for all non-designated and designated mental health beds. Where possible, analysis is done by type of bed (designated beds). Otherwise, diagnosis is used as a proxy to identify MHA patients.







### Costs per hospital stay depend on setting

In 2017–2018, total spending on designated mental health beds was estimated at \$1.3 billion. Data gaps prevent us from doing a direct comparison but we can estimate costs and compare care provided in general and psychiatric hospitals. The cost per day in designated mental health beds is higher in general hospitals. However, longer hospital stays make the total cost per stay much higher in psychiatric hospitals.

Type of hospital	Cost per day	× Average length of stay (days)	= Estimated average cost per stay
Mental health stays in general hospitals (psychiatric units)	\$450	13*	\$5,850
Mental health stays in psychiatric hospitals	\$414	67	\$27,738

#### Notes

\* Average length of stay for general hospitals include all MHA patients treated inside and outside of psychiatric units.

Dementia cases are excluded.

Data is not available for Quebec and Nunavut in the Canadian MIS Database.

Data year for average cost per day and average length of stay was 2017–2018.

Cost estimates include the hospital cost of labour, nursing and allied health professionals, pharmacy (drugs), supplies, medical imaging, laboratory and indirect (overhead). Physician compensation was excluded from the analysis and spending on MHA could be underestimated.

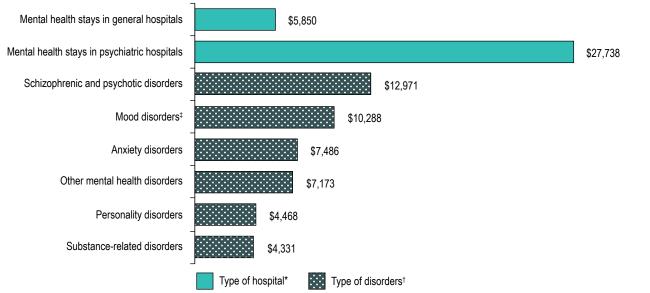
#### Sources

Canadian MIS Database (average cost per day) and Hospital Mental Health Database (average length of stay), Canadian Institute for Health Information.



# Cost of hospital stay varies by type of mental health and addictions condition

### Estimated average cost of hospital stays by type of hospital and disorders (2017–2018)



#### Notes

- \* Costs by type of hospital were estimated based on the costs per day in the psychiatric units of general hospitals and psychiatric hospitals multiplied by the average length of stays in general hospitals and psychiatric hospitals, respectively. The average length of stay for general hospitals includes all MHA patients treated inside and outside of psychiatric units; dementia cases are excluded.
- † This analysis includes patients (stays) in general hospitals and psychiatric hospitals. Average costs by type of diagnosis are estimated using RIWs based on the 2018 Case Mix Group+. Data is not available for Quebec and Nunavut. Stand-alone psychiatric facilities in Ontario were also excluded as they do not submit data to the DAD.

‡ Mood disorders include depression, bipolar disorder, other persistent mood (affective) disorders and unspecified mood (affective) disorders. Estimated average costs by type of hospital were calculated using the Canadian MIS Database and Hospital Mental Health Database. The cost estimates include the hospital cost of labour, nursing and allied health professionals, pharmacy (drugs), supplies, medical imaging, laboratory and indirect (overhead). Physician compensation was excluded from the analysis and spending on MHA could be underestimated. Data is not available for Quebec and Nunavut.

#### Sources

Canadian MIS Database, Hospital Mental Health Database and Discharge Abstract Database, Canadian Institute for Health Information.



### Provincial and territorial initiatives

Provinces and territories are making large investments in MHA to improve treatment and support at the community level. Jurisdictions have each released strategic plans but there are some common themes.



Improving access to community-based MHA care, including specialized care (e.g., LGBTQ, women, youth, seniors)



Increasing number of **specialized treatment beds** for **youth with addictions** 



Increasing access to mental health care for **youth in schools** and **in the community** 



Providing more support for **families** and **caregivers** 

**For more details** Refer to the provincial and territorial strategic plans listed in <u>Appendix B</u>.



## Health care professionals

This section describes the supply of health care professionals available for MHA services.



### Status of supply of health care professionals

CIHI has comparable information on **6 groups of mental health professionals** across the jurisdictions: family physicians, social workers, psychologists, psychiatrists, regulated nurses\* and occupational therapists.

### Challenges



Fewer mental health workers in rural areas



Many family doctors often see MHA patients but **few feel well prepared** 



Mental health workers are aging

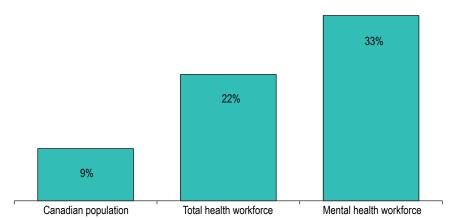


Little is known about the **distress** of **family and friend caregivers** 

#### Note

\* Regulated nurses include registered nurses, nurse practitioners, licensed practical nurses and registered psychiatric nurses.

### Cumulative growth (2008 to 2017)



#### Notes

6 groups of professionals are represented in the workforce graph: social workers, occupational therapists, family physicians, psychiatrists, regulated nurses and psychologists. The mental health workforce is a subset of these professionals, defined as those whose practice area is in mental health.

#### Sources

Health Workforce Database and Scott's Medical Database, Canadian Institute for Health Information.

Statistics Canada. <u>Population estimates on July 1st, by age and sex (Table 17-10-0005-01)</u>. Accessed April 5, 2019.



### Data sources

The health care professionals section describes the availability and distribution of care providers for 6 occupations in the MHA area of care. The information is collected through regulatory bodies, national associations, physician colleges and provincial or territorial health ministries. Data sources used in this section are outlined below.

