Mental Health and Addictions Programs Performance Indicators

April 2015

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Introduction

This indicator report was developed by the Newfoundland and Labrador Centre for Health Information (NLCHI) to address accountability and performance monitoring needs of the regional health authorities (RHAs) and the Department of Health and Community Services related to mental health and addictions programs and services. The report is intended to support program/service planning and delivery, resource allocation, and evaluation of service efficiency and effectiveness.

The need for this type of report was identified by leaders of mental health and addictions programs across the province. A project team at NLCHI was created to work collaboratively with provincial and regional leaders to define and populate a proposed set of indicators. Existing clinical, administrative and costing data sources were used to populate select indicators used in current national, provincial and regional reports.

Where possible, indicators already in use at the national level were used. Canadian Institute for Health Information (CIHI) methodologies for select indicators were adapted to include data from the Waterford Hospital, which is often excluded from reports focused on general hospital psychiatric services. As a result of this inclusion it is important to note that the results for some indicators presented in this report may vary slightly from those found in CIHI reports. In addition, data related to the forensic and geriatric psychiatry services at the Waterford Hospital have been excluded for selected indicators to enhance comparability where appropriate.

Indicators are organized based on the following categories deemed by program leaders to be of greatest relevance: Quality, Safety, Access, Utilization, Efficiency, Spending, and Health Outcomes. While efforts were made to include indicators relevant to both hospital and community based services, the majority of indicators are hospital focused due to the lack of data available for community services at this time. The description, data source(s), and calculation methodologies for each indicator can be found in Appendix A. Hyperlinks are available to link each indicator to its corresponding methodology. Contextual information is provided through provincial and regional profiles to assist readers in their interpretation of the indicator results.

The spending indicators that are contained within this report relate to the operating and direct client costs incurred by the regional health authorities in the delivery of programs and services. While regional health authority programs and services comprise a significant portion of provincial spending in the area of mental health and addictions, there are additional costs which fall outside the scope of this report such as grants provided to community agencies, costs of drugs covered under the Newfoundland and Labrador Prescription Drug Program, and costs associated with out of province treatment services.

This report aligns with the Department of Health and Community Services' Strategic Plan 2014 – 2017 which outlines priorities for working towards a vision of "optimal health and well-being for the people of Newfoundland and Labrador". The Plan represents a commitment to improving outcomes in the areas of population health, access to priority services, and quality of care and efficiency. One of the key strategic directions of the Plan - an accountable, sustainable, quality health and community services system – strives for improved performance and efficiency to provide quality services that are affordable and sustainable.

This report provides valuable baseline measures of performance for mental health and addictions programs and services which can be tracked over time. Such information will support program leaders at the regional and provincial levels in their efforts to improve health outcomes and system performance for the benefit of all.

Demographics

Population: 526,702Male: 49.3%Female: 50.7%Urban: 49.0%Rural: 51.0%

Seniors: 17.1%<19 years: 18.8%



Provincial Mental Health and Addictions Facilities/Programs

- Recovery Centre, St. John's
- Youth Treatment Centres, Grand-Falls Windsor and Paradise (opening fall 2014)
- Humberwood Centre, Corner Brook
- HOPE Eating Disorder Program, St. John's
- Janeway Child Health and Rehabilitation Centre, St. John's (tertiary child/youth psychiatry)
- Waterford Hospital, St. John's (tertiary adult psychiatry)

Mental Health and Addictions Spending

- Total MH&A Expenditures 2012-13: \$86.5 million
- MH&A Expenses to Total RHA Operational Expenses 2012-13: 3.9%

Health Characteristics

Heavy drinkers: 27.1%

• Current smokers: 23.2%

Inactive: 49.8%Obese: 27.0%

Excellent/very good perceived mental health: 73.4%

Mood disorders: 7.0%

• Contact with mental health professionals:

10.3%



Eastern Health

Regional Profile

Demographics

Population: 316,953

Provincial Population: 60.2%

Male: 49.2%Female: 50.8%Urban: 68.3%Rural: 31.8%Seniors: 15.8%<19 years: 18.9%



Provincial Mental Health and Addictions Facilities/Programs Operated by Eastern Health

- Recovery Centre, St. John's
- Paradise Youth Treatment Centre (Mental health focused, opening fall 2014)
- HOPE Eating Disorder Program, St. John's
- Janeway Child Health and Rehabilitation Centre, St. John's (tertiary child/youth psychiatry)
- Waterford Hospital, St. John's (tertiary adult psychiatry)

Mental Health and Addictions Spending

- Total MH&A Expenditures 2012-13: \$62.4 million
- MH&A Expenses to Total RHA Operational Expenses 2012-13: 4.6%

Health Characteristics

Heavy drinkers: 27.3%Current smokers: 22.4%

• Inactive: 48.6%

Obese: 25.7%



• Mood disorders: 8.5%

• Contact with mental health professionals: 12.4%



Facility Name	# of Hospitalizations for MH&A 2012-13	Average Total Length of Stay (days) 2012-13
Bonavista Peninsula Health Centre	11	10.5
Burin Peninsula Health Care Centre	63	11.8
Carbonear General Hospital	24	20.0
Dr. A.A. Wilkinson Memorial Health Centre		
Dr. G.B Cross Memorial Hospital	11	13.0
Dr. Walter Templeman Community Health Centre	0	0.0
General Hospital, Health Sciences Centre	396	19.5
Janeway Children's Health and Rehabilitation Centre	72	14.1
Placentia Health Centre	5	41.4
St. Clare's Mercy Hospital	109	15.9
Waterford Hospital	964	22.7

Demographics

Population: 94,119

Provincial Population: 17.9%

Male: 49.4%
Female: 50.6%
Urban: 15.5%
Rural: 84.9%
Seniors: 21.0%
<19 years: 18.0%



Provincial Mental Health and Addictions Facilities/Programs Operated by Central Health

 Grand Falls-Windsor Youth Treatment Centre (Addictions focused)

Mental Health and Addictions Spending

- Total MH&A Expenditures 2012-13:
 \$8.3 million
- MH&A Expenses to Total RHA Operational Expenses 2012-13: 2.5%

Health Characteristics

Heavy drinkers: 27.4%

Current smokers: 20.6%
Inactive: 56.5%

Obese: 27.1%

Excellent/very good perceived mental health:

74.1%

• Mood disorders: 3.9^E%

• Contact with mental health professionals:

5.7^E%

Hospital F	Profile	
Facility Name	# of Hospitalizations for MH&A 2012-13	Average Total Length of Stay (days) 2012-13
A.M. Guy Memorial Health Centre	0	0.0
Baie Verte Peninsula Health Centre		
Brookfield/ Bonnews Health Centre	7	10.3
Central Newfoundland Regional Health Centre	387	20.3
Connaigre Peninsula Health Centre	20	1.6
Fogo Island Health Centre	5	11.4
Green Bay Community Health Centre	9	12.6
James Paton Memorial Hospital	33	54.9
Notre Dame Bay Memorial Health Centre	19	22.7

Data with a coefficient of variation (CV) from 16.6% to 33.3% are identified by an (E) and should be interpreted with caution.

Regional Profile

Demographics

Population: 77,827

Provincial Population: 14.8%

Male: 48.8%
Female: 51.2%
Urban: 35.5%
Rural: 64.5%
Seniors: 20.2%
<19 years: 17.8%



Provincial Mental Health and Addictions Facilities/Programs Operated by Western Health

Humberwood Treatment Centre, Corner Brook

Mental Health and Addictions Spending

- Total MH&A Expenditures 2012-13: \$10.8 million
- MH&A Expenses to Total RHA Operational Expenses 2012-13: 3.3%

Health Characteristics

Heavy drinkers: 25.6%

• Current smokers: 26.9%

• Inactive: 45.1%

Obese: 30.0%

• Excellent/very good perceived mental health:

71.8%

• Mood disorders: 4.9^E%

 Contact with mental health professionals: 7.5^E%

Hospital Profile			
Facility Name	# of Hospitalizations for MH&A 2012-13	Average Total Length of Stay (days) 2012-13	
Bonne Bay Health Centre			
Calder Health Centre			
Dr. Charles L. LeGrow Health Centre	25	17.6	
Rufus Guinchard Health Care Centre	6	5.2	
Sir Thomas Roddick Hospital	128	12.0	
Western Memorial Regional Hospital	602	15.3	

Data with a coefficient of variation (CV) from 16.6% to 33.3% are identified by an (E) and should be interpreted with caution.

Labrador-Grenfell Health

Regional Profile

Demographics

Population: 37,803

• Provincial Population: 7.2%

Male: 50.7%
Female: 49.3%
Urban: 0%
Rural: 100%
Seniors: 11.9%
<19 years: 22.6%



Provincial Mental Health and Addictions Facilities/Programs Operated by Labrador-Grenfell Health

N/A

Mental Health and Addictions Spending

- Total MH&A Expenditures 2012-13: \$5.0 million
- MH&A Expenses to Total RHA Operational Expenses 2012-13: 3.0%

Health Characteristics

Heavy drinkers: 27.7%Current smokers: 28.9%

• Inactive: 52.2%

• Obese: 30.5%



79.5%

Mood disorders: 6.2^E%

 Contact with mental health professionals: 10.2^E%

Hospital Profile Facility Name # of Hospitalizations for **Average Total** MH&A Length of Stay (days) 2012-13 2012-13 Captain William Jackman Memorial Hospital 68 5.1 Cartwright Community Clinic ----Hopedale Community Clinic 6 1.0 105 Labrador Health Centre 6.0 5 Labrador South Health Centre 1.4 Makkovik Community Clinic 0 0.0 Nain Community Clinic 0.0 Strait of Belle Isle Health Centre The Charles S. Curtis Memorial Hospital 45 11.0 White Bay Central Health Centre

Data with a coefficient of variation (CV) from 16.6% to 33.3% are identified by an (E) and should be interpreted with caution.

