





Hospital Mental Health Services in Canada, 2009–2010



## **Our Vision**

Better data. Better decisions. Healthier Canadians.

## **Our Mandate**

To lead the development and maintenance of comprehensive and integrated health information that enables sound policy and effective health system management that improve health and health care.

## **Our Values**

Respect, Integrity, Collaboration, Excellence, Innovation

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## **Executive Summary**

Hospital Mental Health Services in Canada, 2009–2010 is intended to provide key indicators of hospital services use—including separation volumes and rates, lengths of stay and readmission rates—for individuals with mental illness. These indicators are presented by age, sex, diagnosis and geographic region of Canada. They will be relevant to individuals involved in setting policy, delivering and managing health care, and conducting research; those living with mental illness; and the general public.

The report is based primarily on data from the Hospital Mental Health Database (HMHDB) at the Canadian Institute for Health Information (CIHI). The HMHDB is the only comprehensive pan-Canadian database on hospital mental health services. For some of the comparisons provided in the report, CIHI's Hospital Morbidity Database (HMDB) and Ontario Mental Health Reporting System (OMHRS) were also used. In general, the indicators presented in this report are based on inpatient stays for a primary diagnosis of mental illness; that is, the medical reason for the majority of the hospital stay was a mental illness. Please note that for Ontario, data presented for general hospitals includes separations from designated adult inpatient mental health beds (a psychiatric unit of a general hospital). The statistics published in this report are for separations (discharges or deaths) and not unique individuals; an individual may have had more than one separation in a specific fiscal year, and each would be included in these statistics. Finally, the lengths of stay reported here include the entire hospital stay, including days classified as both acute care and alternate level of care. As a result, the lengths of stay may reflect time waiting to be discharged from the hospital, which can be affected by factors other than the immediate need for medical care.

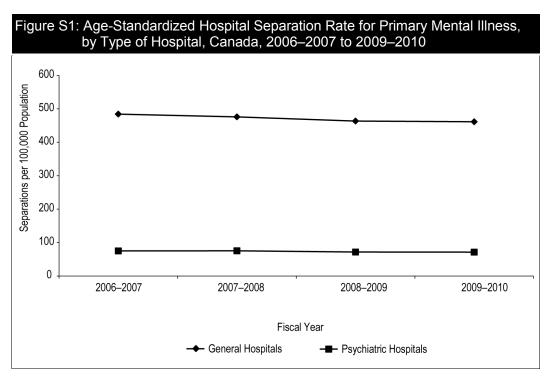
The report shows that overall age-standardized separation rates have remained relatively stable over the last four years (Figure S1), ranging from 484 per 100,000 for general hospitals in 2006–2007 to 461 in 2009–2010. Over the longer term, these rates have shown a decline from the 532 separations per 100,000 population that were reported in 2000–2001 (see *Hospital Mental Health Services in Canada, 2000–2001*). Median lengths of mental health stays have also remained relatively stable (Figure S2).

The majority of individuals with mental illness who required hospitalization were treated in general hospitals. There were more than 189,000 mental illness–related separations from all hospitals in Canada in 2009–2010; of these, 87% were from general hospitals. Although psychiatric hospitals accounted for a minority of separations (13%), they accounted for almost 40% of the total days stayed in both types of facilities (tables 1a and 1b).

As in previous years, separation rates and average lengths of stay varied by diagnosis category for both general and psychiatric facilities. In 2009–2010, *mood disorders* was the most common primary separation diagnosis category in general hospitals, followed by *schizophrenia* and *psychotic disorders* and *substance-related disorders*. In psychiatric hospitals, *schizophrenia* and *psychotic disorders* was the most common primary separation diagnosis category, followed by *mood disorders* and *substance-related disorders*. Hospital stays for *schizophrenia* and *psychotic disorders* made up the largest proportion of days stayed in psychiatric facilities, whereas in general hospitals, *organic disorders* made up almost 30% of hospital days, followed by *schizophrenia* and *psychotic disorders* at 26.2% and *mood disorders* at 25.7% of hospital days (Figure 1b).

Hospitalizations involving mental illness are a prominent part of the overall number of hospitalizations in Canada, especially when secondary diagnoses of mental illness are considered. Hospitalizations that involved a mental health diagnosis (primary, secondary or both) made up 14.7% of all hospitalizations in Canada.

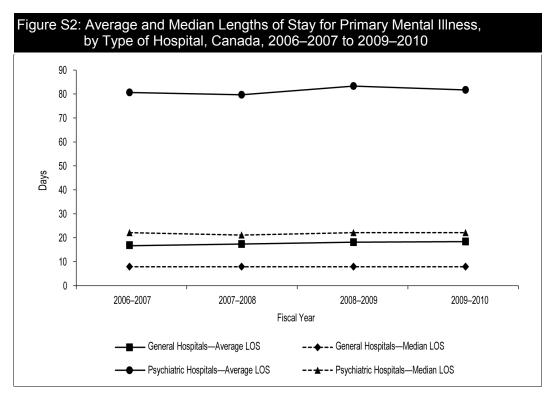
Some new information and enhancements have been included in this edition of *Hospital Mental Health Services in Canada*. Socio-economic information based on neighbourhood income quintile is featured in tables 2, 3a and 3b. Diagnosis-specific readmission rates for general hospitals have been incorporated in Table 1a. As well, some provincial comparisons are now provided based on the residence of the individual who was discharged from hospital rather than on the geographic location of the facility at which the individual received treatment (see figures 6a and 6b).



Age-standardized rates are based on the number of separations per 100,000 population. Population counts are based on Statistics Canada's population estimates for 2006 to 2009. (The standard population is based on Statistics Canada's population estimates for 1991.)

Data from four psychiatric hospitals that report to the Ontario Mental Health Reporting System was excluded due to a data quality issue.

#### Source



LOS: length of stay.

Data from four psychiatric hospitals that report to the Ontario Mental Health Reporting System was excluded due to a data quality issue.

Differences between the average and median LOS for psychiatric hospitals reflect the influence of a number of cases with very long hospital stays.

#### Source

## Mental Health Services Indicators, 2009–2010

Hospital Mental Health Services in Canada, 2009–2010 contains statistics relating to separations that occurred in fiscal year 2009–2010 for inpatient stays with at least one diagnosis of mental illness as the reason for the majority of the hospital stay. Hospitalization is one of many services used by individuals living with mental illness. Other sectors of the health care system that are relevant for those with mental illness include community-based care and primary care, as well as residential care and addiction treatment services. All of these types of care are important in maintaining and promoting mental health. This report captures only information related to hospitalizations for mental illness.

Hospitalization remains an important component of the continuum of mental health services. It is particularly important to those individuals for whom the conditions of a mental illness become severe, as well as those who have nowhere else to turn for care. Often, hospitalization can aid in stabilizing an individual's condition, attending to his or her personal safety, resuming pharmacological treatments and reconnecting the individual with social supports and services outside the hospital.

Data in this report is intended to offer a pan-Canadian perspective on use of hospital services by individuals diagnosed with mental illness and on the scope of these services for different age groups, diagnosis groups and hospital types. Much of this data was aggregated across regions and provinces; thus it necessarily omits details and inherent variations due to differences in policies, service delivery models, demographics and other characteristics that exist across jurisdictions.

A main challenge of presenting an overview of provincial/territorial/regional data is to provide high-level insight into the characteristics of mental health services in a particular geographic region without inviting unwarranted comparative inferences. Differences among jurisdictions may be the result of structural, political, economic and other factors that are not accounted for in this report. Thus any differences between geographic regions should be interpreted carefully. Presenting the data by smaller geographical/political units, however, promotes jurisdiction-specific examination and opportunities to better understand the provision and management of mental health services across the continuum. For this report, statistics are provided only for geographic regions with populations greater than 75,000 individuals.

## Organization of This Report

Like preceding editions of this report, the current version provides pan-Canadian, provincial/ territorial and regional data on some basic indicators of hospital services use for individuals diagnosed with mental illness. This report is composed of figures and tables containing 2009–2010 updates to the standard hospital mental health services indicators from the Hospital Mental Health Database (HMHDB). In addition, it draws on data available in the Ontario Mental Health Reporting System (OMHRS) and Hospital Morbidity Database (HMDB) to provide 30-day and 1-year readmission rates specific to mental illnesses and diagnoses.