Database	Information collected	Considerations
<u>Health Workforce</u> Database (HWDB)	Demographic information on health care providers (regulated nurses, occupational therapists, social workers, psychologists), including education, employment and geographic information	<ol> <li>Only health care providers who are active are included in the analysis.</li> <li>Data coverage differs by occupation. Data is not available for social workers in Yukon and Nunavut. Data is not available for psychologists in Yukon.</li> <li>Aggregate data is collected for social workers, without information on the sector of care where they are employed. The number of social workers in the MHA care sector could be overestimated.</li> </ol>
		4. Data on practice area is only available for certain groups of professionals (i.e., regulated nurses and occupational therapists). Practice area data is used to identify those who provide care in MHA. Since practice area data is not available for occupational therapists in Quebec, occupational therapists in Quebec were excluded.
Scott's Medical Database (SMDB)	The number of physicians (family physicians and psychiatrists) and their distribution across Canada	<ol> <li>Includes active physicians in clinical and non-clinical practice (e.g., research, academia). Some physicians may maintain their registration status but not engage in clinical activity. This means that the supply of physicians may be overestimated.</li> </ol>
<u>National Physician</u> Database (NPDB)	Physician payments and physicians' level of activity within Canada's health care system	<ol> <li>Information for physician activity is based on fee-for-service and shadow billings for alternative payments. Services provided by physicians on alternative payments may not be captured completely and the number of physicians who delivered mental health services may be underestimated based on billing data.</li> </ol>

# i

# Proportion of time spent on mental health care

This section focuses on 6 types of professionals: regulated nurses, occupational therapists, family physicians, social workers, psychiatrists and psychologists.

These professionals are commonly identified across jurisdictions as providing MHA services and regulatory information is available for these types of professionals in CIHI's databases.

Our ability to identify the amount of time these professionals dedicate to mental health care varies. For example, we can identify the number of hours that regulated nurses spent on psychiatric care, and estimate it for family physicians.

Time distribution information available	Time distribution assumed to be 100%	Time distribution information estimated or unavailable
<ul> <li>Regulated nurses*</li> </ul>	<ul> <li>Psychiatrists</li> </ul>	Family physicians
<ul> <li>Occupational therapists</li> </ul>	<ul> <li>Psychologists</li> </ul>	Social workers

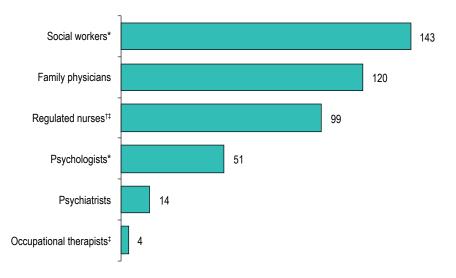
#### Note

\* Regulated nurses include registered nurses, nurse practitioners, licensed practical nurses and registered psychiatric nurses.



### Availability of mental health workforce

### Health workforce per 100,000 population by type of professional (2017)



#### Notes

- \* Data coverage differs by occupation. Data is not available for social workers in Yukon and Nunavut. Data is not available for psychologists in Yukon.
- † Regulated nurses include registered nurses, nurse practitioners, licensed practical nurses and registered psychiatric nurses.
- ‡ Practice area (e.g., MHA service) information only available for regulated nurses and occupational therapists. For regulated nurses and occupational therapists, only those whose practice specialty is in mental health are included. Practice area information is not available for occupational therapists in Quebec; they were excluded from the calculation.

This includes only active professionals who are registered/licensed, regardless of number of hours worked.

#### Sources

Health Workforce Database and Scott's Medical Database, Canadian Institute for Health Information. Statistics Canada. <u>Population estimates on July 1st, by age and sex (Table 17-10-0005-01)</u>. Accessed April 5, 2019. Availability is important to care delivery. So, too, are the contributing factors below.

### Collaboration

To be able to work with colleagues and caregivers

### **Diversity**

To be culturally aware and to overcome language barriers

### Skills

To be trained adequately to meet current needs (e.g., opioids crisis) and needs of specific groups (e.g., children and youth, seniors)

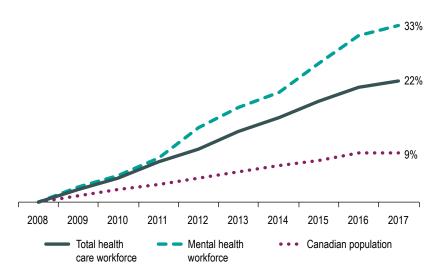
### Compassion

To be able to deliver patient- and family-centred care in a caring manner

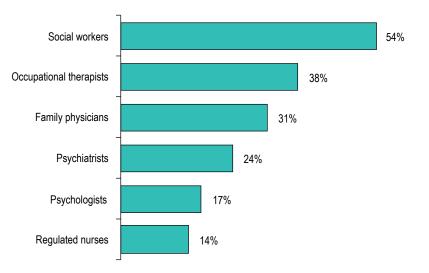
For more details Refer to the strategic plans listed in Appendix B.

# Growth of mental health workforce driven by social workers

Cumulative growth of the mental health workforce in Canada (2008 to 2017)\*<sup>†</sup>



### Cumulative growth of mental health workforce<sup>†</sup> in Canada, by occupation (2008 to 2017)



#### Notes

\* 6 groups of professionals are represented in the workforce graph on the left: social workers, occupational therapists, family physicians, psychiatrists, regulated nurses and psychologists.

† The mental health workforce is a subset of these professionals, defined as those whose practice area is in mental health.

Health care professionals include active professionals who are registered or licensed, regardless of number of hours worked.

Data coverage differs by professional group. Data is not available for social workers in Yukon and Nunavut. Data is not available for psychologists in Yukon.

For regulated nurses and occupational therapists, only those who are practising in MHA are included. Practice area information is not available for occupational therapists in Quebec; they were excluded from the calculation.

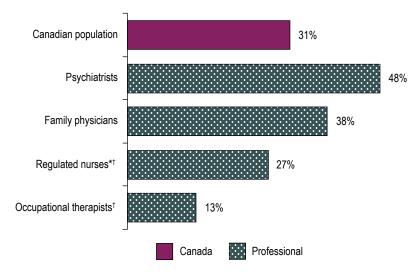
Regulated nurses include registered nurses, nurse practitioners, licensed practical nurses and registered psychiatric nurses. **Sources** 

Both figures: Health Workforce Database and Scott's Medical Database, Canadian Institute for Health Information. Left figure: Statistics Canada. <u>Population estimates on July 1st, by age and sex (Table 17-10-0005-01)</u>. Accessed April 5, 2019.