Indicator Overview

The indicator results have been grouped and presented under the categories of quality, safety, access, utilization, efficiency, spending and health outcomes. The indicators selected for each category include the following:

Quality

30-Day Readmission
7-Day Readmission
Repeat Hospitalizations

Child/Youth Psychosis and Personality Disorder Hospitalizations

Safety

Total Adverse Inpatient Events
Adverse Inpatient Drug Events
Inpatient Self-Harm Events
Inpatient Suicide Events
Inpatient Fall Events
Elopements/Unauthorized Leave
Left Against Medical Advice(LAMA)

Access

Mental Health and Addictions Hospitalizations
Hospitalizations, by Concurrent, Mental Illness Only and Addictions Only
Average ALC Days
Involuntary Admissions
Psychiatric/Mental Health Providers

Utilization

Hospitalization Rate Patient Days High Volume Case Mix Groups ECT Treatment

Patient to Hospitalization Ratio General vs Psychiatric Hospitals

General Hospitals
Psychiatric Hospitals

Non MH&A Hospitalizations with MH&A as Secondary Diagnoses

Unintentional Overdose Hospitalizations

Inflow/Outflow

Efficiency

ALC Days

Nursing Worked Hours per Patient Day

Indicator Overview

Spending

Direct Operating Expense to Total RHA Operating Expense
Hospital-Based MH&A Services Direct Operating Expense to Total RHA Operating
Expense

Community-Based MH&A Services Direct Operating Expense to Total RHA Operating Expense

Direct Cost of MH&A Programs/Services per capita
Direct Client Costs to Total MH&A Programs/Services Operating Expenses
Drug Costs per Psychiatric Inpatient Day
High Cost Case Mix Groups

Health Outcomes

Suicide
Potential Years of Life Lost due to Suicide
Intentional Self-Injury Hospitalization
Perceived Mental Health Status

Prevalence of Mood Disorders

Mental health and addictions hospitalizations were identified according to the diagnosis of the patient. Clinical indicators which utilize CIHI methodologies often include selected diagnoses rather than all mental health and addictions diagnoses in their calculations. A complete description of each indicator and its calculation methodology can be found in Appendix A, cross-referenced with the indicator results for ease of use. Where applicable, nationally defined indicators and methodologies have been used however, some modifications were needed to include the Waterford Hospital in this provincial report. In addition, data related to the forensic and geriatric psychiatry services at the Waterford Hospital have been excluded for selected clinical indicators to increase comparability but are included for the spending indicators.

Many of the clinical indicators were calculated using data from the provincial Clinical Database Management System. This contains the inpatient and day surgery information originally submitted to CIHI's Discharge Abstract Database by facilities in Newfoundland and Labrador.

Facilities that have dedicated psychiatric inpatient units are required to collect additional information in the health record abstract relevant to mental health services. Collection of this additional information is optional for other facilities should they have mental health and addictions related admissions. As a result, for a small number of indicators only facilities that collect this additional information are included in the analysis. Similarly, for indicators specific to psychiatric inpatient services, only facilities with dedicated psychiatric inpatient units are included in the analysis.

A potential data quality issue has been identified in 27 records (the majority of which were from Labrador-Grenfell Health) which may impact the accuracy of the mental health and addictions diagnosis code assigned in the health record abstract. These 27 records have been excluded from the analysis.

Indicator Overview

The most recent year of data available from each data source has been used in the creation of this report with the exception of the spending indicators, which generally present the most recent five years of data for trending purposes. Indicators from the Canadian Community Health Survey reflect the most recent two year file. Indicators from the Canadian Community Health Survey are based on self-reported measures of the population aged 12 years and older.

Readers are advised to review the specific inclusions and exclusions applicable to each indicator for accurate interpretation. For further assistance with interpretation of the methodological notes, code selection and terminology, please contact the Centre, a health information management professional and/or MIS lead in your organization.



Quality

Quality Indicators

Quality

30-Day Readmission



Readmission to inpatient care may be an indicator of relapse or complications after an inpatient stay. Inpatient care for people living with a mental illness aims to stabilize acute symptoms. Once stabilized, the individual is discharged, and subsequent care and support are ideally provided through outpatient and community programs in order to prevent relapse or complications. High rates of readmission could be interpreted as a direct outcome of poor coordination of services and/or an indirect outcome of poor continuity of services after discharge; lower rates are desirable.

The 30-day readmission rate for selected mental health and addictions hospitalizations measures the rate of readmission following discharge for mental illness/addiction. A case is counted as a readmission if it is for a selected mental illness/addiction diagnosis and if it occurs within 30 days of the index episode of inpatient care.

Figure 1 below presents the regional and provincial results for 2012-13. Table 1 provides facility level results. The provincial 30-day readmission rate was 11.9%. Western Health had the highest 30-day readmission rate (15.0%) while Labrador-Grenfell Health had the lowest (9.9%).

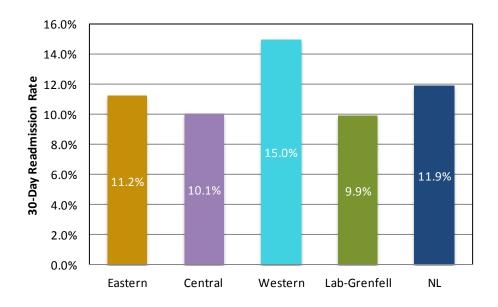


Figure 1
30-Day Readmission Rate for Selected Mental Health and Addictions Hospitalizations, by RHA of Service, 2012-13

Data Source: NLCHI Clinical Database Management System 2012-13

Quality

Table 1: 30-Day Readmission Rate for Selected Mental Health and Addictions Hospitalizations, by Facility, 2012-13

RHA	Facility	30-Day Readmission Rate (%)
	Bonavista Peninsula Health Centre	16.7
	Burin Peninsula Health Care Centre	23.4
	Carbonear General Hospital	0
	Dr. A.A. Wilkinson Memorial Health Centre	0
	Dr. G.B Cross Memorial Hospital	0
Eastern	Dr. Walter Templeman Community Health Centre	N/A
	General Hospital, Health Sciences Centre	9.0
	Janeway Children's Health and Rehabilitation Centre	12.5
	Placentia Health Centre	0
	St. Clare's Mercy Hospital	2.6
	Waterford Hospital	12.3
	A.M. Guy Memorial Health Centre	N/A
	Baie Verte Peninsula Health Centre	N/A
	Brookfield/ Bonnews Health Centre	0
	Central Newfoundland Regional Health Centre	11.1
Central	Connaigre Peninsula Health Centre	5.6
	Fogo Island Health Centre	0
	Green Bay Community Health Centre	0
	James Paton Memorial Hospital	0
	Notre Dame Bay Memorial Health Centre	0
	Bonne Bay Health Centre	N/A
	Calder Health Centre	0
Mastana	Dr. Charles L. LeGrow Health Centre	7.1
Western	Rufus Guinchard Health Care Centre	0
	Sir Thomas Roddick Hospital	12.4
	Western Memorial Regional Hospital	16.0
	Captain William Jackman Memorial Hospital	8.6
	Cartwright Community Clinic	
	Hopedale Community Clinic	0
	Labrador Health Centre	10.5
Lab Cuanfall	Labrador South Health Centre	0
Lab-Grenfell	Makkovik Community Clinic	N/A
	Nain Community Clinic	N/A
	Strait of Belle Isle Health Centre	0
	The Charles S. Curtis Memorial Hospital	13.8
	White Bay Central Health Centre	0

Data Source: NLCHI Clinical Database Management System 2012-13

[&]quot;N/A" indicates the facility did not have any mental health and addictions hospitalizations in 2012-13.

7-Day Readmission



The 7-day readmission rate for selected mental health and addictions hospitalizations measures the rate of readmission following discharge for mental illness/addiction. A case is counted as a readmission if it is for a selected mental illness/addiction diagnosis and if it occurs within 7 days of the index episode of inpatient care.

Figure 2 below presents the regional and provincial results for 2012-13. Table 2 provides facility level results. The provincial 7-day readmission rate was 4.0% with little variation across the regional health authorities. Western Health had the highest 7-day readmission rate (4.8%) while Labrador-Grenfell Health had the lowest (3.1%).

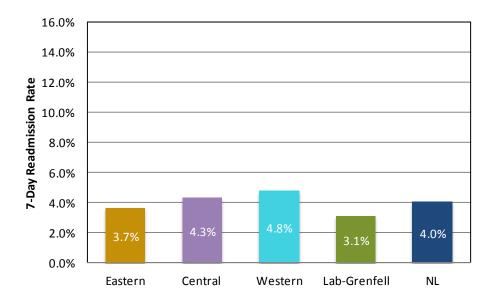


Figure 2
7-Day Readmission Rate for Selected Mental Health and Addictions Hospitalizations, by RHA of Service, 2012-13

Data Source: NLCHI Clinical Database Management System 2012-13

Quality

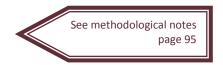
Table 2: 7-Day Readmission Rate for Selected Mental Health and Addictions Hospitalizations, by Facility, 2012-13

RHA	Facility	7-Day Readmission Rate
	Bonavista Peninsula Health Centre	0
	Burin Peninsula Health Care Centre	9.4
	Carbonear General Hospital	0
	Dr. A.A. Wilkinson Memorial Health Centre	0
	Dr. G.B Cross Memorial Hospital	0
Eastern	Dr. Walter Templeman Community Health Centre	N/A
	General Hospital, Health Sciences Centre	3.0
	Janeway Children's Health and Rehabilitation Centre	0
	Placentia Health Centre	0
	St. Clare's Mercy Hospital	0
	Waterford Hospital	4.3
	A.M. Guy Memorial Health Centre	N/A
	Baie Verte Peninsula Health Centre	N/A
	Brookfield/ Bonnews Health Centre	0
	Central Newfoundland Regional Health Centre	4.6
Central	Connaigre Peninsula Health Centre	5.6
	Fogo Island Health Centre	0
	Green Bay Community Health Centre	0
	James Paton Memorial Hospital	0
	Notre Dame Bay Memorial Health Centre	0
	Bonne Bay Health Centre	N/A
	Calder Health Centre	0
Western	Dr. Charles L. LeGrow Health Centre	0
western	Rufus Guinchard Health Care Centre	0
	Sir Thomas Roddick Hospital	3.7
	Western Memorial Regional Hospital	5.2
	Captain William Jackman Memorial Hospital	3.2
	Cartwright Community Clinic	
	Hopedale Community Clinic	0
	Labrador Health Centre	2.2
Lab-Grenfell	Labrador South Health Centre	0
Lab-Grenieii	Makkovik Community Clinic	N/A
	Nain Community Clinic	N/A
	Strait of Belle Isle Health Centre	0
	The Charles S. Curtis Memorial Hospital	6.5
	White Bay Central Health Centre	0

Data Source: NLCHI Clinical Database Management System 2012-13

[&]quot;N/A" indicates the facility did not have any mental health and addictions hospitalizations in 2012-13.

Repeat Hospitalizations



This indicator measures the percentage of patients that had three or more hospital stays for selected mental illness/addiction diagnosis in general hospitals and psychiatric hospitals within a given year. It is considered an indirect measure of appropriateness of care and support in the community, since the need for repeat admission to hospital depends on the person and the type of illness.

This indicator may help to identify a population of frequent users (three or more episodes of care in a given year); further investigation could provide a description of the characteristics of this group. Understanding this population better can aid in developing/enhancing programs that may prevent the need for frequent re-hospitalization. Lower rates are desirable.

Provincial and regional results are presented in Figure 3 below. Provincially, the proportion of repeat hospitalizations was 13.5%. Western Health had the highest proportion of repeat hospitalizations (17.3%) while Central Health had the lowest (11.0%). Facility level results are noted in Table 3.