Section 1 presents a pan-Canadian perspective on hospital separations for mental illness, including number of separations, crude and age-standardized separation rates and lengths of stay, and key descriptors of the population that received hospital services for mental illness. Characteristics of separations by hospital type (general or psychiatric) are also provided.

Section 2 provides a provincial/territorial breakdown of the hospitalization data. Also included in this section of the report are 2009–2010 regional-level indicators for regions with a population greater than 75,000.

For a list of the diagnosis categories used in this report, please see Appendix A. For a glossary of key terms used in this report, refer to Appendix B.

More information, including interactive tables and data on hospital services use for 2006–2007, 2007–2008 and 2008–2009, is available through the Quick Stats application on CIHI's website at <a href="https://www.cihi.ca/mentalhealth">www.cihi.ca/mentalhealth</a>. As well, other mental health indicators on self-injury and repeat hospitalizations can be found in CIHI's *Health Indicators* report, beginning with the 2011 edition.

Additional analytical products and materials on activities related to mental health information are available at <a href="www.cihi.ca/mentalhealth">www.cihi.ca/mentalhealth</a> or by contacting CIHI at <a href="mentalhealth@cihi.ca">mentalhealth@cihi.ca</a>.

## Methodological Notes

#### **Inclusion Criteria**

The report focuses on hospital separations due to discharge or death that occurred between April 1, 2009, and March 31, 2010 (fiscal year 2009–2010) with mental illness as the most responsible diagnosis; this means that mental illness was the diagnosis that accounted for the majority of the hospital stay. Data prior to 2009–2010 is selectively included in the report for comparison purposes.

This report is based on 2009–2010 data from the Hospital Mental Health Database (HMHDB). The HMHDB is unique in providing comprehensive, pan-Canadian information on hospital mental health services. Data from 2009–2010 from the Hospital Morbidity Database (HMDB) and the Ontario Mental Health Reporting System (OMHRS) was also used in parts of the report for comparison purposes. Data from each of these databases for earlier fiscal years was included for some of the statistics reported. It should be noted that the HMHDB is derived from OMHRS, the HMDB, the Discharge Abstract Database (DAD) and the Hospital Mental Health Survey. The latter source supplies data from four psychiatric facilities in Saskatchewan, Manitoba and Prince Edward Island. For some tables and graphs, it was necessary to obtain data from the original databases that are used to construct the HMHDB. In all of these instances, a note under the table or figure indicates which databases were used.

For both psychiatric and general hospitals, no limit was placed on length of stay relating to each separation. The data also included separations with a diagnosis of Alzheimer's in the organic disorders category. These separations were indicated by a separation diagnosis of G30 in the ICD-10-CA classification system or 294.1 in the ICD-9 classification system.

### **Exclusion Criteria**

The exclusions noted here refer to the HMHDB for 2009–2010. This report focuses on those cases of hospitalization for a mental illness that included a separation due to discharge or death in 2009–2010. If an individual was in the hospital during 2009–2010 but was not separated on or before March 31, 2010, that individual's record was not included in the report.

Only two exclusion criteria were applied based on age. First, newborns were excluded from all analyses. Second, some readmission rates were calculated only for individuals age 15 to 65; this is noted under the relevant figures and tables.

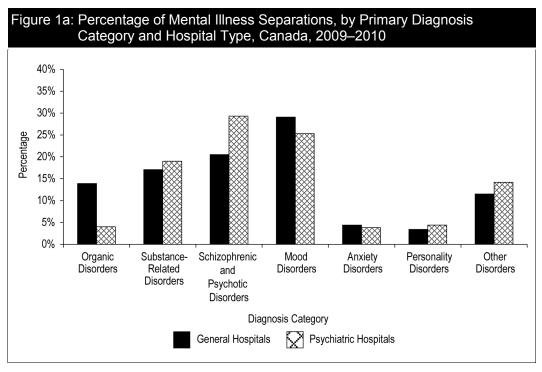
Those for whom gender was identified as *other* in OMHRS data were excluded from analyses; however, this was such a small number of individuals that it had little to no impact on the results. Four facilities that report to OMHRS were excluded due to a data quality issue related to artificial admission dates. Also, general hospital data in the HMHDB excluded those individuals who presented at emergency departments with a mental illness but were not admitted as inpatients.

Not included in the HMHDB or this report are measures relating to individuals treated for mental illness as outpatients, in community-based facilities, in residential care facilities or group homes, in primary care, in day and night centres, or by private practitioners. The report also does not include individuals treated either in institutions for those with intellectual disabilities or in alcohol/drug treatment agencies. For further information regarding the HMHDB for 2009–2010, please refer to *Hospital Mental Health Database*, 2009–2010: *User Documentation*, which is available on CIHI's website.

## Comparability

The HMHDB and the *Hospital Mental Health Services in Canada* reports offer a unique opportunity to engage in pan-Canadian and historical comparisons of these health services; however, care should be exercised when doing so. There have been regular and ongoing changes in the HMHDB's frame (for example, the re-inclusion of Quebec psychiatric facilities), as well as changes to the clinical coding standard (the implementation of ICD-10-CA) in recent years. The frame refers to those facilities for which data is included in the HMHDB. Frame changes result from events such as hospital closures, restructuring of the way mental health services are delivered, hospital mergers and exclusions due to difficulties in timely and accurate reporting, among others. Care should also be exercised when attempting to make specific comparisons across jurisdictions. Interjurisdictional hospital and level-of-care definitions, as well as systemic and demographic differences, among other factors, can affect such comparisons.

## Section 1—Pan-Canadian Information



#### **Notes**

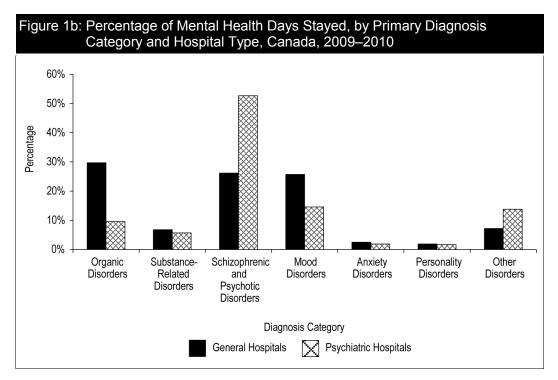
Data from four psychiatric hospitals that report to the Ontario Mental Health Reporting System was excluded due to a data quality issue.

The category other disorders includes disorders of infancy, childhood and adolescence and developmental disorders, as well as those valid mental health disorders that were not included in the previous categories. Separations for which a diagnosis is deemed to be unknown are not presented in the figure and accounted for 0.2% of the total from both general and psychiatric hospitals.

Unknown disorders result when there is insufficient diagnosis information to allow for assignment into existing mental health categories.

Percentages are calculated separately for general and psychiatric facilities such that the sum of the percentages adds to 100% for each type of facility.

#### Source



Data from four psychiatric hospitals that report to the Ontario Mental Health Reporting System was excluded due to a data quality issue.

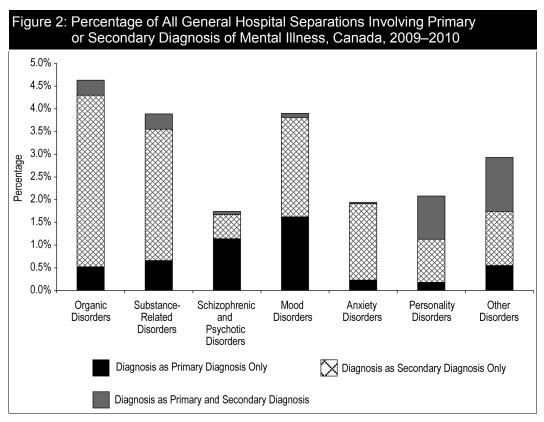
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Unknown disorders result when there is insufficient diagnosis information to allow for assignment into existing mental health categories.

Percentages represent the proportion of all days stayed in a general or psychiatric hospital attributed to a primary diagnosis of mental illness.

Percentages are calculated separately for general and psychiatric facilities such that the sum of the percentages adds to 100% for each type of facility.