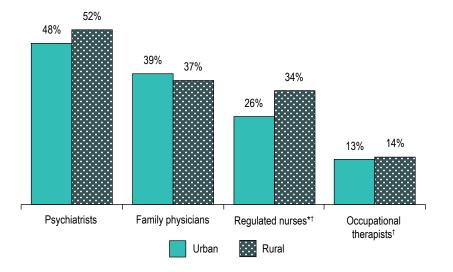


### Aging mental health workforce

### Proportion of mental health workforce age 55+, by type of professional (2017)



### Proportion of mental health workforce age 55+, by type of professional in rural and urban areas (2017)



#### Notes

\* Regulated nurses include registered nurses, nurse practitioners, licensed practical nurses and registered psychiatric nurses.

† For regulated nurses and occupational therapists, only those who are practicing in MHA are included. Practice area information is not available for occupational therapists in Quebec; they were excluded from the calculation.

Age data not available for psychologists and social workers.

This includes only active professionals who are registered/licensed, regardless of number of hours worked.

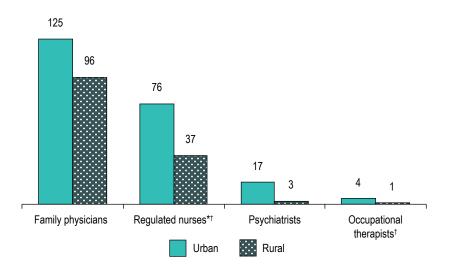
#### Sources

Health Workforce Database and Scott's Medical Database, Canadian Institute for Health Information. Statistics Canada. Population estimates on July 1st, by age and sex (Table 17-10-0005-01). Accessed April 5, 2019.



### Fewer MHA workers in rural areas

Mental health workforce per 100,000 population, by type of professional in urban and rural areas (2017)



#### Notes

- \* Regulated nurses include registered nurses, nurse practitioners, licensed practical nurses and registered psychiatric nurses.
- † For regulated nurses and occupational therapists, only those who are practicing in MHA are included. Practice area information is not available for occupational therapists in Quebec; they were excluded from the calculation.

Data for social workers and psychologists not available.

This includes only active professionals who are registered/licensed, regardless of number of hours worked.

#### Sources

Health Workforce Database and Scott's Medical Database, Canadian Institute for Health Information.

Statistics Canada. Estimates of population (2011 Census and administrative data), by age group and sex for July 1st, Canada, provinces, territories, health regions (2015 boundaries) and peer groups. Accessed May 3, 2019.

### Significance

Fewer workers may result in reduced service availability in rural areas.

### **Contributing factors**

There are challenges in recruitment and retention.

### Initiatives

Virtual technologies are being used to improve service availability, ensure consistency in assessment and treatment protocols, and provide groups of colleagues to consult with in rural regions in various jurisdictions.

> For more details Refer to the strategic plans listed in Appendix B.



# Primary care physicians often see mental health patients, but few feel prepared

### Patients and primary care physicians



### Patients

Almost 80% of people with common mental health problems use the services of a family physician<sup>12</sup>

#### Reference

12. Mental Health Commission of Canada. <u>Options for Improving</u> <u>Access to Counselling, Psychotherapy and Psychological Services</u> <u>for Mental Health Problems and Illnesses</u>. 2017.

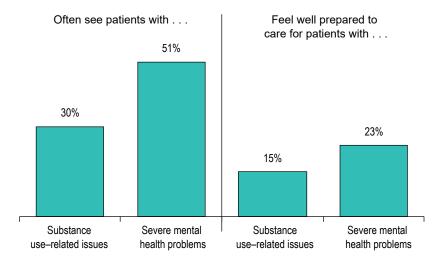


**Primary care physicians** 84% of active family physicians provided psychiatric care or counselling in 2016–2017

Source

National Physician Database, Canadian Institute for Health Information.

### Proportion of primary care physicians who . . .



#### Source

Canadian Institute for Health Information. *Commonwealth Fund International Health Policy Survey of Primary Care Physicians*. 2015.



In some jurisdictions, there are plans to improve training and support to enhance mental health capacity in primary care settings.

**For more details** Refer to the strategic plans listed in Appendix B.

### Families important in mental health caregiving

Over 2 million Canadians (7.6%) provided care to a family member with a mental health need in 2012.<sup>13, 14</sup> Caregiver tasks include providing transportation, scheduling and coordinating appointments, and providing social, financial and emotional support.<sup>15</sup>

### Benefits of family-oriented care<sup>16</sup>

A family-oriented approach can benefit both the individual and their families:

- Improved health and social outcomes (i.e., education, housing, employment)
- Reduced caregiver distress

### Impact of caregiving<sup>17</sup>

- Negative impact on perceived health
- Financial difficulties
- Reduced hours of work
- Psychological distress

#### References

- 13. Mental Health Commission of Canada. <u>Mental health indicators for Canada</u>. Accessed April 5, 2019.
- 14. Statistics Canada. <u>Population estimates on July 1st, by age and sex</u> (<u>Table 17-10-0005-01</u>). Accessed April 5, 2019.
- 15. Mental Health Commission of Canada. Caregiving. Accessed April 5, 2019.
- 16. Government of British Columbia. <u>B.C.'s Mental Health and Substance Use Strategy</u>, <u>2017–2020</u>. 2017.
- 17. Statistics Canada. Portrait of Caregivers, 2012. 2013.



### Initiatives

 Supports are being developed for family caregivers, including improved access to information, laws to allow access to needed health information, and standards and guidelines for health workers to provide family-centred care.

> For more details Refer to the strategic plans listed in <u>Appendix B</u>.



### Provincial and territorial initiatives

Provinces and territories are implementing initiatives to improve the mix of mental health professionals with the right skills. Here are some common strategies.

## **Quantity** of mental health workers

- Increasing number of providers overall
- Increasing number of providers for specialized needs (e.g., clinicians specialized in children and youth)
- Overcoming geographic distances through virtual technology

## **Quality** of mental health workers

- Implementing systems or networks to promote sharing of best practices
- Improving training quality and opportunities (e.g., cultural awareness training, specialized needs in children and youth or seniors)
- Providing mental and emotional support for providers

**For more details** Refer to the strategic plans listed in <u>Appendix B</u>.

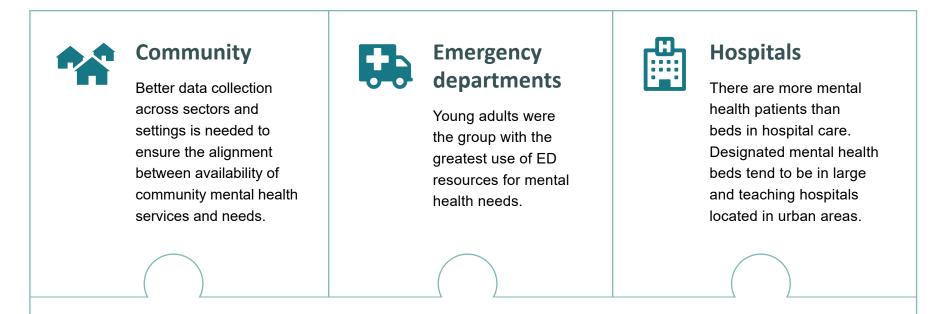


## **Physical resource use**

This section describes the physical resources that are available and used for MHA care.