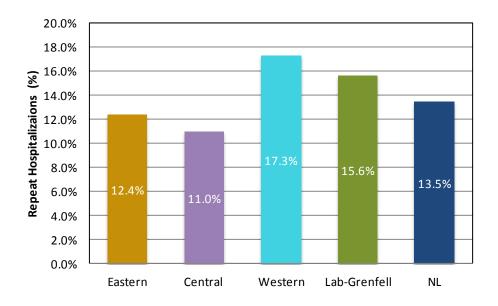


Figure 3
Repeat Selected Mental Health and Addictions Hospitalizations, by RHA of Service, 2011-12 and 2012-13

Data Source: NLCHI Clinical Database Management System 2011-12 and 2012-13

Quality

Table 3: Repeat Selected Mental Health and Addictions Hospitalizations, by Facility, 2011-12 and 2012-13

RHA	Facility	Repeat Hospitalization %
	Bonavista Peninsula Health Centre	*
	Burin Peninsula Health Care Centre	25.0
	Carbonear General Hospital	16.7
	Dr. A.A. Wilkinson Memorial Health Centre	*
	Dr. G.B Cross Memorial Hospital	0
Eastern	Dr. Walter Templeman Community Health Centre	*
	General Hospital, Health Sciences Centre	11.3
	Janeway Children's Health and Rehabilitation Centre	18.9
	Placentia Health Centre	0
	St. Clare's Mercy Hospital	5.8
	Waterford Hospital	12.5
	A.M. Guy Memorial Health Centre	0
	Baie Verte Peninsula Health Centre	0
	Brookfield/ Bonnews Health Centre	*
	Central Newfoundland Regional Health Centre	12.9
Central	Connaigre Peninsula Health Centre	0
	Fogo Island Health Centre	0
	Green Bay Community Health Centre	0
	James Paton Memorial Hospital	0
	Notre Dame Bay Memorial Health Centre	0
	Bonne Bay Health Centre	0
	Calder Health Centre	0
NA/ o ot o um	Dr. Charles L. LeGrow Health Centre	11.1
Western	Rufus Guinchard Health Care Centre	27.3
	Sir Thomas Roddick Hospital	19.6
	Western Memorial Regional Hospital	17.0
	Captain William Jackman Memorial Hospital	25.6
	Cartwright Community Clinic	
	Hopedale Community Clinic	100
	Labrador Health Centre	9.8
Lab-Grenfell	Labrador South Health Centre	0
Lab-Grentell	Makkovik Community Clinic	*
	Nain Community Clinic	0
	Strait of Belle Isle Health Centre	50.0
	The Charles S. Curtis Memorial Hospital	6.7
	White Bay Central Health Centre	0

Data Source: NLCHI Clinical Database Management System 2011-12 and 2012-13

[&]quot;*" indicates the facility did not have any mental health and addictions hospitalizations in 2011-12.



Child/Youth Psychosis and Personality Disorder Hospitalizations

It is difficult to diagnose a child or youth with a personality disorder as a long longitudinal history is required to support such a diagnosis. As a result it is not common to diagnose patients under the age of 19 years with psychosis or personality disorders. In the case of antisocial personality disorder, the patient must be 18 years of age for a diagnosis to be made.

This indicator measures the proportion (%) of all hospitalizations with a most responsible diagnosis of psychosis or personality disorder who were less than 19 years of age. It can be used in this context to monitor the frequency of such diagnoses as a quality of care indicator.

As illustrated in Figure 4, 18 percent of all hospitalizations in Newfoundland and Labrador for psychosis and personality disorders in 2012-13 were for patients aged less than 19 years of age. Age of patients ranged from 14 to 18 years of age. Results were similar in Eastern Health (18.3%) and in Western Health (18.0%). Results for Central Health and Labrador-Grenfell Health have been suppressed to protect patient privacy. Facility level results are presented in Table 4.

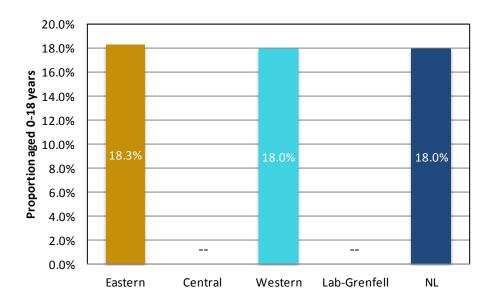


Figure 4
Proportion of all Hospitalizations with Psychosis and Personality Disorders for Patients <19 Years of Age, by RHA of Service, 2012-13

Data Source: NLCHI Clinical Database Management System 2012-13 Cell counts less than five are suppressed to protect patient privacy and indicated as "--".

Quality

Table 4: Proportion of all Hospitalizations with Psychosis and Personality Disorders for Patients < 19
Years of Age, by Facility, 2012-13

RHA	Facility	% Admissions
	General Hospital, Health Sciences Centre	
Eastern	Janeway Children's Health and Rehabilitation Centre	100
Eastern	St. Clare's Mercy Hospital	0
	Waterford Hospital	6.7
Central	Central Newfoundland Regional Health Centre	
Central	Connaigre Peninsula Health Centre	0
	Calder Health Centre	0
Western	Sir Thomas Roddick Hospital	
	Western Memorial Regional Hospital	17.0
	Captain William Jackman Memorial Hospital	0
Lab-Grenfell	Labrador Health Centre	
	The Charles S. Curtis Memorial Hospital	

Data Source: NLCHI Clinical Database Management System 2012-13

Safety Indicators

Total Adverse Inpatient Events



Adverse events include post-admission adverse drug events, intentional self-harm, falls and other types of injury. Adverse event rates are an indicator of the safety of the environments in which services/programs are delivered. Monitoring adverse events rates can highlight possible risks/dangers, can help identify weak or insufficient processes, and is essential for developing and assessing the impact of strategies aimed at reducing harms and improving patient safety. [From: Fraser Health, Mental Health and Addictions Balanced Scorecard: Key Performance Indicator Report 2009/2010.] Lower rates are desirable.

Figure 5 presents the total reported adverse events for all mental health and addictions hospitalizations. Results for Central Health and Labrador-Grenfell Health have been suppressed to protect patient privacy. Table 5 presents facility level results.

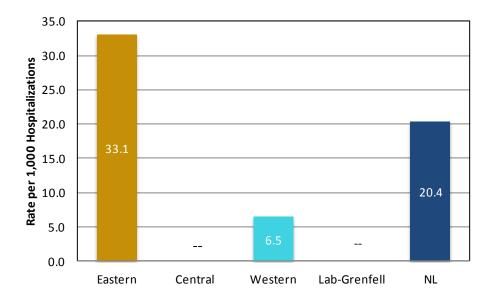


Figure 5
Rate of Reported Adverse Events, all Mental Health and Addictions Hospitalizations, by RHA of Service, 2012-13

Data Source: NLCHI Clinical Database Management System 2012-13 Cell counts less than five are suppressed to protect patient privacy and indicated as "--".

Table 5: Rate of Reported Adverse Events, all Mental Health and Addictions Hospitalizations, by Facility, 2012-13

RHA	Facility	Rate per 1,000 Hospitalizations
	Bonavista Peninsula Health Centre	0
	Burin Peninsula Health Care Centre	0
	Carbonear General Hospital	0
	Dr. A.A. Wilkinson Memorial Health Centre	0
	Dr. G.B Cross Memorial Hospital	0
Eastern	Dr. Walter Templeman Community Health Centre	N/A
	General Hospital, Health Sciences Centre	32.8
	Janeway Children's Health and Rehabilitation Centre	0
	Placentia Health Centre	
	St. Clare's Mercy Hospital	
	Waterford Hospital	40.5
	A.M. Guy Memorial Health Centre	N/A
	Baie Verte Peninsula Health Centre	0
	Brookfield/ Bonnews Health Centre	0
	Central Newfoundland Regional Health Centre	
Central	Connaigre Peninsula Health Centre	0
	Fogo Island Health Centre	0
	Green Bay Community Health Centre	0
	James Paton Memorial Hospital	
	Notre Dame Bay Memorial Health Centre	0
	Bonne Bay Health Centre	N/A
	Calder Health Centre	0
14 /2 24 2 222	Dr. Charles L. LeGrow Health Centre	0
Western	Rufus Guinchard Health Care Centre	0
	Sir Thomas Roddick Hospital	0
	Western Memorial Regional Hospital	8.3
	Captain William Jackman Memorial Hospital	0
	Cartwright Community Clinic	0
	Hopedale Community Clinic	0
	Labrador Health Centre	
Lab-Grenfell	Labrador South Health Centre	0
Lab-Grenieii	Makkovik Community Clinic	N/A
	Nain Community Clinic	N/A
	Strait of Belle Isle Health Centre	
	The Charles S. Curtis Memorial Hospital	0
	White Bay Central Health Centre	0

Data Source: NLCHI Clinical Database Management System 2012-13

[&]quot;N/A" indicates the facility did not have any mental health and addictions hospitalizations in 2012-13.

Adverse Inpatient Drug Events



Adverse drug events are those occurring post admission with negative effects involving drugs properly administered, accidental and intentional. In 2012-13, there were 7.3 reported adverse drug events per 1,000 mental health and addictions hospitalizations in Newfoundland and Labrador. All reported adverse drug events occurred in Eastern Health or Western Health. Results for Western Health have been suppressed to protect patient privacy. The highest rate of adverse drug events occurred at the Health Sciences Centre (17.7 per 1,000). A low rate is desirable for this indicator.

Table 6: Rate of Reported Adverse Drug Events, all Mental Health and Addictions Hospitalizations, by Facility, 2012-13

RHA	Facility	Rate per 1,000 Hospitalizations
	Bonavista Peninsula Health Centre	0
	Burin Peninsula Health Care Centre	0
	Carbonear General Hospital	0
	Dr. A.A. Wilkinson Memorial Health Centre	0
	Dr. G.B Cross Memorial Hospital	0
	Dr. Walter Templeman Community Health	N/A
Eastern	Centre	
Lastern	General Hospital, Health Sciences Centre	17.7
	Janeway Children's Health and	0
	Rehabilitation Centre	
	Placentia Health Centre	
	St. Clare's Mercy Hospital	-
	Waterford Hospital	14.5
	All Eastern Health facilities	13.3
NL		7.3

Data Source: NLCHI Clinical Database Management System 2012-13

[&]quot;N/A" indicates the facility did not have any mental health and addictions hospitalizations in 2012-13.

Inpatient Self-Harm Events



Table 7 presents the rate of intentional self-harm events during all mental health and addictions hospitalizations. For this indicator, a low rate is preferred. All reported intentional self-harm events occurred in Eastern Health or Western Health. Results for Western Health have been suppressed to protect patient privacy.