#### Source



For those with a secondary diagnosis of mental illness, the primary illness could be non–mental health related. The category *other disorders* includes disorders of infancy, childhood and adolescence and developmental disorders, as well as those valid mental health disorders that were not included in the previous categories.

#### Sources

Hospital Mental Health Database and Hospital Morbidity Database, 2009–2010, Canadian Institute for Health Information.

Table 1a: Separations, Lengths of Stay and Readmission Rates, by Primary Diagnosis Category, General Hospitals, Canada, 2009–2010

	Separations	Separations Lengths of Stay			Readmiss	sion Rates*	
Diagnosis Category	Number (Percentage)	Median (Days)	Average (Days)	0.5% Trimmed Mean (Days)	Total (Days)	30 Days per 100 People	1 Year per 100 People
Organic Disorders	22,928 (13.9%)	21	39.1	36.2	895,677	6.4	19.6
Substance-Related Disorders	28,134 (17.1%)	3	7.3	6.4	205,492	8.4	28.3
Schizophrenic and Psychotic Disorders	33,754 (20.5%)	13	23.4	21.7	790,151	12.4	41.3
Mood Disorders	47,964 (29.1%)	9	16.2	15.2	776,559	10.1	30.9
Anxiety Disorders	7,267 (4.4%)	5	10.5	9.7	76,066	9.9	28.3
Personality Disorders	5,602 (3.4%)	4	10.4	9.3	58,471	13.6	40.6
Other Disorders	18,959 (11.5%)	4	11.4	10.0	216,000	7.8	24.2
Unknown Disorders	224 (0.1%)	5	9.5	9.0	2,138	NA	NA
Total	164,832 (100%)	8	18.3	16.7	3,020,554	9.2	29.9

The category other disorders includes disorders of infancy, childhood and adolescence and developmental disorders, as well as those valid mental health disorders that were not included in the previous categories.

Unknown disorders result when there is insufficient diagnosis information to allow for assignment into existing mental health categories. NA: not applicable.

#### Sources

Hospital Mental Health Database, 2009–2010, and Hospital Morbidity Database and Ontario Mental Health Reporting System, 2008–2009 and 2009–2010, Canadian Institute for Health Information.

<sup>\*</sup> Readmission rates (30-day and 1-year) were based on acute care hospital data from the Hospital Morbidity Database and the Ontario Mental Health Reporting System for 2008–2009 and 2009–2010. See the definition of *readmission rates* in Appendix B—Glossary. Readmission rates include only individuals who were age 15 to 65 at admission for the first hospitalization, who were diagnosed with a mental disorder in the first hospitalization during 2008–2009 and who were readmitted with a mental disorder.

Table 1b: Separations and Lengths of Stay, by Primary Diagnosis Category, Psychiatric Hospitals, Canada, 2009–2010

	Separations	Lengths of Stay			
Diagnosis Category	Number (Percentage)	Median (Days)	Average (Days)	0.5% Trimmed Mean (Days)	Total (Days)
Organic Disorders	962 (4.0%)	63	196.3	171.5	188,845
Substance-Related Disorders	4,616 (19.0%)	20	24.0	20.7	110,950
Schizophrenic and Psychotic Disorders	7,136 (29.3%)	35	144.6	107.9	1,031,494
Mood Disorders	6,161 (25.3%)	23	46.3	38.7	285,068
Anxiety Disorders	918 (3.8%)	28	41.0	36.7	37,621
Personality Disorders	1,060 (4.4%)	5	30.6	17.4	32,393
Other Disorders	2,435 (10.0%)	11	80.1	40.6	194,931
Unknown Disorders	33 (0.1%)	4	56.4	23.3	1,861
Total	24,347 (100%)	22	80.5	57.4	1,959,072

Data from four psychiatric hospitals that report to the Ontario Mental Health Reporting System was excluded due to a data quality issue.

The category *other disorders* includes disorders of infancy, childhood and adolescence and developmental disorders, as well as those valid mental health disorders that were not included in the previous categories.

Unknown disorders result when there is insufficient diagnosis information to allow for assignment into existing mental health categories.

#### Source

Table 2: Demographic and Treatment Characteristics of Inpatient Populations, by Diagnosis of Any Mental Illness and by Hospital Type, Canada, 2009–2010

		General Hospitals		Psychiatric Hospitals*
		Non-Mental Illness <sup>†</sup>	Mental Illness <sup>†</sup>	Mental Illness <sup>†</sup>
Male (Percentage)		41.5	49.5	56.8
Mean Age (Years)		52.9	46.3	42.0
Age (Percentage)	0–14	7.3	3.1	2.3
	15–24	6.9	15.5	16.1
	25–44	22.9	31.7	39.0
	45–64	23.7	28.4	30.8
	65+	39.1	21.3	11.9
Rural/Urban Residence	Rural	24.0	21.0	NA
	Urban	75.1	75.5	NA
	Unknown	0.9	3.5	NA
Income Quintile (Percentage)	1 (Low)	23.0	28.8	NA
	2	20.7	21.2	NA
	3	19.8	17.5	NA
	4	18.6	15.2	NA
	5 (High)	16.6	13.4	NA
	Unknown	1.3	4.0	NA
With at Least One Co-occurring Psychiatric Condition (Percentage)		9.3	48.7	56.5
Admitted via the Emergency Department (Percentage)		51.8	76.9	NA
Death in Hospital (Percentage)		4.2	1.1	0.7
Separations (Percentage)		94.1	5.9	NA
Total Length of Stay (Percentage)		86.6	13.4	NA
Average Length of Stay (Days)		7.4	18.3	80.5
Median Length of Stay (Days)		3	8	22
Distribution of Lengths	1 Day	24.0	14.1	9.1
of Stay (Percentage)	2–7 Days	53.7	34.4	18.6
	8–30 Days	4.0	15.5	35.3
	31–365 Days	18.4	35.8	33.8
	366+ Days	0.0	0.1	3.2

There were 972 observations excluded from the analysis for psychiatric hospitals because they did not have a primary mental health diagnosis.

When comparing mental illness separations and non-mental illness separations from general hospitals, please be aware that some facilities may not have provided acute care information; thus the denominator may be missing some separations.

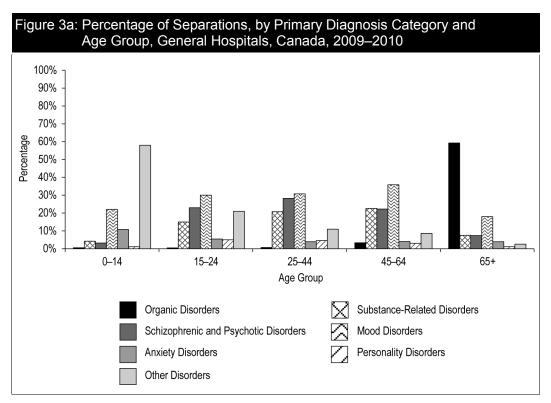
NA: not applicable.

#### Sources

Hospital Mental Health Database and Discharge Abstract Database, 2009–2010, Canadian Institute for Health Information.

<sup>\*</sup> Data from four psychiatric hospitals that report to the Ontario Mental Health Reporting System was excluded due to a data quality issue.

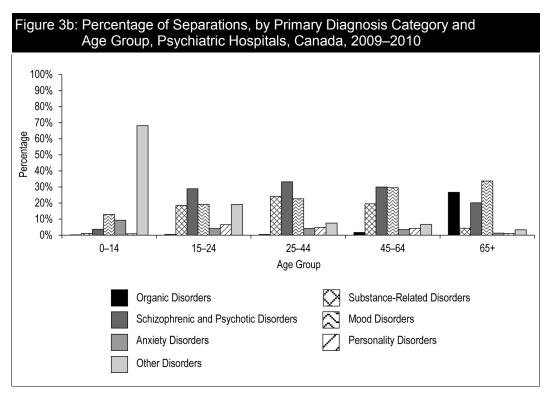
<sup>†</sup> Diagnosis was determined based on the diagnosis responsible for the majority of the hospital stay, that is, the most responsible diagnosis.



#### Note

The category *other disorders* includes disorders of infancy, childhood and adolescence and developmental disorders, as well as those valid mental health disorders that were not included in the previous categories.