# Physical resources available for mental health and addictions care





### Data to connect the settings

Since MHA services are provided across many settings, several jurisdictions have identified a need for an integrated data infrastructure to ensure continuity of care. To achieve this, a common set of data standards and system design will need to be developed within the jurisdictions.



### Data sources

The physical resources section describes the availability and use of facilities and beds for MHA care. The information is reported by health ministries across Canada. Services provided by other provincial or territorial ministries, federal departments and private sectors of care are not included. Data sources used in this section are outlined below.

Database	Information collected	Considerations		
<u>CMDB</u>	Distribution of health facilities and beds used for MHA treatment	<ol> <li>In most jurisdictions, data provided to the CMDB reflects spending by health authorities. While this will account for most health spending in the jurisdiction, any additional amounts spent by the ministry separate from health authority funding will generally not be included in the CMDB.</li> <li>Data is not available for Quebec and Nunavut. Data is not available for community care in Yukon.</li> </ol>		
<u>NACRS</u>	Use for mental health- and non-mental health–related ED visits	1. Information on ED visits is only available for Ontario, Alberta and Yukon.		
DAD	Use of hospital resources for mental health- and non-mental health–related hospitalizations	<ol> <li>Information on the use of hospitals for MHA in general hospitals is determined by the type of diagnosis. The analysis in this section included patients with a main diagnosis of MHA.</li> <li>Quebec and Nunavut were excluded. Stand-alone psychiatric facilities in Ontario were also excluded as they do not submit data to the DAD.</li> </ol>		
HMHDB See <u>Appendix A</u> for details.	Hospitalizations for MHA care	<ol> <li>Information on hospitalizations include hospitals reporting through health ministries in provinces and territories.</li> <li>Includes hospitalizations in both psychiatric and general hospitals. Hospitalizations in general hospitals are only included if the patient had a main diagnosis of MHA.</li> </ol>		



# Lacking data on community mental health and addictions services

Community mental health care is generally funded and organized by several levels of governments and types of organizations. Community MHA care can be delivered in a variety of settings, such as clinics, primary care physicians' offices, community centres, clients' homes, schools, supportive housing units and outside traditional physical walls (e.g., telehealth services).

To ensure community mental health services are meeting people's needs, it is important to consider where services are located and how they are used. Currently, CIHI collects limited information on community mental health services for these reasons:

- For publicly funded services, information is distributed across data sources held by different ministries and organizations (e.g., health, social services, education, children- and youth-specific ministries)
- For privately funded services, little data is available publicly



Publicly funded	
Sources	Federal, provincial and territorial governments
Typical programs	Outpatient (facility-based) programs, case management, early detection and intervention, vocational rehabilitation

Privately funded		
Sources	Private insurance plans, out-of-pocket payments	
Typical programs	Residential and outpatient addictions services	

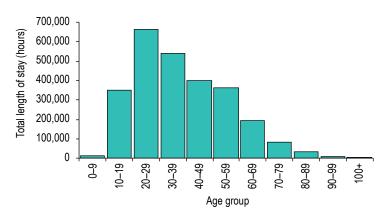
#### Source

Canadian Institute for Health Information. <u>Community Mental Health and Addiction Information:</u> <u>A Snapshot of Data Collection and Reporting in Canada</u>. 2017.

# In the ED, young adults with MHA used more resources



# Resource utilization as measured by total length of stay (hours), by age (2017–2018)



#### Note

Data only available for Ontario, Alberta and Yukon.

#### Source

National Ambulatory Care Reporting System, Canadian Institute for Health Information.

### Children and youth (age 5–24)

Symptoms of MHA needs often develop early in life.<sup>18</sup> Repeat ED visits may suggest there are access challenges and gaps in community care.<sup>19</sup>



Number of mental health-related ED visits in 11 years (2006–2007 to 2017–2018)<sup>20</sup>

**39**%

Had 3 or more mental health–related ED visits (2013–2014)<sup>19</sup>

Youth and young adults may be more vulnerable to gaps in the system as they transition from child and adolescent mental health services to adult services.<sup>21</sup>

#### References

- Public Health Agency of Canada. <u>Data blog: Mental illness in Canada</u>. Accessed March 6, 2019.
- Canadian Institute for Health Information. <u>Care for Children and Youth with</u> <u>Mental Disorders</u>. 2015.
- 20. Canadian Institute for Health Information. <u>*Child and youth mental health in Canada.*</u> 2019.
- 21. Mental Health Commission of Canada. <u>Taking the Next Step Forward: Building</u> <u>a Responsive Mental Health and Addictions System for Emerging Adults</u>. 2015.



# Mental health beds tend to be in large hospitals in urban areas

		Peer group		Geographic location	
Type of hospital	Number of facilities	Teaching or large hospitals	Medium or small hospitals	Urban	Rural
General hospitals					
With designated mental health beds	139	90 (65%)	49 (35%)	126 (91%)	13 (9%)
Without designated mental health beds but treat a minimum of 5 mental health patients per day on average	8	3 (38%)	5 (63%)	8 (100%)	0 (0%)
Psychiatric hospitals	22	Not applicable	Not applicable	19 (86%)	3 (14%)

#### Notes

Not applicable: Psychiatric hospitals are not classified to a peer group.

Quebec and Nunavut are excluded from the analysis as data is not available in the Canadian MIS Database.