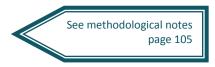
Table 7: Rate of Reported Adverse Self-Harm Events, all Mental Health and Addictions Hospitalizations, by Facility, 2012-13

RHA	Facility	Rate per 1,000 Hospitalizations
	Bonavista Peninsula Health Centre	0
	Burin Peninsula Health Care Centre	0
	Carbonear General Hospital	0
	Dr. A.A. Wilkinson Memorial Health Centre	0
	Dr. G.B Cross Memorial Hospital	0
Costova	Dr. Walter Templeman Community Health Centre	N/A
Eastern	General Hospital, Health Sciences Centre	15.2
	Janeway Children's Health and Rehabilitation Centre	0
	Placentia Health Centre	0
	St. Clare's Mercy Hospital	0
	Waterford Hospital	6.2
	All Eastern Health facilities	7.2
NL		4.1

Data Source: NLCHI Clinical Database Management System 2012-13

[&]quot;N/A" indicates the facility did not have any mental health and addictions hospitalizations in 2012-13.

Inpatient Suicide Events



There were no suicide events during all mental health and addiction hospitalizations (defined as self-harm events occurring during care episodes which ended in the death of the patient) reported for 2012-13.

Inpatient Fall Events



The number of adverse fall events per 1,000 mental health and addictions hospitalizations is presented in Table 8. Eastern Health had a rate of 6.6 per 1,000 hospitalizations. Results for Central Health, Western Health and Labrador-Grenfell Health have been suppressed to protect patient privacy.

Table 8: Rate of Reported Adverse Fall Events, all Mental Health and Addictions Hospitalizations, by Facility, 2012-13

RHA	Facility	Rate per 1,000 Hospitalizations
Eastern	Bonavista Peninsula Health Centre	0
	Burin Peninsula Health Care Centre	0
	Carbonear General Hospital	0
	Dr. A.A. Wilkinson Memorial Health Centre	0
	Dr. G.B Cross Memorial Hospital	0
	Dr. Walter Templeman Community Health Centre	N/A
	General Hospital, Health Sciences Centre	
	Janeway Children's Health and Rehabilitation Centre	0
	Placentia Health Centre	
	St. Clare's Mercy Hospital	
	Waterford Hospital	7.3
	All Eastern Health Facilities	6.6
NL		5.4

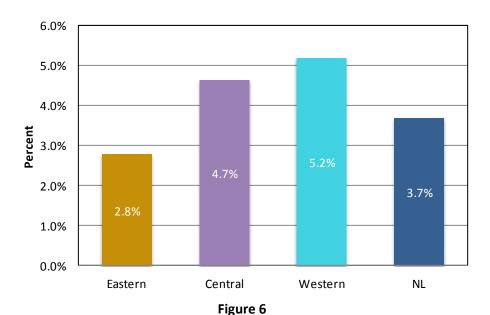
Data Source: NLCHI Clinical Database Management System 2012-13

[&]quot;N/A" indicates the facility did not have any mental health and addictions hospitalizations in 2012-13.

Elopements/Unauthorized Leave



In 2012-13, 3.7 % of all mental health and addictions hospitalizations involved a patient elopement; that is the patient left the hospital but was not formally discharged. The highest percentage of elopement was reported in Western Health facilities (5.2%). Eastern Health reported the lowest percentage. Only facilities that collect additional information on the discharge abstract for mental health and addictions patients are included in this analysis. Data was not available for Labrador-Grenfell Health facilities.



Proportion of all Mental Health and Addictions Hospitalizations with Elopements/Unauthorized Leave, by RHA of Service, 2012-13

Table 9: Proportion of all Mental Health and Addictions Hospitalizations with Elopements/Unauthorized Leave, by Facility, 2012-13

RHA	Facility	% Admissions
	Burin Peninsula Health Care Centre	0
	Dr. G.B Cross Memorial Hospital	0
Fastana	General Hospital, Health Sciences Centre	1.8
Eastern	Janeway Children's Health and Rehabilitation Centre	0
	St. Clare's Mercy Hospital	0
	Waterford Hospital	3.9
Central	Central Newfoundland Regional Health Centre	4.7
Mostova	Sir Thomas Roddick Hospital	8.6
Western	Western Memorial Regional Hospital	4.5

Data Source: NLCHI Clinical Database Management System 2012-13

See methodological notes page 111

Left Against Medical Advice (LAMA)

Figure 7 presents the proportion of all mental illness and addictions hospitalizations where the patient left earlier than recommended by the care team. Western Health reported the highest proportion of patients that left against medical advice (5.4%) while the lowest rate was reported in Central Health facilities (3.9%). Results by facility are presented in Table 10.

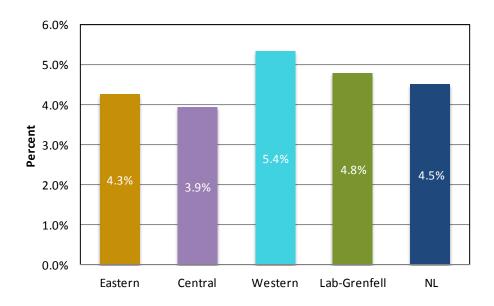


Figure 7
Proportion of all Mental Health and Addictions Hospitalizations Whereby Patients Left Against
Medical Advice, by RHA of Service, 2012-13

Data Source: NLCHI Clinical Database Management System 2012-13

Table 10: Proportion of all Mental Health and Addictions Hospitalizations Whereby Patients Left
Against Medical Advice, by Facility, 2012-13

RHA	Facility	% Admissions
	Bonavista Peninsula Health Centre	0
	Burin Peninsula Health Care Centre	
	Carbonear General Hospital	0
	Dr. A.A. Wilkinson Memorial Health Centre	0
	Dr. G.B Cross Memorial Hospital	0
Eastern	Dr. Walter Templeman Community Health Centre	N/A
	General Hospital, Health Sciences Centre	3.3
	Janeway Children's Health and Rehabilitation Centre	0
	Placentia Health Centre	
	St. Clare's Mercy Hospital	8.3
	Waterford Hospital	4.9
	A.M. Guy Memorial Health Centre	N/A
	Baie Verte Peninsula Health Centre	0
	Brookfield/ Bonnews Health Centre	0
	Central Newfoundland Regional Health Centre	4.7
Central	Connaigre Peninsula Health Centre	0
	Fogo Island Health Centre	0
	Green Bay Community Health Centre	0
	James Paton Memorial Hospital	
	Notre Dame Bay Memorial Health Centre	0
	Bonne Bay Health Centre	0
	Calder Health Centre	0
14 /2 24 2 222	Dr. Charles L. LeGrow Health Centre	
Western	Rufus Guinchard Health Care Centre	0
	Sir Thomas Roddick Hospital	8.6
	Western Memorial Regional Hospital	4.7
	Captain William Jackman Memorial Hospital	11.8
	Cartwright Community Clinic	0
	Hopedale Community Clinic	0
	Labrador Health Centre	
Lab Cuanfall	Labrador South Health Centre	0
Lab-Grenfell	Makkovik Community Clinic	N/A
	Nain Community Clinic	N/A
	Strait of Belle Isle Health Centre	0
	The Charles S. Curtis Memorial Hospital	
	White Bay Central Health Centre	0

Data Source: NLCHI Clinical Database Management System 2012-13

[&]quot;N/A" indicates the facility did not have any mental health and addictions hospitalizations in 2012-13.

Access

Access Indicators

Access

Mental Health and Addictions Hospitalizations



Figure 8 presents the proportion of all hospitalizations that are for mental health and addictions conditions. Overall, 6.5% of all hospitalizations in Newfoundland and Labrador have a most responsible diagnosis of mental health or addictions conditions. This rate is higher in Western Health (9.3%) than the other regional health authorities. Results by facility are presented in Table 11.

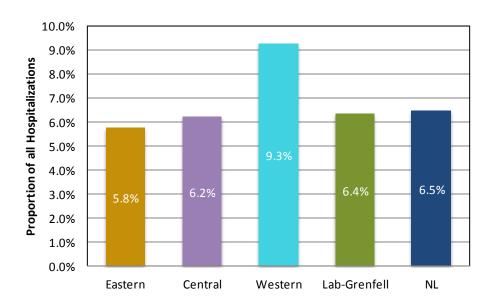


Figure 8
Proportion of all Hospitalizations due to Mental Health and Addictions Conditions, by RHA of Service, 2012-13

Access

Table 11: Proportion of all Hospitalizations due to Mental Health and Addictions Conditions, by Facility, 2012-13

RHA	Facility	% Mental Health Hospitalizations
	Bonavista Peninsula Health Centre	3.6
	Burin Peninsula Health Care Centre	4.4
	Carbonear General Hospital	1.3
	Dr. A.A. Wilkinson Memorial Health Centre	
	Dr. G.B Cross Memorial Hospital	0.6
Eastern	Dr. Walter Templeman Community Health Centre	0
	General Hospital, Health Sciences Centre	2.8
	Janeway Children's Health and Rehabilitation Centre	14.5
	Placentia Health Centre	2.4
	St. Clare's Mercy Hospital	1.6
	Waterford Hospital	91.5
	A.M. Guy Memorial Health Centre	0
	Baie Verte Peninsula Health Centre	
	Brookfield/ Bonnews Health Centre	2.3
	Central Newfoundland Regional Health Centre	11.5
Central	Connaigre Peninsula Health Centre	5.2
	Fogo Island Health Centre	2.9
	Green Bay Community Health Centre	3.7
	James Paton Memorial Hospital	1.3
	Notre Dame Bay Memorial Health Centre	4.5
	Bonne Bay Health Centre	
	Calder Health Centre	
Western	Dr. Charles L. LeGrow Health Centre	4.3
western	Rufus Guinchard Health Care Centre	3.3
	Sir Thomas Roddick Hospital	10.5
	Western Memorial Regional Hospital	10.0
	Captain William Jackman Memorial Hospital	11.5
	Cartwright Community Clinic	
	Hopedale Community Clinic	-
Lab-Grenfell	Labrador Health Centre	9.5
	Labrador South Health Centre	4.6
	Makkovik Community Clinic	0
	Nain Community Clinic	0
	Strait of Belle Isle Health Centre	
	The Charles S. Curtis Memorial Hospital	3.0
	White Bay Central Health Centre	

Data Source: NLCHI Clinical Database Management System 2012-13

Cell counts less than five are suppressed to protect patient privacy and indicated as "--".



Hospitalizations, by Concurrent, Mental Illness Only and Addictions Only

Figure 9 shows the proportion of all mental health and addictions hospitalizations for concurrent, mental illness only and addictions only. Concurrent hospitalization means that the patient is hospitalized for both a mental illness and an addiction at the same time. Fifteen percent of all mental health and addictions hospitalizations in Newfoundland and Labrador are for treatment of concurrent mental health and addictions conditions. Regional results vary from 18.5% in Western Health to as low as 6.6% in Labrador-Grenfell Health. The majority of all mental health and addictions hospitalizations are for mental illness only. Almost 73% of these hospitalizations have a mental illness as the most responsible diagnosis. Hospitalizations for addiction only account for a lower percentage of all mental health and addictions hospitalizations. Approximately a quarter of all mental health and addictions hospitalizations in Labrador-Grenfell Health can be attributed to addiction only. Western Health reports the lowest percentage of 7.4%. Results by facility are presented in Table 12.