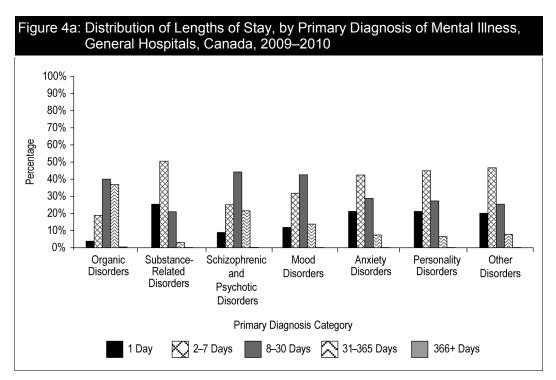
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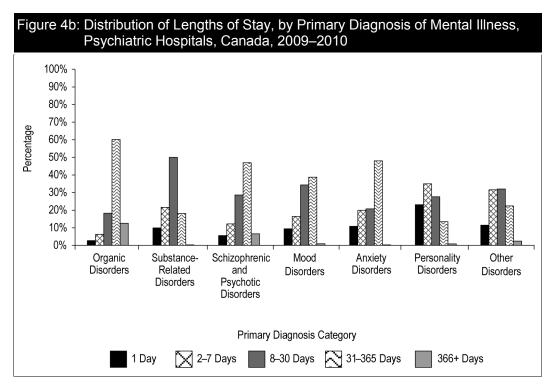
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The category *other disorders* includes disorders of infancy, childhood and adolescence and developmental disorders, as well as those valid mental health disorders that were not included in the previous categories.

#### Source

Table 3a: Comparison of Mental Illness Separations With and Without Co-occurring Substance-Related Disorders, General Hospitals, Canada, 2009–2010

		Co-occurring Sub Disor	
		Yes (15.7%)	No (84.3%)
Mean Age (Years)		38.1	48.6
Age Group (Percentage)	0–14	1.3	4.0
	15–24	22.6	14.6
	25–44	43.0	27.9
	45–64	26.0	26.6
	65+	7.0	26.9
Gender (Percentage)	Female	37.7	57.2
	Male	62.3	42.8
Income Quintile (Percentage)	1 (Low)	31.5	27.7
	2	20.3	21.5
	3	16.8	17.9
	4	14.1	15.7
	5 (High)	11.7	13.9
	Unknown	5.7	3.3
Length of Stay (Percentage)	Average (Days)	16.0	21.4
	Median (Days)	8.0	10.0
Length of Stay Categories	1 Day	13.3	11.6
(Percentage)	2–7 Days	36.4	30.1
	8–30 Days	13.1	19.0
	31–365 Days	37.1	39.1
	366+ Days	0.1	0.2
Primary Mental Illness	Organic Disorders	5.5	18.9
Category (Percentage)	Schizophrenic and Psychotic Disorders	29.7	23.8
	Mood Disorders	38.6	34.4
	Anxiety Disorders	4.6	5.4
	Personality Disorders	6.7	3.6
	Other Disorders	14.8	13.7
	Unknown Disorders	0.1	0.2

The category other disorders includes disorders of infancy, childhood and adolescence and developmental disorders, as well as those valid mental health disorders that were not included in the previous categories.

Unknown disorders result when there is insufficient diagnosis information to allow for assignment into existing mental health categories. The term "co-occurring substance-related disorders" refers to the existence of drug- or alcohol-related disorders as secondary diagnoses.

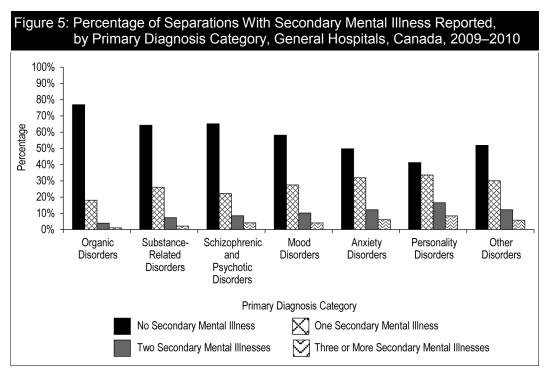
Table 3b: Comparison of Mental Illness Separations With and Without Co-occurring Substance-Related Disorders, Psychiatric Hospitals,\* Canada, 2009–2010

		Co-occurring Substar	nce-Related Disorders
		Yes (23.3%)	No (76.7%)
Mean Age (Years)		37.6	44.3
Age Group (Percentage)	0–14	0.7	3.4
	15–24	20.4	14.9
	25–44	47.6	33.1
	45–64	26.4	31.8
	65+	4.9	16.8
Gender (Percentage)	Female	32.3	49.5
	Male	67.7	50.5
Income Quintile (Percentage)	1 (Low)	34.6	29.9
	2	22.6	21.5
	3	15.3	16.3
	4	12.1	14.3
	5 (High)	9.5	13.1
	Unknown	6.0	4.9
Length of Stay (Percentage)	Average (Days)	69.2	101.1
	Median (Days)	25.0	25.0
Length of Stay Categories	1 Day	8.1	9.2
(Percentage)	2–7 Days	17.4	18.1
	8-30 Days	39.3	39.3
	31–365 Days	32.1	29.4
	366+ Days	3.0	4.1
Primary Mental Illness	Organic Disorders	2.2	5.7
Category (Percentage)	Schizophrenic and Psychotic Disorders	41.2	34.6
	Mood Disorders	29.2	31.8
	Anxiety Disorders	5.5	4.4
	Personality Disorders	8.2	4.5
	Other Disorders	10.8	12.8

The category other disorders includes disorders of infancy, childhood and adolescence and developmental disorders, as well as those valid mental health disorders that were not included in the previous categories.

The term "co-occurring substance-related disorders" refers to the existence of drug- or alcohol-related disorders as secondary diagnoses. **Source** 

<sup>\*</sup> Data from four psychiatric hospitals that report to the Ontario Mental Health Reporting System was excluded due to a data quality issue.



#### Note

The category *other disorders* includes disorders of infancy, childhood and adolescence and developmental disorders, as well as those valid mental health disorders that were not included in the previous categories.

#### Source

# Section 2—Provincial/Territorial and Regional Information

Table 4: Separation Frequencies and Rates for Primary Mental Illness Diagnosis, by Hospital Type and Province/Territory,\* 2009–2010

		General Hospitals			Psychiatric Hospitals <sup>↑</sup>			
Province/Territory	Number of Separations	Crude Separation Rate (per 100,000)	Age- Standardized Separation Rate <sup>‡</sup> (per 100,000)	Number of Separations	Crude Separation Rate (per 100,000)	Age- Standardized Separation Rate <sup>‡</sup> (per 100,000)		
Newfoundland and Labrador	2,032	399.3	374.9	1,113	218.7	219.7		
Prince Edward Island	1,261	894.4	870.6	218	154.6	156.3		
Nova Scotia	3,620	385.9	361.3	530	56.5	57.9		
New Brunswick	5,049	673.7	628.3	293	39.1	44.7		
Quebec	37,181	474.9	433.7	7,166	91.5	91.4		
Ontario	56,231	430.3	409.1	11,233	86.0	84.0		
Manitoba	6,896	564.3	542.8	345	28.2	28.0		
Saskatchewan	6,241	605.8	592.9	178	17.3	18.5		
Alberta	17,752	481.4	466.4	2,927	79.4	77.7		
British Columbia	27,745	622.8	594.3	344	7.7	7.5		
Yukon	169	502.2	517.5	NA	NA	NA		
Northwest Territories	506	1,164.9	1,201.0	NA	NA	NA		
Nunavut	149	463.0	463.1	NA	NA	NA		
Canada	164,832	488.5	461.5	24,347	72.2	71.2		

#### Notes

NA: not available.

#### Source

Data is based on the jurisdiction of the facility.

<sup>†</sup> Data from four psychiatric hospitals that report to the Ontario Mental Health Reporting System was excluded due to a data quality issue. Differences between jurisdictions in the frame and in coverage may contribute to the observed variations in rates of psychiatric hospital services use.