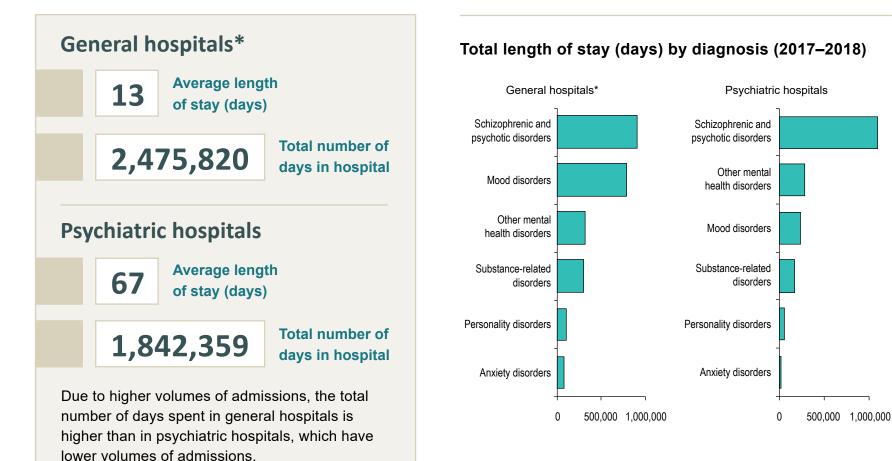
Data year is 2017–2018.

Geographic location was identified by mapping the postal code of the head office to the Postal Code Conversion File. Dementia was not included when counting mental health patients.

#### Sources

Canadian MIS Database and Hospital Mental Health Database, Canadian Institute for Health Information.

# Usage patterns differ between psychiatric and general hospitals



#### Notes

\* General hospitals include both hospitals with and without designated mental health beds. Dementia was not included when counting mental health patients.

#### Source

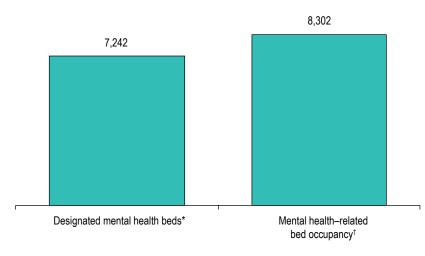
Hospital Mental Health Database, Canadian Institute for Health Information.



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# Many mental health patients treated outside of designated beds

#### Number of designated mental health beds and estimated daily beds occupied by mental health patients (2017–2018)



#### Notes

- \* Designated mental health beds in both psychiatric and general hospitals are counted.
- Cccupancy is measured using a census approach to measure available beds treating mental health patients, including beds outside mental health units.
   Patients with dementia or Alzheimer's are excluded.

Quebec and Nunavut are excluded from the analysis because data is not available in the Canadian MIS Database.

#### Sources

Canadian MIS Database and Hospital Mental Health Database, Canadian Institute for Health Information.

#### **Extended stays**

When a patient is in a hospital and no longer requires the intensity of resources or services, this portion of the stay is considered an extended stay (also known as alternate level of care). Extended stays can reduce bed availability, ultimately impeding access to hospital resources.

# Mental health hospital stays with extended stays\* (2017–2018)

**4**<sup>%</sup>

As proportion of all mental health stays

Median number of days identified as extended stay

#### Notes

\* Quebec has no equivalent data for extended stays, so results for the province are not included.

Dementia is excluded from the analysis.

#### Source

Discharge Abstract Database, Canadian Institute for Health Information.



# Information systems are key technical resources to connect care settings

Mental health care spans across many sectors of care in many settings. It has been identified in multiple jurisdictions that there is a need to improve the information infrastructure to:

- Provide timely access to patient information to support multidisciplinary care across geographic regions, ministries and organizations<sup>22</sup>
- Track and monitor performance of the system through the development of quality and outcome indicators<sup>22</sup>

### Considerations<sup>23</sup>

 A common set of data standards and collection systems is needed to integrate data from diverse sources

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 Adequate training is needed for providers and other users to use existing information-sharing tools<sup>24</sup>

#### References

- 22. For more details, refer to the strategic plans listed in Appendix B.
- 23. Canadian Institute for Health Information. <u>Community Mental Health and Addiction</u> <u>Information: A Snapshot of Data Collection and Reporting in Canada</u>. 2017.
- 24. Government of Alberta. Valuing Mental Health: Next Steps. 2017.



# Provincial and territorial initiatives

Provinces and territories are implementing initiatives to ensure they have the amount of physical resources required to meet the needs of their populations. The focus is on improving the efficiency of the current resources and expanding the amount of physical resources available. Here are some common strategies.

### Efficiency improvement

- Centralizing information about MHA services for better awareness and access
- · Aligning available resources to needs
- Improving the discharge planning process by identifying gaps and supports required for community follow-up

### **Resource** expansion

- Building new treatment centres and establishing more specialized treatment beds
- Expanding service provision beyond physical settings and using technology like videoconferencing, teleconferencing and online applications.

#### **For more details** Refer to the strategic plans listed in Appendix B.

# Summary of what we know

### **Financial resources**

- The amount spent on publicly funded care that is primarily delivered directly or through local health authorities (some can be delivered through ministries of health).
- Spending between 2009–2010 and 2017–2018 has grown; increases in community mental health care are outstripping total health spending, with the largest increase seen in community programs.

### Health care professionals

- Growth in the mental health workforce was faster than in the total health workforce and the Canadian population between 2008 and 2017.
- While many primary care physicians often see patients with MHA needs, few report feeling well prepared.

### **Physical resources**

• In EDs, young adults with MHA needs use more resources than older adults.

# Summary of what we do not know

### **Financial resources**

- There is a gap in information on the amount of money spent on MHA programs that are funded by other ministries, from private sources, or directly by the ministries of health outside of regional health authority funding. This impacts the estimation of total spending on MHA particularly community-based care that is delivered by a variety of organizations and ministries.
- Costs for hospital MHA patients receiving care outside of designated mental health units can only be estimated.

### Health care professionals

- Information is only available for a subset of MHA care professionals.
- We know the number of individuals who report working in MHA but not the proportion of their direct time spent providing MHA care.

### **Physical resources**

• No information is captured on the buildings or places that are used to provide community-based MHA care.

# **Future directions**

Globally and nationally, strategies have been developed to improve mental health access and care.