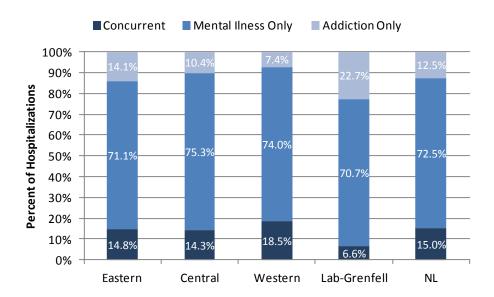


Figure 9
Proportion of all Mental Health and Addictions Hospitalizations for Treatment of Concurrent, Mental Illness Only and Addictions Only, by RHA of Service, 2012-13

Access

Table 12: Proportion of all Mental Health and Addictions Hospitalizations for Treatment of Concurrent, Mental Illness Only and Addictions Only, by Facility, 2012-13

RHA	Facility	Concurrent	Mental Health	Addictions
Eastern	Bonavista Peninsula Health Centre	0		
	Burin Peninsula Health Care Centre		65.1	
	Carbonear General Hospital	3.8	69.2	26.9
	Dr. A.A. Wilkinson Memorial Health Centre	0		
	Dr. G.B Cross Memorial Hospital	0	0	100
	Dr. Walter Templeman Community Health Centre	N/A	N/A	N/A
Lasteili	General Hospital, Health Sciences Centre	7.6	78.5	13.9
	Janeway Children's Health and Rehabilitation Centre		91.7	
	Placentia Health Centre	0	100	0
	St. Clare's Mercy Hospital	9.2	31.2	59.6
	Waterford Hospital	18.9	71.4	9.8
	A.M. Guy Memorial Health Centre	N/A	N/A	N/A
	Baie Verte Peninsula Health Centre		100	
	Brookfield/ Bonnews Health Centre		100	
	Central Newfoundland Regional Health Centre	16.8	73.1	10.1
Central	Connaigre Peninsula Health Centre		65.0	
	Fogo Island Health Centre			0
	Green Bay Community Health Centre		77.8	
	James Paton Memorial Hospital		84.8	
	Notre Dame Bay Memorial Health Centre	0	100	0
	Bonne Bay Health Centre	0	100	0
	Calder Health Centre	0	100	0
Western	Dr. Charles L. LeGrow Health Centre		72.0	
Western	Rufus Guinchard Health Care Centre			
	Sir Thomas Roddick Hospital	17.2	74.2	8.6
	Western Memorial Regional Hospital	19.6	73.9	6.5
	Captain William Jackman Memorial Hospital	8.8	61.8	29.4
	Cartwright Community Clinic	0	100	0
	Hopedale Community Clinic	0	100	0
	Labrador Health Centre	7.6	72.4	20.0
Lab-	Labrador South Health Centre			0
Grenfell	Makkovik Community Clinic	N/A	N/A	N/A
	Nain Community Clinic	N/A	N/A	N/A
	Strait of Belle Isle Health Centre	0	100	0
	The Charles S. Curtis Memorial Hospital	0	77.8	22.2
	White Bay Central Health Centre	0		

Data Source: NLCHI Clinical Database Management System 2012-13

Cell counts less than five are suppressed to protect patient privacy and indicated as "--".

[&]quot;N/A" indicates the facility did not have any mental health and addictions hospitalizations in 2012-13.

Average ALC Days



Alternate level care (ALC) days are those for which patients are occupying an acute care bed while waiting to be transferred to a different level of care, such as long term care. For this indicator, a lower number is desirable. Central Health has the highest number with an average of 7.2 ALC days for every mental health and addictions hospitalization. Labrador-Grenfell Health has the lowest average number of ALC days at 0.5 days. Results by facility are presented in Table 13.

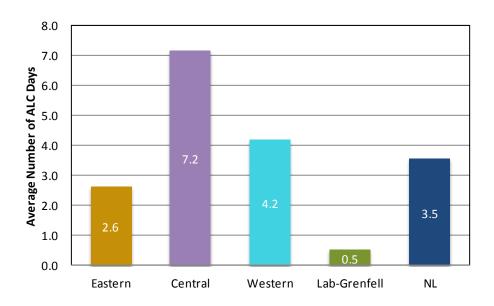


Figure 10

Average Number of Alternate Level Care Days per Mental Health and Addictions Hospitalizations, by RHA of Service, 2012-13

Access

Table 13: Average Number of Alternate Level Care day per Mental Health and Addictions
Hospitalizations, by Facility, 2012-13

RHA	Facility	Average ALC Days
	Bonavista Peninsula Health Centre	1.1
	Burin Peninsula Health Care Centre	5.0
	Carbonear General Hospital	6.9
	Dr. A.A. Wilkinson Memorial Health Centre	
	Dr. G.B Cross Memorial Hospital	3.2
Eastern	Dr. Walter Templeman Community Health Centre	N/A
	General Hospital, Health Sciences Centre	2.4
	Janeway Children's Health and Rehabilitation Centre	0
	Placentia Health Centre	12.8
	St. Clare's Mercy Hospital	7.4
	Waterford Hospital	2.0
	A.M. Guy Memorial Health Centre	N/A
	Baie Verte Peninsula Health Centre	
	Brookfield/ Bonnews Health Centre	0
	Central Newfoundland Regional Health Centre	4.1
Central	Connaigre Peninsula Health Centre	0
	Fogo Island Health Centre	0
	Green Bay Community Health Centre	3.7
	James Paton Memorial Hospital	45.7
	Notre Dame Bay Memorial Health Centre	16.4
	Bonne Bay Health Centre	
	Calder Health Centre	0
Western	Dr. Charles L. LeGrow Health Centre	11.1
western	Rufus Guinchard Health Care Centre	
	Sir Thomas Roddick Hospital	0
	Western Memorial Regional Hospital	4.0
	Captain William Jackman Memorial Hospital	0
	Cartwright Community Clinic	0
	Hopedale Community Clinic	0
	Labrador Health Centre	0.8
Lab-Grenfell	Labrador South Health Centre	0
Lab-Greinen	Makkovik Community Clinic	N/A
	Nain Community Clinic	N/A
	Strait of Belle Isle Health Centre	0
	The Charles S. Curtis Memorial Hospital	0.6
	White Bay Central Health Centre	0

Data Source: NLCHI Clinical Database Management System 2012-13

Cell counts less than five are suppressed to protect patient privacy and indicated as "--".

[&]quot;N/A" indicates the facility did not have any mental health and addictions hospitalizations in 2012-13.

Involuntary Admissions

See methodological notes page 117

In Eastern Health, almost 16% of hospitalizations for mental health and addictions were involuntary. Central Health reported the lowest percentage (10.6%). Only facilities that collect additional information on the discharge abstract for mental health and addictions patients are included in this analysis Labrador-Grenfell Health does not report involuntary admissions. Results by facility are presented in Table 14.

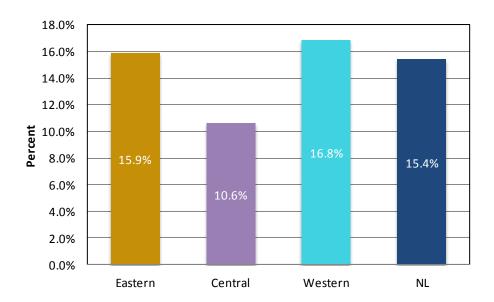


Figure 11
Proportion of all Hospitalizations for Mental Health and Addictions Conditions which were Involuntary
Admissions, by RHA of Service, 2012-13

Table 14: Proportion of all Hospitalizations for Mental Health and Addiction Conditions which were Involuntary Admissions, by Facility, 2012-13

RHA	Facility	% Admissions
	Burin Peninsula Health Care Centre	0
	Dr. G.B Cross Memorial Hospital	0
Fastana	General Hospital, Health Sciences Centre	9.1
Eastern	Janeway Children's Health and Rehabilitation Centre	
	St. Clare's Mercy Hospital	0
	Waterford Hospital	22.8
Central	Central Newfoundland Regional Health Centre	10.6
Mastana	Sir Thomas Roddick Hospital	
Western	Western Memorial Regional Hospital	20.3

Psychiatric/Mental Health Providers



Table 15 presents the number of psychiatric/mental health providers per 100,000 population. Rates ranged from 70 nurses per 100,000 population to 6 occupational therapists per 100,000 population.

Table 15: Number of Psychiatrists, Psychologists, Social Workers, Occupational Therapists and Nurses
Working in Mental Health and Addictions per 100,000 Population, 2012-13

Provider	Year	Rate per 100,000 population
Psychiatrists ¹	2013	14
Psychologists ²	2012	38
Occupational Therapist ³	2012	6
Nurses (Psychiatric/Mental Health) ⁴	2013	70

¹ CIHI, Supply, Distribution and Migration of Canadian Physicians, 2013

²Health Personnel Database, CIHI; Population estimates: Statistics Canada. Quarterly Demographic Estimates. March 2013;26(4). 91-002-X.

⁴CIHI, Occupational Therapist Database, 2012

⁵ CIHI, Regulated Nursing Supply 2013 (Health Workforce Database)

Utilization Indicators

Hospitalization Rate

See methodological notes page 120

This indicator measures the rate of separations from general/psychiatric hospitals through discharge or death following a hospitalization for a selected mental illness or substance disorder, per 100,000 population. Hospitalization rate is a partial measure of general hospital utilization. It does not include inpatients who were using hospital services but had not yet been discharged within the fiscal year of interest. This indicator may reflect differences between jurisdictions, such as the health of the population, differing health services delivery models and variations in the availability and accessibility of specialized, residential and/or ambulatory and community-based services.

The mental illnesses selected for this indicator are substance-related disorders; schizophrenia, delusional and non-organic psychotic disorders; mood/affective disorders; anxiety disorders; and selected disorders of adult personality and behavior.

In NL, there were almost 562 hospitalizations for selected mental illness and addictions per 100,000 population. The rate of mental illness and addictions hospitalizations was highest in Western (987.3 per 100,000); Eastern had the lowest rate (450.9 per 100,000).