<sup>‡</sup> Age-standardized rates are based on the number of separations per 100,000 population. Population counts are based on Statistics Canada's population estimates for 2009. (The standard population is based on Statistics Canada's population estimates for 1991.)

Table 5: Lengths of Stay for Primary Mental Illness Diagnosis, by Hospital Type and Province/ Territory,\* 2009–2010

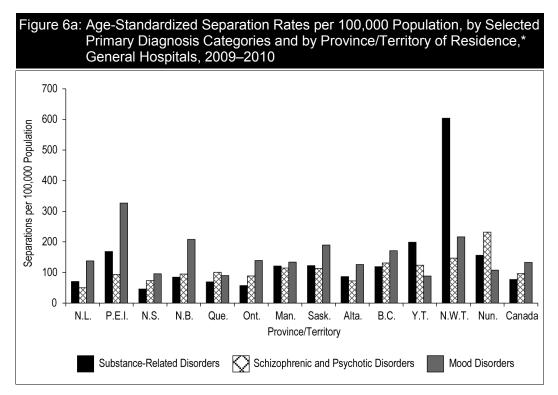
	General Hospitals			Psychiatric Hospitals <sup>†</sup>			
	Len	Length of Stay (Days)			Length of Stay (Days)		
Province/Territory	Total	Average	Median	Total	Average	Median	
Newfoundland and Labrador	35,847	17.6	8	66,930	60.1	10	
Prince Edward Island	14,312	11.3	6	5,512	25.5	18	
Nova Scotia	86,503	23.9	7	58,558	110.5	27	
New Brunswick	131,341	26.0	9	60,518	206.5	29	
Quebec	889,760	23.9	11	358,459	50.0	16	
Ontario	813,111	14.5	7	718,043	63.9	25	
Manitoba	162,017	23.5	10	152,912	443.2	40	
Saskatchewan	82,142	13.2	7	90,157	506.5	23	
Alberta	360,924	20.3	8	258,773	88.4	25	
British Columbia	429,808	15.5	6	189,210	550.0	132	
Yukon	1,289	7.6	3	NA	NA	NA	
Northwest Territories	12,926	25.5	2	NA	NA	NA	
Nunavut	574	3.9	2	NA	NA	NA	
Canada	3,020,554	18.3	8	1,959,072	80.5	22	

NA: not available.

#### Source

<sup>\*</sup> Data is based on the jurisdiction of the facility.

<sup>†</sup> Data from four psychiatric hospitals that report to the Ontario Mental Health Reporting System was excluded due to a data quality issue. Differences between jurisdictions in the frame and in coverage may contribute to the observed variations in rates of psychiatric hospital services use.



\* Data is based on the resident's postal code.

Age-standardized rates are based on the number of separations per 100,000 population. Population counts are based on Statistics Canada's population estimates for 2009. (The standard population is based on Statistics Canada's population estimates for 1991.)

#### Source

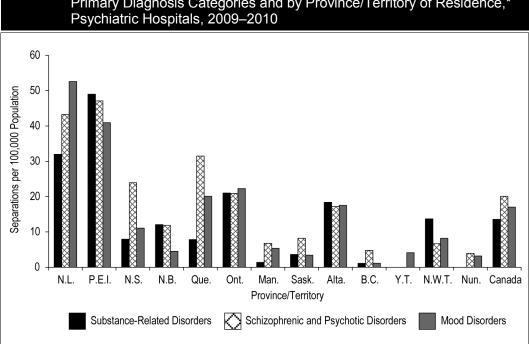
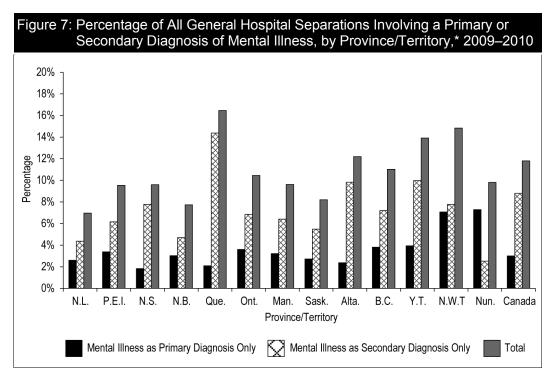


Figure 6b: Age-Standardized Separation Rates per 100,000 Population, by Selected Primary Diagnosis Categories and by Province/Territory of Residence,\*
Psychiatric Hospitals, 2009–2010

\* Data is based on the client's postal code; although the Northwest Territories does not have a psychiatric facility, some individuals who live in the territory were treated at psychiatric facilities in other jurisdictions. Data from four psychiatric hospitals that report to the Ontario Mental Health Reporting System was excluded due to a data quality issue. Differences between jurisdictions in the frame and in coverage may contribute to the observed variations in psychiatric hospital services.

Age-standardized rates are based on the number of separations per 100,000 population. Population counts are based on Statistics Canada's population estimates for 2009. (The standard population is based on Statistics Canada's population estimates for 1991.)

#### Source



Data is based on the jurisdiction of the facility.

The *total* category includes those with primary mental illness only and secondary mental illness only and is the sum of the first two categories. Those with both primary and secondary mental illnesses are not included in the figure.

#### Sources

Ontario Mental Health Reporting System and Hospital Morbidity Database, 2009–2010, Canadian Institute for Health Information.

Table 6a: Primary Mental Illness Diagnosis, by Province/Territory,\* General Hospitals, 2009–2010

	Diagnosis Category							
Province/Territory	Organic Disorders Percentage	Substance- Related Disorders Percentage	Schizophrenic and Psychotic Disorders Percentage	Mood Disorders Percentage	Anxiety Disorders Percentage	Personality Disorders Percentage	Other Disorders Percentage	
Newfoundland and Labrador	11.6	19.8	11.9	35.9	6.1	2.4	12.4	
Prince Edward Island	6.8	20.8	10.7	39.1	10.2	1.7	10.8	
Nova Scotia	14.7	12.9	19.4	26.9	6.2	2.7	17.2	
New Brunswick	17.3	13.0	14.0	32.9	5.0	2.1	15.6	
Quebec	19.7	14.9	21.1	20.6	4.3	6.9	12.5	
Ontario	12.0	14.7	22.1	34.9	3.7	2.4	10.0	
Manitoba	15.3	21.9	19.9	24.5	4.6	3.3	10.4	
Saskatchewan	9.9	20.0	18.3	31.9	6.2	1.2	12.5	
Alberta	13.3	19.6	15.9	27.2	5.1	3.0	15.9	
British Columbia	11.2	21.4	22.5	29.4	4.3	2.2	9.1	
Yukon	5.9	38.5	19.5	19.5	6.5	4.1	5.9	
Northwest Territories	3.6	52.4	13.4	17.0	5.9	1.4	6.3	
Nunavut	1.3	21.5	31.5	17.4	14.8	6.7	6.7	
Canada	13.9	17.1	20.5	29.1	4.4	3.4	11.5	

The category other disorders includes disorders of infancy, childhood and adolescence and developmental disorders, as well as those valid mental health disorders that were not included in the previous categories.

#### Source

Data is based on the jurisdiction of the facility.

Table 6b: Primary Mental Illness Diagnosis, by Province/Territory,\* Psychiatric Hospitals, 2009–2010

	Diagnosis Category								
Province/Territory	Organic Disorders Percentage	Substance- Related Disorders Percentage	Schizophrenic and Psychotic Disorders Percentage	Mood Disorders Percentage	Anxiety Disorders Percentage	Personality Disorders Percentage	Other Disorders Percentage		
Newfoundland and Labrador	5.7	12.3	19.4	24.0	6.4	4.6	11.5		
Prince Edward Island	3.7	21.1	29.4	26.6 4.6		1.8	7.8		
Nova Scotia	ova Scotia 4.7		42.6	22.6	2.5	2.5	8.7		
New Brunswick	unswick 3.4 25.9		27.3	10.2	0.7	13.0	17.1		
Quebec	2.1 7.		33.9	23.7	2.6	9.5	14.3		
Ontario	3.8		26.7	28.3	4.9	2.1	6.8		
Manitoba	4.9	2.9	24.9	18.3	2.3	1.4	7.0		
Saskatchewan	3.4	15.7	45.5	18.5	1.7	3.4	10.7		
Alberta	6.9	24.9	24.6	23.2	2.6	0.7	12.4		
British Columbia	15.4	0.6	69.8	12.2	0.3	†	†		
Canada	4.0	19.0	29.3	25.3	3.8	4.4	10.0		

Data from four psychiatric hospitals that report to the Ontario Mental Health Reporting System was excluded due to a data quality issue. Differences between jurisdictions in the frame and in coverage may contribute to the observed variations in psychiatric hospital services. The category *other disorders* includes disorders of infancy, childhood and adolescence and developmental disorders, as well as those valid mental health disorders that were not included in the previous categories.