- Globally, the OECD with support from member countries began a new project in 2018 to develop performance-based indicators for mental health care.<sup>25</sup>
- At a pan-Canadian level, the Mental Health Commission of Canada developed a framework for action between 2017 and 2022<sup>26</sup> to guide mental health system planning based on their mental health strategy for Canada. The framework identified 4 key areas: leadership and funding, promotion and prevention, access and services, and data and research.
- In 2017, the Government of Canada pledged \$5 billion over 10 years to support provinces and territories in improving access to MHA services.<sup>27</sup> CIHI is currently working with health ministers from the federal, provincial and territorial governments to develop indicators measuring access to MHA services across Canada.<sup>28</sup>

#### References

<sup>25.</sup> Organisation for Economic Co-operation and Development. <u>Mental health</u>. Accessed March 11, 2019.

<sup>26.</sup> Mental Health Commission of Canada. Advancing the Mental Health Strategy for Canada: A Framework for Action (2017-2022). 2016.

<sup>27.</sup> Government of Canada. <u>A Common Statement of Principles on Shared Health Priorities</u>. 2017.

<sup>28.</sup> Canadian Institute for Health Information. <u>Shared Health Priorities</u>. Accessed March 11, 2019.

## Appendix A: Overall data sources

The data sources used in this chartbook contain information reported by health ministries across Canadian provinces and territories. Services provided by other provincial or territorial ministries, federal departments and private sectors of care are not included in CIHI's data. Refer to Funding and delivery of community mental health and addictions services in the Financial resources section.

Information on the data limitations and methodologies of the data sources is available in each section of the 3 areas of health systems resources. Below is an overview of the CIHI databases used to obtain information on MHA resources.

Database	Contains information on
<u>CMDB</u>	Financial and statistical operations for services funded by ministries of health, including acute and community care in public hospitals and other health service organizations across Canada.
NACRS	Demographic, administrative, clinical and service-specific data related to ED visits.
DAD	Demographic, administrative and clinical information related to hospital stays.
HWDB	Administrative, demographic, education and employment characteristics of health care providers.
<u>SMDB</u>	Demographic, specialty, activity status and education characteristics of physicians.
<u>NPDB</u>	Socio-demographic, payment and service utilization data of physicians.
HMHDB, includes the Ontario Mental Health Reporting System, DAD, Hospital Morbidity Database and Hospital Mental Health Survey	Demographic and clinical information on inpatient hospital stays for MHA concerns in general and psychiatric hospitals.

## Appendix B: Provincial and territorial strategic plans

Jurisdictions	Most recent mental health strategic plans	
Newfoundland and Labrador	The Way Forward — Towards Recovery: The Mental Health and Addictions Action Plan for Newfoundland and Labrador	
Prince Edward Island	Prince Edward Island Mental Health and Addiction Strategy, 2016–2026	
Nova Scotia	Together We Can: The Plan to Improve Mental Health and Addictions Care for Nova Scotians	
New Brunswick	The Action Plan for Mental Health in New Brunswick, 2011–18	
Quebec	Faire ensemble et autrement : plan d'action en santé mentale, 2015-2020	
Ontario	Open Minds, Healthy Minds: Ontario's Comprehensive Mental Health and Addictions Strategy	
Manitoba	Improving Access and Coordination of Mental Health and Addiction Services: A Provincial Strategy for All Manitobans	
Saskatchewan	Ministry of Health Plan for 2018–19	
Alberta	Valuing Mental Health: Next Steps	
British Columbia	B.C.'s Mental Health and Substance Use Strategy, 2017–2020	
Yukon	Forward Together: Yukon Mental Wellness Strategy, 2016–2026	
Northwest Territories	Mind and Spirit: Promoting Mental Health and Addictions Recovery in the Northwest Territories — Child and Youth Mental Wellness Action Plan, 2017–2022	
Nunavut	Inuusivut Anninagtuq Action Plan, 2017–2022	

## Appendix C: Text alternative for figures

#### Health system resources for MHA care

This diagram describes how the report is organized. 3 types of resources that contribute to MHA care will be discussed: financial resources, health care professionals and physical resources.

# Proportion of total health expenditure on mental health, by OECD country (2017)

Country	Proportion of total health expenditure on mental health
France	15%
England	13%
Germany	11%
New Zealand	9%
Australia	8%
Canada	7%
Iceland	6%
Italy	4%

#### Note

The data year for Canada is 2015 and the data year for England is 2014. **Sources** 

Canada: Mental Health Commission of Canada. <u>Strengthening the Case for</u> <u>Investing in Canada's Mental Health System: Economic Considerations</u>. 2017. England: Organisation for Economic Co-operation and Development. <u>Making</u> <u>Mental Health Count</u>. 2014.

Other countries: World Health Organization. <u>Mental Health Atlas — 2017</u> <u>country profiles</u>. Accessed April 4, 2019.

#### Funding and delivery of community mental health and addictions services

The diagram illustrates how community MHA services are funded and delivered.

For all provinces and the Northwest Territories, MHA services are primarily delivered by regional health authorities, either directly or contracted through organizations. For Yukon and Nunavut, MHA services are primarily delivered through ministries of health.

In some jurisdictions, other ministries or departments can also be involved. In Newfoundland and Labrador, the Department of Children, Seniors and Social Development is involved. In Ontario, the Ontario Ministry of Children, Community and Social Services is involved.\* In Manitoba, Manitoba Families and Healthy Child Manitoba are involved. In Alberta, the Ministry of Children's Services and the Ministry of Community and Social Services are involved. In British Columbia, both the Ministry of Mental Health and Addictions and Ministry of Children and Family Development are involved. In Nunavut, the Department of Health also provides some funding to travel to Ontario, Manitoba and the Northwest Territories for services; other departments, such as Education and Justice, may also be involved.

#### Note

\* The Ministry of Children, Community and Social Services in Ontario was formerly known as the Ministry of Children and Youth Services.

#### Source

Canadian Institute for Health Information. <u>Selecting Pan-Canadian Indicators for Access to Mental Health and Addiction Services, and to Home and Community Care:</u> <u>Progress Report</u>. 2018.

# Per capita increases in MHA and total public-sector health expenditure (%) by jurisdiction (2009–2010 to 2017–2018)

Jurisdiction	Increase in MHA spending per capita	Total public-sector health expenditure
Newfoundland and Labrador	39%	26%
Prince Edward Island	87%	28%
Nova Scotia	12%	31%
New Brunswick	23%	21%
Ontario	22%	14%
Manitoba	29%	19%
Saskatchewan	23%	19%
Alberta	22%	27%
British Columbia	35%	24%
Northwest Territories	20%	61%
Canada	25%	23%

#### Notes

The total MHA services expenditure for fiscal years 2009–2010 and 2017–2018 was calculated using direct costs reported in the Canadian MIS Database.