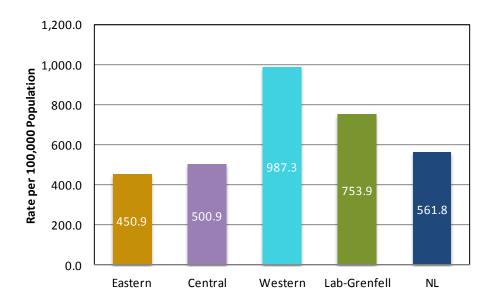


Figure 12
Rate of Mental Illness and Addictions Hospitalizations per 100,000 population for, by RHA of Residence, 2012-13

Data Source: NLCHI Clinical Database Management System 2012-13; Statistics Canada Population Estimates 2012

Patient Days

See methodological notes page 122

The patient days indicator is the rate of total number of days in general/psychiatric hospitals for selected mental illness/addictions per 10,000 population. The patient days rate is a partial measure of general hospital utilization. It does not include patients who were admitted to hospital but had not yet been discharged within the fiscal year of interest. Patient days are influenced by the number of hospitalizations and the length of stay. For the same number of hospitalizations, the rate of patient days will increase as length of stay increases. This indicator may reflect differences between jurisdictions, such as the health of the population, differing health services delivery models and variations in the availability and accessibility of specialized, residential and/or ambulatory and community-based services.

The mental illnesses selected for this indicator are substance-related disorders; schizophrenia, delusional and non-organic psychotic disorders; mood/affective disorders; anxiety disorders; and selected disorders of adult personality and behavior.

Among the province's four regional health authorities, Western Health has the highest rate of patient days for selected mental illness and addictions per 10,000 population. The lowest rate is reported in Labrador-Grenfell Health.

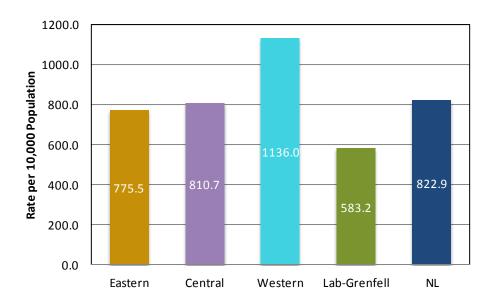


Figure 13

Rate of Patient Days per 10,000 Population for Selected Mental Illness and Addictions
Hospitalizations, by RHA of Residence, 2012-13

Source: NLCHI Clinical Database Management System 2012-13; Statistics Canada Population Estimates 2012

High Volume Case Mix Groups

See methodological notes page 124

This indicator is presented by patients' place of residence (Table 16) and region where patient received service (Table 17). Depressive episode without ECT is the highest ranked Case Mix Group for all Regional Health Authorities.

Table 16: Top 10 Case Mix Groups (by volume) – Mental Illness and Addictions Acute Care Hospitalizations, by RHA of Residence, 2012-13

Rank	CMG Description (Number of Hospitalizations)						
Kank	NL	Eastern	Central	Western	Labrador-Grenfell		
1	Depressive Episode without ECT (531)	Depressive Episode without ECT (179)	Depressive Episode without ECT (126)	Depressive Episode without ECT (147)	Depressive Episode without ECT (76)		
2	Stress Reaction/ Adjustment Disorder (282)	Stress Reaction/ Adjustment Disorder (169)	Bipolar Disorder without ECT (41)	Stress Reaction/ Adjustment Disorder (75)	Psychoactive Substance Use, Dependence Syndrome (15)		
3	Bipolar Disorder without ECT (221)	Bipolar Disorder without ECT (103)	Dementia (30)	Schizophrenia without ECT (63)	Bipolar Disorder without ECT (14)		
4	Schizophrenia without ECT (174)	Psychoactive Substance Use, Dependence Syndrome (95)	Stress Reaction/ Adjustment Disorder (25)	Bipolar Disorder without ECT (61)	Anxiety Disorder (13)		
5	Psychoactive Substance Use, Dependence Syndrome (153)	Schizophrenia without ECT (91)	Psychoactive Substance Use, Dependence Syndrome (20)	Schizoaffective Disorder without ECT (33)	Stress Reaction/ Adjustment Disorder (12)		
6	Dementia (131)	Organic Mental Disorder (79)	Schizophrenia without ECT (18)	Schizotypal/ Delusional Disorder (27)	Miscellaneous Mental Disorder (11)		
7	Schizotypal/ Delusional Disorder (112)	Miscellaneous Mental Disorder (77)	Depressive Episode with ECT (17)	Disorder of Adult Personality Behaviour (24)	Psychoactive Substance Use, Acute Intoxication (11)		
8	Miscellaneous Mental Disorder (109)	Schizotypal/ Delusional Disorder (72)	Disorder of Adult Personality Behaviour (15)	Dementia (23)	Psychoactive Substance Use, Harmful Use (10)		
9	Organic Mental Disorder (95)	Psychoactive Substance Use, Withdrawal States (72)	Anxiety Disorder (14)	Psychoactive Substance Use, Harmful Use (22)	Schizotypal/ Delusional Disorder (7)		
10	Psychoactive Substance Use, Withdrawal States (94)	Dementia (71)	Psychoactive Substance Use, Harmful Use (14)	Psychoactive Substance Use, Dependence Syndrome (21)	Dementia (5)		

Table 17: Top 10 Case Mix Groups (by volume) – Mental Illness and Addictions Acute Care Hospitalizations, by RHA of Service, 2012-13

Davile	CMG Description (Number of Hospitalizations)						
Rank	NL	Eastern	Central	Western	Labrador-Grenfell		
1	Depressive Episode without ECT (531)	Depressive Episode without ECT (177)	Depressive Episode without ECT (128)	Depressive Episode without ECT (150)	Depressive Episode without ECT (76)		
2	Stress Reaction/Adjustm ent Disorder (282)	Stress Reaction/Adjustm ent Disorder (173)	Bipolar Disorder without ECT (44)	Stress Reaction/Adjustm ent Disorder (74)	Psychoactive Substance Use, Dependence Syndrome (14)		
3	Bipolar Disorder without ECT (221)	Bipolar Disorder without ECT (108)	Dementia (30)	Schizophrenia without ECT (63)	Anxiety Disorder (12)		
4	Schizophrenia without ECT (174)	Miscellaneous Mental Disorder (104)	Stress Reaction/Adjustm ent Disorder (24)	Bipolar Disorder without ECT (59)	Stress Reaction/Adjustm ent Disorder (11)		
5	Psychoactive Substance Use, Dependence Syndrome (153)	Psychoactive Substance Use, Dependence Syndrome (96)	Psychoactive Substance Use, Dependence Syndrome (21)	Schizoaffective Disorder without ECT (34)	Psychoactive Substance Use, Acute Intoxication (11)		
6	Dementia (131)	Schizophrenia without ECT (91)	Schizophrenia without ECT (18)	Schizotypal/ Delusional Disorder (26)	Bipolar Disorder without ECT (10)		
7	Schizotypal/ Delusional Disorder (112)	Organic Mental Disorder (80)	Disorder of Adult Personality Behaviour (16)	Disorder of Adult Personality Behaviour (25)	Psychoactive Substance Use, Harmful Use (10)		
8	Miscellaneous Mental Disorder (109)	Dementia (74)	Depressive Episode with ECT (16)	Dementia (22)	Schizotypal/ Delusional Disorder (7)		
9	Organic Mental Disorder (95)	Schizotypal/ Delusional Disorder (73)	Anxiety Disorder (15)	Psychoactive Substance Use, Dependence Syndrome (22)	Psychoactive Substance Use, Withdrawal States (6)		
10	Psychoactive Substance Use, Withdrawal States (94)	Psychoactive Substance Use, Withdrawal States (72)	Psychoactive Substance Use, Harmful Use (14)	Psychoactive Substance Use, Harmful Use (22)	Dementia (5)		

ECT Treatment

See methodological notes page 126

This indicator illustrates the proportion of inpatient hospitalizations and surgical day care visits with a most responsible diagnosis for mental health and addictions conditions during which ECT interventions were received. In Central Health, almost a quarter of these encounters involved Electroconvulsive therapy (ECT). This is markedly higher than the use of ECT in the other regions. Labrador-Grenfell Health does not offer ECT treatments. Results by facility are presented in Table 18.

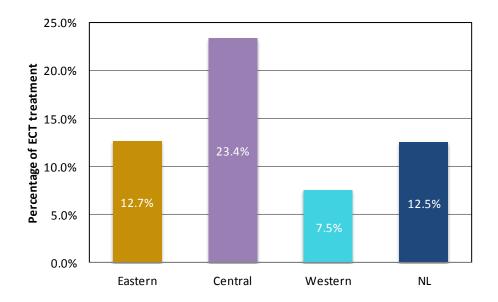


Figure 14

Proportion of Inpatient and Surgical Day Care Hospitalizations for Mental Health and Addictions
Conditions During which ECT Interventions were Received, by RHA of Service, 2012-13

Table 18: Proportion of Inpatient and Surgical Day Care Hospitalizations for Mental Health and Addictions Conditions During which ECT Interventions were Received, by Facility, 2012-13

RHA	Facility	ECT Treatment (%)
	Bonavista Peninsula Health Centre	0
	Burin Peninsula Health Care Centre	0
	Carbonear General Hospital	0
	Dr. A.A. Wilkinson Memorial Health Centre	0
	Dr. G.B Cross Memorial Hospital	0
Eastern	Dr. Walter Templeman Community Health Centre	N/A
	General Hospital, Health Sciences Centre	11.0
	Janeway Children's Health and Rehabilitation Centre	0
	Placentia Health Centre	0
	St. Clare's Mercy Hospital	0
	Waterford Hospital	16.8
	A.M. Guy Memorial Health Centre	N/A
	Baie Verte Peninsula Health Centre	0
	Brookfield/ Bonnews Health Centre	0
	Central Newfoundland Regional Health Centre	27.8
Central	Connaigre Peninsula Health Centre	0
	Fogo Island Health Centre	0
	Green Bay Community Health Centre	0
	James Paton Memorial Hospital	0
	Notre Dame Bay Memorial Health Centre	0
	Bonne Bay Health Centre	0
	Calder Health Centre	0
Western	Dr. Charles L. LeGrow Health Centre	0
western	Rufus Guinchard Health Care Centre	0
	Sir Thomas Roddick Hospital	0
	Western Memorial Regional Hospital	9.5

[&]quot;N/A" indicates the facility did not have any mental health and addictions hospitalizations in 2012-13.

Patient to Hospitalization Ratio

See methodological notes page 128

The patient to hospitalization ratio represents the number of patients hospitalized with a most responsible diagnosis of mental illness or addictions compared to the total number of mental illness or addictions hospitalizations. A ratio of 1.0 would indicate a unique patient for each hospitalization. The lower the number, the more hospitalizations per patient. For instance, in Western Health there are 64 unique patients for every 100 hospitalizations. Western Health has the lowest patient to hospitalization ratio (0.64). Results by facility are presented in Table 19.