The table does not include those with unknown disorders for Ontario; thus the percentages shown will not sum to 100%.

#### Source

Data is based on the jurisdiction of the facility.

<sup>†</sup> Cells with fewer than five separations were suppressed for reasons of confidentiality.

Table 7: Regional Hospital Mental Health Service Indicators for Primary Mental Illness Diagnosis, General Hospitals, 2009–2010

Region Code	Health Region*	Population in 2009	Number of Separations	Length of Stay (Days)	Average Length of Stay (Days)	Separation Rate <sup>†</sup> (per 100,000 Population)	Age- Standardized Separation Rate <sup>†</sup> (per 100,000 Population)	30-Day Readmission Rate <sup>‡</sup> (per 100 People)	1-Year Readmission Rate <sup>‡</sup> (per 100 People)
	Newfoundland and Labrador								
1011	Eastern Regional Integrated Health Authority	300,920	684	11,651	17.0	227.3	202.9	4.55	15.91
1012	Central Regional Integrated Health Authority	93,538	477	10,498	22.0	510.0	502.8	8.57	14.29
1013	Western Regional Integrated Health Authority	77,630	600	11,222	18.7	772.9	770.0	10.17	33.90
	Total	508,925	2,021	35,763	17.7	397.1	374.4	8.28	23.57
	Prince Edward Island								
1102	Queens County Census Division	77,999	653	6,873	10.5	837.2	811.0	3.77	26.42
	Total	140,985	1,212	13,817	11.4	859.7	832.3	4.71	32.94
	Nova Scotia								
1201	Zone 1	117,819	572	13,393	23.4	485.5	447.4	5.88	39.22
1202	Zone 2	82,263	217	5,765	26.6	263.8	240.3	3.57	25.00
1203	Zone 3	106,511	300	9,611	32.0	281.7	270.8	5.71	22.86
1204	Zone 4	90,711	543	9,098	16.8	598.6	591.7	8.00	34.00
1205	Zone 5	123,873	744	16,859	22.7	600.6	583.1	4.81	41.35
1206	Zone 6	417,006	1,115	29,747	26.7	267.4	252.4	3.97	21.43
	Total	938,183	3,491	84,473	24.2	372.1	347.3	5.08	30.46
	New Brunswick								
1301	Region 1	201,771	1,139	28,415	24.9	564.5	531.7	2.44	21.14
1302	Region 2	174,853	704	49,262	70.0	402.6	340.2	9.84	32.79
1303	Region 3	173,062	892	19,518	21.9	515.4	485.5	9.41	35.29
1306	Region 6	78,205	690	12,812	18.6	882.3	867.2	6.00	25.00
	Total	749,468	4,912	128,935	26.2	655.4	609.3	6.68	28.54
	Quebec								
2401	Bas-Saint-Laurent	200,756	1,393	24,244	17.4	693.9	637.6	7.91	26.55
2402	Saguenay-Lac-Saint-Jean	273,264	2,053	37,787	18.4	751.3	730.1	11.45	41.85
2403	Capitale-Nationale	687,810	2,822	85,000	30.1	410.3	342.6	9.29	31.97
2404	Mauricie et Centre-du-Québec	493,084	3,306	54,729	16.6	670.5	640.6	9.82	43.58
2405	Estrie	307,389	1,841	45,918	24.9	598.9	548.5	12.92	44.50
2406	Montréal	1,906,811	6,757	212,531	31.5	354.4	286.9	8.21	32.19
2407	Outaouais	358,872	1,361	26,458	19.4	379.2	360.8	4.27	22.56
2408	Abitibi-Témiscamingue	145,886	908	19,880	21.9	622.4	611.9	8.51	35.11
2409	Côte-Nord	95,704	650	18,096	27.8	679.2	655.2	5.71	28.57
2411	Gaspésie-Îles-de-la-Madeleine	94,067	654	9,214	14.1	695.2	660.0	20.31	45.31
2412	Chaudière-Appalaches	403,011	2,627	45,395	17.3	651.8	625.2	9.73	39.23

Table 7: Regional Hospital Mental Health Service Indicators for Primary Mental Illness Diagnosis, General Hospitals, 2009–2010 (cont'd)

Region		Population	Number of	Length of Stay	Average Length of Stay	Separation Rate <sup>†</sup> (per 100,000	Age- Standardized Separation Rate <sup>†</sup> (per 100,000	30-Day Readmission Rate <sup>‡</sup> (per 100	1-Year Readmission Rate <sup>‡</sup> (per 100
Code	Health Region*	in 2009	Separations	(Days)	(Days)	Population)	Population)	People)	People)
	Quebec (cont'd)								
2413	Laval	391,893	1,685	58,744	34.9	430.0	369.3	10.94	42.19
2414	Lanaudière	457,962	2,244	47,504	21.2	490.0	484.4	5.20	35.69
2415	Laurentides	542,416	2,096	53,506	25.5	386.4	375.4	8.55	36.75
2416	Montérégie	1,428,475	6,451	147,371	22.8	451.6	436.9	10.60	35.72
	Total	7,828,879	37,193	889,104	23.9	475.1	433.6	9.32	35.08
	Ontario								
3501	Erie St. Clair	646,132	2,766	44,716	16.2	428.1	407.5	7.91	30.00
3502	South West	948,684	4,332	59,696	13.8	456.6	429.9	6.57	28.54
3503	Waterloo Wellington	741,263	2,797	32,634	11.7	377.3	366.3	7.48	27.21
3504	Hamilton Niagara Haldimand Brant	1,392,069	5,724	86,485	15.1	411.2	389.1	9.73	34.91
3505	Central West	826,714	2,577	32,185	12.5	311.7	306.3	11.53	39.36
3506	Mississauga Halton	1,126,683	2,743	38,764	14.1	243.5	236.7	8.60	33.48
3507	Toronto Central	1,178,191	4,977	80,292	16.1	422.4	385.1	10.40	38.70
3508	Central	1,696,598	4,805	73,096	15.2	283.2	270.7	9.70	35.44
3509	Central East	1,534,623	5,307	75,830	14.3	345.8	323.9	10.30	33.37
3510	South East	488,420	2,228	32,888	14.8	456.2	438.9	10.68	35.44
3511	Champlain	1,230,670	5,253	84,410	16.1	426.8	402.7	9.67	34.37
3512	North Simcoe Muskoka	451,626	2,349	26,562	11.3	520.1	499.0	6.51	27.91
3513	North East	568,133	5,136	82,767	16.1	904.0	883.9	10.53	36.50
3514	North West	239,376	2,195	26,401	12.0	917.0	944.7	9.34	30.22
	Total	13,069,182	53,189	776,726	14.6	407.0	385.9	9.49	32.98
	Manitoba								
4610	Winnipeg	689,384	3,556	98,052	27.6	515.8	480.9	5.22	26.09
4630	Interlake	82,544	348	5,536	15.9	421.6	399.9	4.35	17.39
4640	Central	107,325	405	11,232	27.8	377.4	350.3	0.00	10.81
	Total	1,221,964	6,705	159,448	23.8	548.7	526.4	5.18	25.09
	Saskatchewan								
4704	Regina Qu'Appelle	253,546	1,343	21,574	16.1	529.7	515.6	10.88	33.16
4706	Saskatoon	307,198	1,197	20,359	17.0	389.7	367.0	4.07	20.35
4709	Prince Albert Parkland	77,461	586	5,427	9.3	756.5	783.9	5.38	27.96
	Total	1,030,129	6,030	79,473	13.2	585.4	571.4	6.95	25.53