Data is not available for Quebec and Nunavut in the Canadian MIS Database. Data is not available for community care in Yukon.

Physician compensation was excluded from the analysis and spending on MHA could be underestimated. **Sources** 

Canadian MIS Database and National Health Expenditure Database, Canadian Institute for Health Information.

## In community care settings, spending in community programs increased the most

Community settings of care	Increase in mental health expenditure (%), 2009–2010 to 2017–2018	Total spending (\$ million), 2017–2018	
Community programs	56%	\$1,902 M	
Residential care	49%	\$751 M	
Hospital outpatient care (ambulatory)	8%	\$343 M	

#### Notes

Data is not available for Quebec and Nunavut. Data is not available for community care in Yukon. Physician compensation was excluded from the analysis and spending on MHA could be underestimated.

#### Source

Canadian MIS Database, Canadian Institute for Health Information.

#### Total ED cost by diagnosis (2017–2018)

Diagnosis	Total ED cost
Substance-related disorders	\$47 M
Anxiety disorders	\$27 M
Mood disorders	\$26 M
Other mental health disorders	\$25 M
Schizophrenic and psychotic disorders	\$16 M
Personality disorders	\$3 M

#### Notes

Data is only available for Ontario, Alberta and Yukon.

ED costs were estimated using <u>RIWs</u> and <u>Cost of a Standard Hospital Stay</u>.

#### Source

National Ambulatory Care Reporting System, Canadian Institute for Health Information.

# Estimated average cost of hospital stays by type of hospital and disorders (2017–2018)

Type of hospital and disorders	Estimated average cost of hospital stays	
Type of hospital*		
Mental health stays in general hospitals	\$5,850	
Mental health stays in psychiatric hospitals	\$27,738	
Type of disorders <sup>+</sup>		
Schizophrenic and psychotic disorders	\$12,971	
Mood disorders <sup>‡</sup>	\$10,288	
Anxiety disorders	\$7,486	
Other mental health disorders	\$7,173	
Personality disorders	\$4,468	
Substance-related disorders	\$4,331	

#### Notes

- \* Costs by type of hospital were estimated based on the costs per day in the psychiatric units of general hospitals and psychiatric hospitals multiplied by the average length of stays in general hospitals and psychiatric hospitals, respectively. The average length of stay for general hospitals includes all MHA patients treated inside and outside of psychiatric units; dementia cases are excluded.
- † This analysis includes patients (stays) in general hospitals and psychiatric hospitals. Average costs by type of diagnosis are estimated using RIWs based on the 2018 Case Mix Group+. Data is not available for Quebec and Nunavut. Stand-alone psychiatric facilities in Ontario were also excluded as they do not submit data to the DAD.
- ‡ Mood disorders include depression, bipolar disorder, other persistent mood (affective) disorders and unspecified mood (affective) disorders.

Estimated average costs by type of hospital were calculated using the Canadian MIS Database and Hospital Mental Health Database. The cost estimates include the hospital cost of labour, nursing and allied health professionals, pharmacy (drugs), supplies, medical imaging, laboratory and indirect (overhead). Physician compensation was excluded from the analysis and spending on MHA could be underestimated. Data is not available for Quebec and Nunavut.

#### Sources

Canadian MIS Database, Hospital Mental Health Database and Discharge Abstract Database, Canadian Institute for Health Information.

#### Cumulative growth (2008 to 2017)

This diagram shows that between 2008 and 2017, the mental health workforce grew by 33%, the total health workforce grew by 22% and the Canadian population grew by 9%.

#### Notes

6 groups of professionals are represented in the workforce graph: social workers, occupational therapists, family physicians, psychiatrists, regulated nurses and psychologists. The mental health workforce is a subset of these professionals, defined as those whose practice area is in mental health.

Regulated nurses include registered nurses, nurse practitioners, licensed practical nurses and registered psychiatric nurses.

#### Sources

Health Workforce Database and Scott's Medical Database, Canadian Institute for Health Information. Statistics Canada. <u>Population estimates on July 1st, by age and sex (Table 17-10-0005-01)</u>. Accessed April 5, 2019.

#### Health workforce per 100,000 population by type of professional (2017)

Type of professional	Number of health workforce per 100,000 population
Social workers*	143
Family physicians	120
Regulated nurses <sup>†‡</sup>	99
Psychologists	51
Psychiatrists	14
Occupational therapists <sup>‡</sup>	4

#### Notes

- \* Data coverage differs by occupation. Data is not available for social workers in Yukon and Nunavut. Data is not available for psychologists in Yukon.
- † Regulated nurses include registered nurses, nurse practitioners, licensed practical nurses and registered psychiatric nurses.
- ‡ Practice area (e.g., MHA service) information only available for regulated nurses and occupational therapists. For regulated nurses and occupational therapists, only those whose practice specialty is in mental health are included. Practice area information is not available for occupational therapists in Quebec; they were excluded from the calculation.
- This includes only active professionals who are registered/licensed, regardless of number of hours worked. **Sources**

Health Workforce Database and Scott's Medical Database, Canadian Institute for Health Information. Statistics Canada. <u>Population estimates on July 1st, by age and sex (Table 17-10-0005-01)</u>. Accessed April 5, 2019.

Year	Canadian population	Total health care workforce	Mental health workforce
2008	0%	0%	0%
2009	1%	2%	3%
2010	2%	4%	5%
2011	3%	8%	8%
2012	5%	10%	14%
2013	6%	13%	18%
2014	7%	16%	20%
2015	8%	19%	26%
2016	9%	21%	31%
2017	9%	22%	33%

#### Cumulative growth of the mental health workforce in Canada (2008 to 2017)\*†

#### Notes

\* 6 groups of professionals are represented in the workforce graph: social workers, occupational therapists, family physicians, psychiatrists, regulated nurses and psychologists.

† The mental health workforce is a subset of these professionals, defined as those whose practice area is in mental health.

Health care professionals include active professionals who are registered or licensed, regardless of number of hours worked.

Data coverage differs by professional group. Data is not available for social workers in Yukon and Nunavut. Data is not available for psychologists in Yukon.