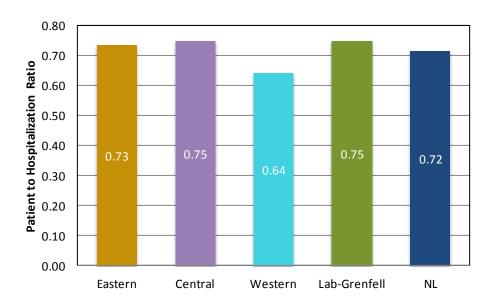


Figure 15
Patient to Hospitalization Ratio of Mental Illness and Addictions Hospitalizations, by RHA of Service, 2012-13

Table 19: Patient to Hospitalization Ratio of Mental Illness and Addictions Hospitalizations, by Facility, 2012-13

RHA	Facility	Patient to Hospitalization Ratio
	Bonavista Peninsula Health Centre	0.8
	Burin Peninsula Health Care Centre	0.5
	Carbonear General Hospital	1.0
	Dr. A.A. Wilkinson Memorial Health Centre	1.0
	Dr. G.B Cross Memorial Hospital	1.0
Eastern	Dr. Walter Templeman Community Health Centre	N/A
	General Hospital, Health Sciences Centre	0.9
	Janeway Children's Health and Rehabilitation Centre	0.8
	Placentia Health Centre	1.0
	St. Clare's Mercy Hospital	0.9
	Waterford Hospital	0.8
	A.M. Guy Memorial Health Centre	N/A
	Baie Verte Peninsula Health Centre	1.0
	Brookfield/ Bonnews Health Centre	1.0
	Central Newfoundland Regional Health Centre	0.8
Central	Connaigre Peninsula Health Centre	0.9
	Fogo Island Health Centre	0.8
	Green Bay Community Health Centre	1.0
	James Paton Memorial Hospital	1.0
	Notre Dame Bay Memorial Health Centre	0.7
	Bonne Bay Health Centre	1.0
	Calder Health Centre	1.0
Western	Dr. Charles L. LeGrow Health Centre	1.0
Western	Rufus Guinchard Health Care Centre	1.0
	Sir Thomas Roddick Hospital	0.8
	Western Memorial Regional Hospital	0.7
	Captain William Jackman Memorial Hospital	0.8
	Cartwright Community Clinic	
	Hopedale Community Clinic	1.0
	Labrador Health Centre	0.8
Lab-Grenfell	Labrador South Health Centre	0.8
Lab-Greinen	Makkovik Community Clinic	N/A
	Nain Community Clinic	N/A
	Strait of Belle Isle Health Centre	1.0
	The Charles S. Curtis Memorial Hospital	0.9
	White Bay Central Health Centre	1.0

Data Source: NLCHI Clinical Database Management System 2012-13

Cell counts less than five are suppressed to protect patient privacy and indicated as "--".

[&]quot;N/A" indicates the facility did not have any mental health and addictions hospitalizations in 2012-13.

See methodological notes page 129

General vs Psychiatric Hospitals

This indicator measures the distribution of all mental illness and addictions hospitalizations between general and psychiatric hospitals. Eastern Health has the only psychiatric hospital in the province and 58.1% of all mental illness and addictions hospitalizations within Eastern Health occur at the Waterford Hospital. Provincially, 30.7% of all mental illness and addictions hospitalizations occur at the Waterford Hospital.

General Hospitals

See methodological notes page 131

In general hospitals, mental illness only hospitalizations account for the majority of all mental health and addictions hospitalizations in all regions except Eastern Health. Results by facility are presented in Table 20.

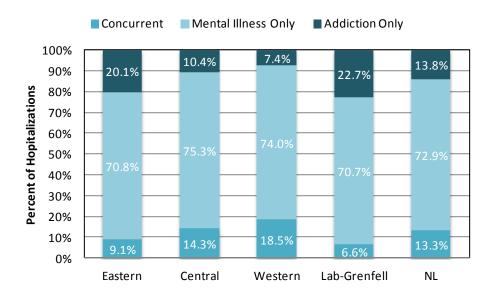


Figure 16
Distribution of General Hospital Mental Illness/Addiction Hospitalizations, by Concurrent, Mental Illness Only and Addiction Only, by RHA of Service, 2012-13

Table 20: Distribution of General Hospital Mental Illness/Addiction Admission, by Concurrent, Mental Illness Only and Addiction Only, by Facility, 2012-13

RHA	Facility	Concurrent	Mental Health	Addictions
	Bonavista Peninsula Health Centre	0	90.9	9.1
	Burin Peninsula Health Care Centre	28.6	65.1	6.3
	Carbonear General Hospital	3.8	69.2	26.9
	Dr. A.A. Wilkinson Memorial Health Centre	0	66.7	33.3
	Dr. G.B Cross Memorial Hospital	0	54.5	45.5
Eastern	Dr. Walter Templeman Community Health Centre	N/A	N/A	N/A
	General Hospital, Health Sciences Centre	7.6	78.5	13.9
	Janeway Children's Health and Rehabilitation Centre	5.6	91.7	2.8
	Placentia Health Centre	0	100	0
	St. Clare's Mercy Hospital	9.2	31.2	59.6
	A.M. Guy Memorial Health Centre	N/A	N/A	N/A
	Baie Verte Peninsula Health Centre	0	100	0
	Brookfield/ Bonnews Health Centre	0	100	0
	Central Newfoundland Regional Health Centre	16.8	73.1	10.1
Central	Connaigre Peninsula Health Centre	5.0	65.0	30.0
	Fogo Island Health Centre	20.0	80.0	0.0
	Green Bay Community Health Centre	0	77.8	22.2
	James Paton Memorial Hospital	6.1	84.8	9.1
	Notre Dame Bay Memorial Health Centre	0	100	0.0
	Bonne Bay Health Centre	0	100	0
	Calder Health Centre	0	100	0
Western	Dr. Charles L. LeGrow Health Centre	4.0	72.0	24.0
Western	Rufus Guinchard Health Care Centre	16.7	66.7	16.7
	Sir Thomas Roddick Hospital	17.2	74.2	8.6
	Western Memorial Regional Hospital	19.6	73.9	6.5
	Captain William Jackman Memorial Hospital	8.8	61.8	29.4
	Cartwright Community Clinic	0	100	0
	Hopedale Community Clinic	0	100	0
Lab- Grenfell	Labrador Health Centre	7.6	72.4	20.0
	Labrador South Health Centre	20.0	80.0	0.0
	Makkovik Community Clinic	N/A	N/A	N/A
	Nain Community Clinic	N/A	N/A	N/A
	Strait of Belle Isle Health Centre	0	100	0
	The Charles S. Curtis Memorial Hospital	0	77.8	22.2
	White Bay Central Health Centre	0	66.7	33.3

[&]quot;N/A" indicates the facility did not have any mental health and addictions hospitalizations in 2012-13.

Psychiatric Hospitals

See methodological notes page 133

This indicator captures the distribution of all psychiatric hospital admissions with a most responsible diagnosis of mental illness and addiction hospitalizations among the categories of concurrent conditions, mental illness only and addictions only. In the Waterford Hospital, mental illness only hospitalizations account for the majority of all mental health and addictions hospitalizations. Addiction only hospitalizations account for the lowest percentage.

Table 21: Distribution of Psychiatric Hospital Mental Illness/Addiction Admission, by Concurrent,
Mental Illness Only and Addiction Only, by Facility, 2012-13

	Concurrent		Mental Illness Only		Addiction Only	
Facility	Number of Hospitalizations	%	Number of Hospitalizations	%	Number of Hospitalizations	%
Waterford Hospital	182	18.9	688	71.4	94	9.8

See methodological notes page 135

Non MH&A Hospitalizations with MH&A as Secondary Diagnoses

Figure 17 presents the proportion of all inpatient hospitalizations with a most responsible diagnosis other than mental health and addictions conditions in which the patient also had a diagnosis of mental illness or addictions. Males experience the highest percentage of non-mental health and addictions hospitalizations with secondary mental health and addictions diagnoses in all health regions. Overall, Western Health had the highest proportion of non-mental health and addictions hospitalizations with secondary mental health and addictions diagnoses. Results by facility are presented in Table 22.

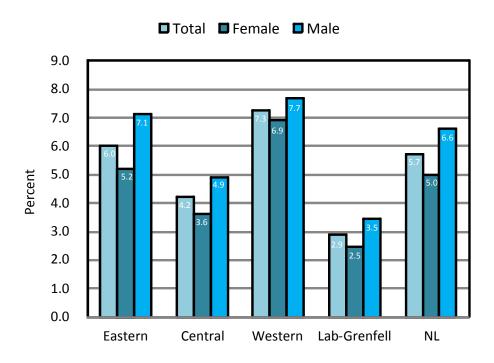


Figure 17

Non-Mental Health and Addiction Hospitalizations with Secondary Mental Health and Addiction

Diagnosis, by RHA of Service, by Sex, 2012-13

Table 22: Non-Mental Health and Addiction Hospitalizations with Secondary Mental Health and Addiction Diagnosis, by Facility, by age and sex 2012-13

RHA	Facility	Total (%)	Female (%)	Male (%)
	Bonavista Peninsula Health Centre	9.4	12.2	6.3
	Burin Peninsula Health Care Centre	8.8	9.2	8.4
	Carbonear General Hospital	4.2	3.9	4.5
	Dr. A.A. Wilkinson Memorial Health Centre	2.4	4.6	0
	Dr. G.B Cross Memorial Hospital	3.8	2.8	5.4
Eastern	Dr. Walter Templeman Community Health Centre	10.0	11.6	7.4
	General Hospital, Health Sciences Centre	5.2	4.2	6.8
	Janeway Children's Health and Rehabilitation Centre	5.6	6.4	4.7
	Placentia Health Centre	1.4	1.7	1.1
	St. Clare's Mercy Hospital	8.3	7.6	9.1
	Waterford Hospital	5.9	5.2	6.4
	A.M. Guy Memorial Health Centre	6.5	0	9.5
	Baie Verte Peninsula Health Centre	6.3	3.7	9.3
	Brookfield/ Bonnews Health Centre	3.6	4.3	2.8
	Central Newfoundland Regional Health Centre	3.6	3.4	4.0
Central	Connaigre Peninsula Health Centre	3.9	5.3	2.6
	Fogo Island Health Centre	2.3	1.0	4.2
	Green Bay Community Health Centre	6.2	5.7	7.0
	James Paton Memorial Hospital	5.3	4.0	7.2
	Notre Dame Bay Memorial Health Centre	1.0	1.0	0.9
	Bonne Bay Health Centre	11.5	16.4	7.2
	Calder Health Centre	1.4	2.3	0.0
Western	Dr. Charles L. LeGrow Health Centre	7.0	6.0	8.1
western	Rufus Guinchard Health Care Centre	8.7	5.4	13.7
	Sir Thomas Roddick Hospital	12.5	13.1	12.0
	Western Memorial Regional Hospital	6.2	5.8	6.5
	Captain William Jackman Memorial Hospital	3.5	2.1	5.3
	Cartwright Community Clinic	0	0	0
	Hopedale Community Clinic	4.0	6.5	0
	Labrador Health Centre	3.4	2.5	5.4
Lab-Grenfell	Labrador South Health Centre	0.9	0	1.8
Lab-Greinell	Makkovik Community Clinic	0	0	0
	Nain Community Clinic	5.0	9.1	0
	Strait of Belle Isle Health Centre	1.6	3.0	0
	The Charles S. Curtis Memorial Hospital	2.5	2.6	2.3
	White Bay Central Health Centre	2.2	2.4	1.9

Unintentional Overdose Hospitalizations

See methodological notes page 136

The overdose hospitalization rate measures the rate of hospitalizations with a most responsible diagnosis of unintentional overdose per 100,000 population. In NL, the unintentional overdose hospitalization rate was 28.0 per 100,000 population in 2012-13. Regional rates varied from 23.3 per 100,000 in Central Health to 30.1 per 100,000 in Eastern Health.