Table 7: Regional Hospital Mental Health Service Indicators for Primary Mental Illness Diagnosis, General Hospitals, 2009–2010 (cont'd)

Region Code	Health Region*	Population in 2009	Number of Separations	Length of Stay (Days)	Average Length of Stay (Days)	Separation Rate <sup>†</sup> (per 100,000 Population)	Age- Standardized Separation Rate <sup>†</sup> (per 100,000 Population)	30-Day Readmission Rate <sup>‡</sup> (per 100 People)	1-Year Readmission Rate <sup>‡</sup> (per 100 People)
	Alberta								
4821	Chinook Regional Health Authority	169,989	1,044	19,438	18.6	614.2	589.9	11.03	33.10
4822	Palliser Health Region	111,931	1,065	14,244	13.4	951.5	914.0	5.26	32.89
4823	Calgary Health Region	1,372,755	5,834	149,220	25.6	425.0	418.6	7.54	29.86
4824	David Thompson Regional Health Authority	330,113	1,507	27,576	18.3	456.5	438.9	5.98	29.06
4825	East Central Health	119,198	729	11,254	15.4	611.6	566.4	3.70	20.37
4826	Capital Health	1,156,839	4,828	99,522	20.6	417.3	401.7	5.44	27.04
4827	Aspen Regional Health Authority	190,306	1,146	15,170	13.2	602.2	602.6	16.00	36.00
4828	Peace Country Health	148,576	742	14,940	20.1	499.4	518.0	15.58	42.86
4829	Northern Lights Health Region	87,955	398	3,526	8.9	452.5	500.7	2.94	26.47
	Total	3,687,662	17,293	354,890	20.5	468.9	454.5	7.40	29.37
	British Columbia							,	
5911	East Kootenay	79,996	570	4,057	7.1	712.5	688.0	4.48	17.91
5912	Kootenay-Boundary	79,305	619	8,404	13.6	780.5	823.9	9.33	30.67
5913	Okanagan	350,945	2,474	29,677	12.0	705.0	705.5	10.19	34.72
5914	Thompson/Cariboo	223,039	1,418	14,906	10.5	635.8	648.0	3.27	29.41
5921	Fraser East	279,993	2,098	25,026	11.9	749.3	742.4	10.66	34.52
5922	Fraser North	596,647	2,889	44,987	15.6	484.2	460.2	10.49	34.88
5923	Fraser South	695,983	3,253	53,914	16.6	467.4	456.8	13.38	41.78
5931	Richmond	193,255	701	8,949	12.8	362.7	335.8	11.58	43.16
5932	Vancouver	643,208	3,985	74,158	18.6	619.6	559.2	11.81	42.21
5933	North Shore/Coast Garibaldi	277,974	1,549	20,877	13.5	557.2	528.5	10.00	42.86
5941	South Vancouver Island	367,578	2,019	54,238	26.9	549.3	491.8	13.99	39.92
5942	Central Vancouver Island	261,476	1,550	27,856	18.0	592.8	578.3	8.21	35.90
5943	North Vancouver Island	120,315	556	10,973	19.7	462.1	452.8	4.17	26.39
5951	Northwest	75,007	763	6,892	9.0	1,017.2	1,059.9	16.13	45.16
5952	Northern Interior	142,581	1,246	19,266	15.5	873.9	880.3	8.16	42.86
	Total	4,455,207	26,209	411,748	15.7	588.3	557.6	10.58	35.94
	Canada	33,739,859	159,166	2,950,468	18.5	471.7	444.4	9.01	32.81

#### Notes

- \* Health regions for this table are based on the location of patient residence using patients' residential postal codes and the Postal Code Conversion File for 2009. All health regions are defined based on 2007 borders from Statistics Canada.
- † Age-standardized rates are based on the number of separations per 100,000 population. Population counts are based on Statistics Canada's population estimates for 2009. (The standard population is based on Statistics Canada's population estimates for 1991.)
- ‡ Readmission rates (30-day and 1-year) for *schizophrenic and psychotic disorders* are based on general hospital data from the HMHDB. Readmission rates include only individuals who were age 15 to 65 at admission, who were diagnosed with *schizophrenic and psychotic disorders* in the index episode during 2008–2009 and who were readmitted with any mental health disorders via the emergency department. Rates exclude patients with invalid health card numbers or postal codes.

Only health regions with populations greater than 75,000 are reported in this table.

#### Sources

Hospital Mental Health Database, 2009–2010, and Hospital Morbidity Database, Ontario Mental Health Reporting System and National Ambulatory Care Reporting System, 2008–2009 and 2009–2010, Canadian Institute for Health Information.

# Appendix A—Mental Illness Diagnosis Categories and Subcategories

Diagnosis Category	Subcategory	DSM-IV Code	ICD-9 and ICD-9-CM Code	ICD-10-CA Code
Organic Disorders	Senile and pre-senile psychotic conditions	290.40–290.43	290.0–290.9	F00-F09, G30
	Transient organic psychotic conditions	293	293.0, 293.1, 293.8, 293.9	
	Other organic psychotic conditions	294.0, 294.8, 294.9, 294.10, 294.11	294.0, 294.1, 294.8, 294.9	
Substance-Related Disorders	Alcoholic psychoses	291.1–291.3, 291.5, 291.81, 291.89, 291.9	291.0–291.9	F10–F19, F55
	Drug psychoses	292.0, 292.11, 292.12, 292.81, 292.82–292.84, 292.89, 292.9	292.0–292.9	
	Alcohol dependence	303.00, 303.90	303.0–303.9	
	Drug dependence	304.00, 304.10, 304.20, 304.30, 304.40, 304.50, 304.60, 304.80, 304.90	304.0–304.9	
	Non-dependent abuse of drugs	291.0, 305.00, 305.1, 305.20, 305.30, 305.40, 305.50, 305.60, 305.70, 305.90	305.0–305.9	
Schizophrenic and Psychotic Disorders	Schizophrenia	295.10, 295.20, 295.30, 295.40, 295.60, 295.70, 295.9	295.0–295.9	F20-F29
	Psychotic	293.81, 293.82, 298.8, 298.9	298.8, 298.9	
	Paranoia, delusional disorders, other psychoses	297.1, 297.3	297.1–297.3, 297.0–297.3, 297.8–297.9, 298.0–298.4	

Diagnosis Category	Subcategory	DSM-IV Code	ICD-9 and ICD-9-CM Code	ICD-10-CA Code
Mood Disorders	Bipolar	296.00–296.06, 296.40–296.46, 296.50–296.56, 296.60–296.66, 296.7, 296.80, 296.89, 301.13	,	F30, F31, F34.0
	Depression	296.20–296.26, 296.30–296.36, 300.4, 311		F32, F33, F34.1, F38.1
	Other	293.83, 296.90	296.9	F34.8, F34.9, F38.0, F38.8, F39
Anxiety Disorders	Anxiety	293.84, 300.00–300.02, 300.21–300.23, 300.29, 300.3, 309.81	300.0, 300.2, 300.3, 309.8	F40, F41, F42, F93.0– F93.2
	Acute stress	308.3	308.3	F43.0, F43.1, F43.8, F43.9
Personality Disorders	Personality disorders	301.0, 301.20, 301.22, 301.4, 301.50, 301.6, 301.7, 301.81– 301.83, 301.9	301.0–301.9	F60, F61, F62, F68, F69
Other Disorders	Adjustment disorders	309.0, 309.24, 309.28, 309.3, 309.4, 309.9	309.0–309.4, 309.9	F43.2, F99
	Physiological malfunction arising from mental factors		306.0–306.9	F45, F59,
	Sexual disorders	302.2–302.4, 302.6, 302.70– 302.76, 302.79, 302.81–302.85, 302.89, 302.9, 306.51	302.0–302.9	F52, F64, F65, F66
	Dissociative and factitious disorders	300.12–300.16, 300.19, 300.6	300.1, 300.6	
	Somatoform disorders	300.11, 300.7, 300.81, 300.82, 307.80, 307.89	300.7, 300.8, 307.8	
	Eating disorders	307.1, 307.50, 307.51	307.1, 307.50, 307.51, 307.54	

Diagnosis Category	Subcategory	DSM-IV Code	ICD-9 and ICD-9-CM Code	ICD-10-CA Code
Other Disorders (cont'd)	Disorders of infancy, childhood and adolescence and developmental disorders	299.80, 307.0, 307.20–307.23, 307.3, 307.52, 307.53, 307.59, 307.6, 307.7, 307.9, 309.21, 312.81, 312.82, 312.89, 312.9,	299.0, 299.1, 299.8, 299.9, 307.0, 307.2, 307.3, 307.6, 307.7, 307.9, 312.0, 312.1, 312.2, 312.4, 312.8, 312.9, 313.0–313.3, 313.8, 313.9, 314.0–314.2, 314.8, 314.9, 315.0–315.2, 315.3, 315.4, 315.5, 315.9, 317–319	
	Sleep disorders	307.42, 307.44–307.47	307.4	
	Impulse control disorders	312.30–312.34, 312.39	312.30–312.35, 312.39	
	Mental disorders due to a general medical condition not elsewhere classified	293.89, 293.9, 310.1		
	All other psychiatric disorders	300.9, 316	300.5, 300.9, 308.0–308.2, 308.9, 310, 316	

# Note

The grouping methodology is under review; potential changes will be reflected in future versions of *Hospital Mental Health Services in Canada*.