For regulated nurses and occupational therapists, only those who are practising in MHA are included. Practice area information is not available for occupational therapists in Quebec; they were excluded from the calculation. Regulated nurses include registered nurses, nurse practitioners, licensed practical nurses and registered psychiatric nurses.

#### Sources

Health Workforce Database and Scott's Medical Database, Canadian Institute for Health Information. Statistics Canada. <u>Population estimates on July 1st, by age and sex (Table 17-10-0005-01)</u>. Accessed April 5, 2019.

# Cumulative growth of mental health workforce<sup>†</sup> in Canada, by occupation (2008 to 2017)

Occupation	Cumulative growth (%)	
Social workers	54%	
Occupational therapists	38%	
Family physicians	31%	
Psychiatrists	24%	
Psychologists	17%	
Regulated nurses	14%	

#### Notes

† The mental health workforce is a subset of these professionals, defined as those whose practice area is in mental health.

Health care professionals include active professionals who are registered or licensed, regardless of number of hours worked.

Data coverage differs by professional group. Data is not available for social workers in Yukon and Nunavut. Data is not available for psychologists in Yukon.

For regulated nurses and occupational therapists, only those who are practising in MHA are included. Practice area information is not available for occupational therapists in Quebec; they were excluded from the calculation.

Regulated nurses include registered nurses, nurse practitioners, licensed practical nurses and registered psychiatric nurses.

#### Sources

Health Workforce Database and Scott's Medical Database, Canadian Institute for Health Information.

#### Proportion of mental health workforce age 55+, by type of professional (2017)

Type of professional	Proportion age 55+	
Canadian population	31%	
Psychiatrists	48%	
Family physicians	38%	
Regulated nurses**	27%	
Occupational therapists <sup>+</sup>	13%	

#### Notes

- \* Regulated nurses include registered nurses, nurse practitioners, licensed practical nurses and registered psychiatric nurses.
- † For regulated nurses and occupational therapists, only those who are practicing in MHA are included. Practice area information is not available for occupational therapists in Quebec; they were excluded from the calculation.

Age data not available for psychologists and social workers.

This includes only active professionals who are registered/licensed, regardless of number of hours worked.

#### Sources

Health Workforce Database and Scott's Medical Database, Canadian Institute for Health Information.

Statistics Canada. <u>Population estimates on July 1st</u>, by age and sex (<u>Table 17-10-0005-01</u>). Accessed April 5, 2019.

# Proportion of mental health workforce age 55+, by type of professional in rural and urban areas (2017)

Type of professional	Urban	Rural
Psychiatrists	48%	52%
Family physicians	39%	37%
Regulated nurses**	26%	34%
Occupational therapists <sup>+</sup>	13%	14%

#### Notes

\* Regulated nurses include registered nurses, nurse practitioners, licensed practical nurses and registered psychiatric nurses.

† For regulated nurses and occupational therapists, only those who are practicing in MHA are included. Practice area information is not available for occupational therapists in Quebec; they were excluded from the calculation.

Age data not available for psychologists and social workers.

This includes only active professionals who are registered/licensed, regardless of number of hours worked.

#### Sources

Health Workforce Database and Scott's Medical Database, Canadian Institute for Health Information.

Statistics Canada. <u>Population estimates on July 1st, by age and sex (Table 17-10-0005-01)</u>. Accessed April 5, 2019.

# Mental health workforce per 100,000 population, by type of professional in urban and rural areas (2017)

Type of professional	Urban	Rural
Family physicians	125	96
Regulated nurses**	76	37
Psychiatrists	17	3
Occupational therapists <sup>+</sup>	4	1

#### Notes

- \* Regulated nurses include registered nurses, nurse practitioners, licensed practical nurses and registered psychiatric nurses.
- † For regulated nurses and occupational therapists, only those who are practicing in MHA are included. Practice area information is not available for occupational therapists in Quebec; they were excluded from the calculation.

Data for social workers and psychologists not available.

This includes only active professionals who are registered/licensed, regardless of number of hours worked.

#### Sources

Health Workforce Database and Scott's Medical Database, Canadian Institute for Health Information.

Statistics Canada. Estimates of population (2011 Census and administrative data), by age group and sex for July 1st, Canada, provinces, territories, health regions (2015 boundaries) and peer groups. Accessed May 3, 2019.

#### Proportion of primary care physicians who . . .

Primary care physicians who	Proportion
Often see patients with substance use-related issues	30%
Often see patients with severe mental health problems	51%
Feel well prepared to care for patients with substance use-related issues	15%
Feel well prepared to care for patients with severe mental health problems	23%

#### Source

Canadian Institute for Health Information. Commonwealth Fund International Health Policy Survey of Primary Care Physicians. 2015.

# Resource utilization as measured by total length of stay (hours), by age (2017–2018)

Age group	Total length of stay (hours)	
0–9	11,060	
10–19	346,395	
20–29	663,465	
30–39	539,315	
40–49	396,688	
50–59	360,157	
60–69	192,954	
70–79	79,805	
80–89	30,973	
90–99	5,869	
100+	261	

#### Note

Data only available for Ontario, Alberta and Yukon.

#### Source

National Ambulatory Care Reporting System, Canadian Institute for Health Information.

#### Total length of stay (days) by diagnosis (2017–2018)

Diagnosis	General hospitals*	Psychiatric hospitals
Schizophrenic and psychotic disorders	903,809	1,089,605
Mood disorders	786,817	237,804
Other mental health disorders	313,308	276,721
Substance-related disorders	295,508	166,974
Personality disorders	101,055	55,293
Anxiety disorders	75,323	14,415

#### Notes

\* General hospitals include both hospitals with and without designated mental health beds.

Dementia was not included when counting mental health patients.

#### Source

Hospital Mental Health Database, Canadian Institute for Health Information.

#### Number of designated mental health beds and estimated

daily beds occupied by mental health patients (2017-2018)

Method of bed count	Number of beds
Designated mental health bed*	7,242
Mental health-related bed occupancy <sup>+</sup>	8,302

#### Notes

\* Designated mental health beds in both psychiatric and general hospitals are counted.

† Occupancy is measured using a census approach to measure available beds treating mental health patients, including beds outside mental health units. Patients with dementia or Alzheimer's are excluded.

Quebec and Nunavut are excluded from the analysis because data is not available in the Canadian MIS Database.

#### Sources

Canadian MIS Database and Hospital Mental Health Database, Canadian Institute for Health Information.

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