#### Sources

International Classification of Diseases, 9th Revision (ICD-9); International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM); International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Canada (ICD-10-CA); Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV).

# Appendix B—Glossary

# age group

The age group is determined based on patient age at admission. For the purposes of the report, patients' ages at admission are divided into five groups: 0 to 14; 15 to 24; 25 to 44; 45 to 64; and 65 and older.

# age-standardized separation rate by province, territory or health region

Rate of departures from hospital through discharge or death, adjusted for prevailing differences in age structures between populations of provinces, territories or health regions. The age-standardized rate allows for the comparison of separation statistics as if all populations had the same age distribution.

# anxiety disorder

A condition of excessive anxiety, fear or worry, causing either avoidance of situations that might precipitate the anxiety or development of compulsive rituals that lessen the anxiety. Examples of anxiety disorders include generalized anxiety disorder, post-traumatic stress disorder, obsessive-compulsive disorder, panic disorder and social phobia.

# average age

The average age is calculated as the sum of age at admission of all separated individuals divided by the total number of separations.

# average length of stay

The average length of stay is the mean number of days stayed in hospital at separation. It is calculated as the total number of inpatient days divided by the associated number of separations (departures from hospital through discharge or death). As an additional reference of central tendency, the median length of stay is also provided.

# co-occurring disorder

The co-occurrence of a substance-related disorder and any other psychiatric disorder, also known as dual diagnosis or concurrent disorder.

# crude hospital separation rate per 100,000 population

The hospital separation rate is a measure of hospital utilization. It is the total number of hospital separations for a particular subgroup (those hospitalized for mental illness) that occur in an area over a specific time period divided by the population of the area during a specified period of time, multiplied by a factor of 100,000.

# days stayed

Length of hospitalization from date of admission to date of separation. See average length of stay.

#### frame

The facilities, both general and psychiatric hospitals, that usually submit data on hospitalizations to the Canadian Institute for Health Information for inclusion in the specified databases.

# general hospital

A publicly funded hospital that provides for the diagnosis and treatment of inpatients and clients with a wide range of diseases or injuries. The services of a general hospital are not restricted to a specific age group or sex. Within the HMHDB frame, facility types such as non-teaching general hospitals with or without long-term care units, pediatric hospitals, teaching general hospitals and specialty institutions (cancer, cardiology, maternity, extended and chronic care, rehabilitation, neurological, orthopedic, etc.) are included. Contact CIHI for more information about the facilities included in the HMHDB frame.

# half-percent trimmed mean

A measure of central tendency that removes the highest and lowest 0.5% of values in a sample and then computes the mean of that sample. The 0.5% trimmed mean is used to reduce the effect of extreme values or outliers on a mean.

# hospital separation

A hospital separation is the departure of an inpatient from hospital, due either to discharge or death. Hospital separation records are completed by hospitals for each patient who is discharged or who dies in hospital. Hospital separation records provide data on the relative frequency of a disease and the trends in morbidity from it.

# International Classification of Diseases, 9th Revision (ICD-9)

A set of internationally accepted codes for classifying medical diagnoses and conditions; medical records staff use these codes when transcribing information from physicians' written medical charts to the hospital database that is submitted to CIHI.

# International Classification of Diseases, 10th Revision, Canada (ICD-10-CA)

ICD-10-CA classifies diseases, injuries and causes of death, as well as external causes of injury and poisoning. The classification has 23 chapters with alphanumeric categories and subcategories. Unlike ICD-9, ICD-10-CA applies beyond acute hospital care. ICD-10-CA also includes conditions and situations that are not diseases but represent risk factors to health, such as occupational and environmental factors and lifestyle and psychosocial circumstances.

# jurisdictions

Refers to provinces, territories or health regions.

# length of stay

Length of stay is defined as the difference between the date of admission and the date of separation. For this report, the days that someone is admitted and separated from hospital are included in the sum.

# median length of stay

The median length of stay in hospital is the middle value in the distribution of all the individual lengths of stay. In the HMHDB, some separations have lengths of stay of years and, in some cases, decades. The median length of stay provides a measure of central tendency that is not affected by extreme values, unlike the average length of stay. See *average length of stay*.

#### mood disorder

People with mood disorders experience depression, mania or both. Those with depression may feel worthless, sad and empty to the point that these feelings impair functioning. Those with mania are overly energetic and may do things that are out of character. These symptoms are severe and may interfere with day-to-day life. Examples of mood disorders include major depressive disorder, bipolar disorder and dysthymic disorder.

# neighbourhood income quintile

Small geographic areas divided into five roughly equal population groups. Quintile 1 refers to the least affluent neighbourhoods, while quintile 5 refers to the most affluent. The quintiles were constructed according to the methods developed at Statistics Canada.

# organic disorder

People with organic disorders have a detectable physiological or structural change in an organ, usually the brain, causing impaired cognitive function. An example of an organic disorder is Alzheimer's disease.

# percentage of length of stay

The degree to which a group (hospital type, age and jurisdiction) makes up the total number of hospital days stayed. Used interchangeably with percentage of hospital days stayed.

# personality disorder

People with personality disorders have personality traits that are used inappropriately and become maladaptive. Some deviations may be quite mild and interfere very little with their life, while others may cause great disturbance. Typical personality disorders include borderline personality disorder, narcissistic personality disorder and dependent personality disorder.

# population

The number of people living in a geographic area. A population's size and age—sex composition may affect the health status of a region and its need for health services.

# primary separation diagnosis

The diagnosis deemed to be most responsible for an individual's hospital stay at the time of discharge from hospital or death.

# psychiatric hospital

In Canada, there is no standard definition of a psychiatric hospital. For the purposes of this report and CIHI's data collection, psychiatric hospitals are medical hospitals that provide psychiatric services on an inpatient and/or outpatient basis and that have been identified by the provinces as specialty psychiatric hospitals.

#### readmission rates

Based on patients who had more than one episode of hospitalization, with the second episode occurring within a specified time frame (30 days or 1 year) of the discharge date of the index episode. Patients were included if the most responsible diagnosis in the index episode was a mental disorder. Patients were considered to be readmitted if they were re-hospitalized for a mental disorder in an acute care inpatient hospital and were admitted via the emergency department after the index episode within the given period.

# schizophrenic and psychotic disorder

Schizophrenic and psychotic disorders are characterized by disturbances of thought and the experience of delusions and hallucinations that might lead to atypical behaviour. These signs and symptoms are severe enough to cause dysfunction in daily life.

# secondary psychiatric disorder

The HMHDB contains up to 25 diagnoses for each separation. Any of the 2nd to the 25th diagnoses is considered a secondary psychiatric disorder for this report.

# separation rate

See crude hospital separation rate per 100,000 population.

#### substance-related disorder

People with substance-related disorders either abuse or are dependent on psychoactive substances. A substance can be anything that is ingested in order to produce a high, alter one's senses or otherwise affect functioning. Examples of substances are alcohol, marijuana, cocaine and heroin.

# total patient days

The sum of hospital days stayed.

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