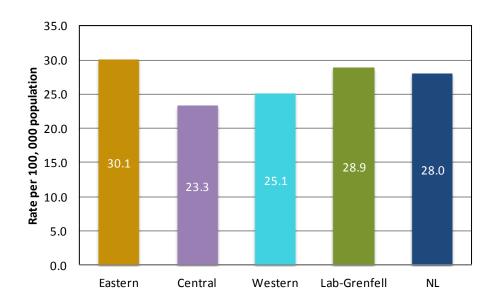


Figure 18
Unintentional Overdose Hospitalization Rate per 100,000 Population, by RHA of Service, 2012-13

Data Source: NLCHI Clinical Database Management System 2012-13; Statistics Canada Population Estimates 2012

Inflow/Outflow

See methodological notes page 137

This indicator captures the ratio of the number of hospitalizations for all mental illness and addictions within a given region to the number of hospitalizations for mental illness and addictions generated by residents of that region. Labrador-Grenfell Health had the lowest ratio meaning this region has the most outflow of patients to receive service in another RHA.

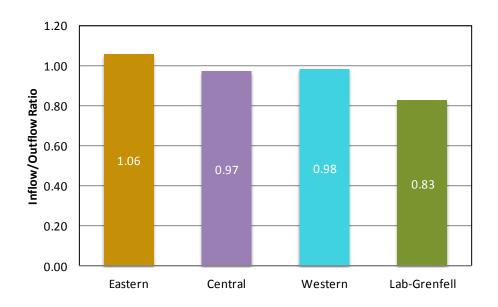


Figure 19
Inflow/Outflow rate, Mental Illness and Addictions Hospitalizations, by RHA of Residence, 2012-13

Efficiency Indicators

ALC Days

See methodological notes page 138

The figure below presents the proportion of total length of stay that are alternate level care (ALC) days for all mental health and addictions hospitalizations. ALC days are those when a patient is occupying an acute care bed and waiting to receive an alternate level of care, such as long term care. For this indicator a low percentage is favorable. Labrador-Grenfell Health has the lowest proportion of ALC days; Central Health has the highest. Results by facility are presented in Table 23.

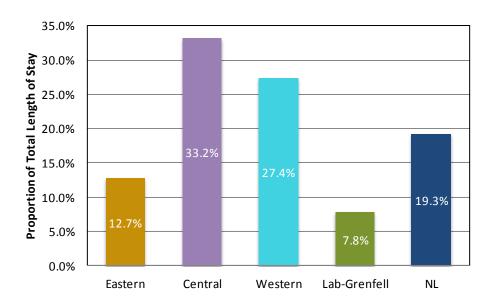


Figure 20
Proportion of Total Length of Stay that are Alternate Level Care Days for Mental Health and Addictions Hospitalizations, by RHA of Service, 2012-13

Table 23: Proportion of Total Length of Stay that are Alternate Level Care Days for Mental Health and Addictions Hospitalizations, by Facility, 2012-13

RHA	Facility	ALC Days (%)
Eastern	Bonavista Peninsula Health Centre	10.3
	Burin Peninsula Health Care Centre	42.7
	Carbonear General Hospital	33.3
	Dr. A.A. Wilkinson Memorial Health Centre	
	Dr. G.B Cross Memorial Hospital	24.5
	Dr. Walter Templeman Community Health Centre	N/A
	General Hospital, Health Sciences Centre	12.5
	Janeway Children's Health and Rehabilitation Centre	0
	Placentia Health Centre	30.9
	St. Clare's Mercy Hospital	46.4
	Waterford Hospital	9.0
	A.M. Guy Memorial Health Centre	N/A
	Baie Verte Peninsula Health Centre	
	Brookfield/ Bonnews Health Centre	0
	Central Newfoundland Regional Health Centre	20.2
Central	Connaigre Peninsula Health Centre	0
	Fogo Island Health Centre	0
	Green Bay Community Health Centre	29.2
	James Paton Memorial Hospital	83.3
	Notre Dame Bay Memorial Health Centre	72.4
	Bonne Bay Health Centre	
	Calder Health Centre	0
Western	Dr. Charles L. LeGrow Health Centre	63.1
western	Rufus Guinchard Health Care Centre	0
	Sir Thomas Roddick Hospital	19.0
	Western Memorial Regional Hospital	26.4
	Captain William Jackman Memorial Hospital	0
	Cartwright Community Clinic	0
	Hopedale Community Clinic	0
	Labrador Health Centre	14.0
Lab-Grenfell	Labrador South Health Centre	0
	Makkovik Community Clinic	N/A
	Nain Community Clinic	N/A
	Strait of Belle Isle Health Centre	0
	The Charles S. Curtis Memorial Hospital	5.6
	White Bay Central Health Centre	0

Data Source: NLCHI Clinical Database Management System 2012-13

N/A" indicates the facility did not have any mental health and addictions hospitalizations in 2012-13.

Nursing Worked Hours per Inpatient Day



Figure 21 and Table 24 present the number of nursing worked hours per day on psychiatric inpatient units. This indicator is calculated only for facilities with dedicated Mental Health and Addictions inpatient units. The number of nursing worked hours on psychiatric inpatient units ranged from 9.0 hours per day in Eastern Health to 5.8 hours per day in Central Health. Note: The nurse to patient ratio at the Janeway would appear to be significantly higher than other facilities (22.4 hours per inpatient day 2012-13).

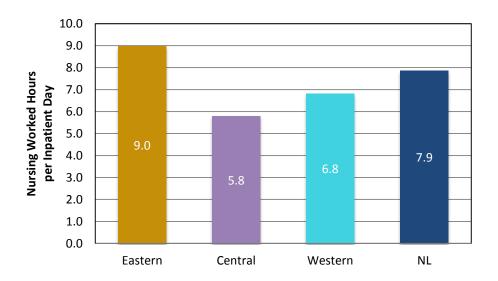


Figure 21
Nursing Worked Hours per Inpatient Day on a Psychiatric Nursing Unit, by RHA of Service, 2012-13

Table 24: Nursing Worked Hours per Inpatient Day on a Psychiatric Nursing Unit, by RHA, 2012-13 by Facility, 2012-13

RHA	Facility	Hours per Inpatient Day	
Eastern	General Hospital, Health Sciences Centre	7.3	
	Janeway Children's Health and Rehabilitation Centre	22.4	
	Waterford Hospital	7.8	
Central	Central Newfoundland Regional Health Centre	5.8	
Western	Western Memorial Regional Hospital	6.8	

Data Source: Provincial MIS Database 2012-13

Spending

Spending Indicators

Spending

Spending

The spending indicators that are contained within this report relate to the operating and direct client costs incurred by the regional health authorities in the delivery of programs and services. While regional health authority programs and services comprise a significant portion of provincial spending in the area of mental health and addictions, there are additional costs which fall outside the scope of this report such as grants provided to community agencies, costs of drugs covered under the Newfoundland and Labrador Prescription Drug Program, and costs associated with out of province treatment services.

<u>Direct Operating Expense to Total RHA Operating Expense</u>

See methodological notes page 141

This indicator reports the percentage of the total direct operating expenditures related to mental health and addictions services. From 2008-09 to 2012-13, the proportion of direct operating expenses spent on mental health and addictions programs and services increased each year for an overall increase of 0.75% provincially. All regions had increased spending in this area. Actual expenditures are reported in Table 25.

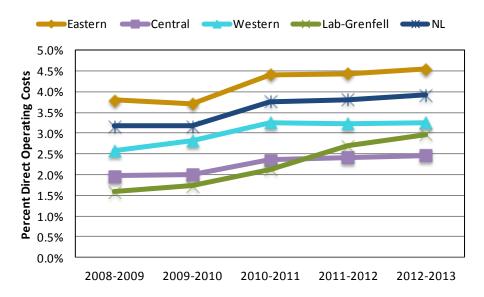


Figure 22

Mental Health & Addictions Direct Operating Expenses to Total Direct Operating Expenses, by RHA of Service, 2008-09 to 2012-13

Table 25: Mental Health & Addictions Direct Operating Expenses, by RHA of Service, 2008-09 to 2012-13

RHA of Service	Mental Health and Addictions Programs/Services Direct Operating Expenses					
	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	
Eastern	\$43,155,687	\$47,284,761	\$56,741,767	\$60,093,734	\$62,396,773	
Central	\$5,302,981	\$6,066,800	\$7,305,129	\$8,012,024	\$8,269,099	
Western	\$7,015,268	\$8,447,863	\$10,170,644	\$10,625,868	\$10,840,949	
Lab-Grenfell	\$2,389,319	\$2,863,846	\$3,304,436	\$4,598,678	\$5,008,310	
NL	\$57,863,255	\$64,663,272	\$77,521,972	\$83,330,309	\$86,515,129	

Data Source: Provincial MIS Database 2008-09 to 2012-13



<u>Hospital Based MH&A Services Direct Operating Expense to Total RHA</u> <u>Operating Expense</u>

The percentage of the total operating expenses related to hospital based mental health and addictions services has fluctuated provincially with an overall decrease of less than 1% from 2008-09 to 2012-13 although total spending over this period increased by approximately \$380,000. Actual expenditures are reported in Table 26.

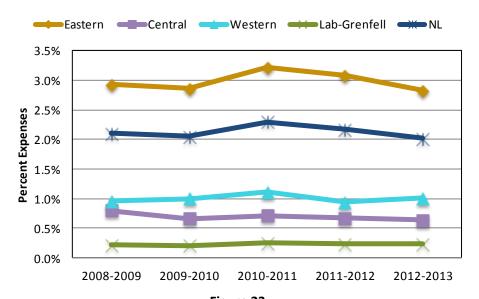


Figure 23

Total Hospital based Mental Health and Addictions Services Direct Operating Expenses/Total RHA

Operating Expenses, by RHA of Service, 2008-09 to 2012-13

Table 26: Total Hospital based Mental Health and Addictions Services Direct Operating Expenses, by RHA of Service, 2008-09 to 2012-13

RHA of Service	Hospital based Mental Health and Addictions Services Direct Operating Expenses				
	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Eastern	\$33,211,855	\$36,384,158	\$41,318,699	\$41,682,733	\$38,723,780
Central	\$2,158,659	\$1,999,175	\$2,181,809	\$2,222,646	\$2,134,876
Western	\$2,596,226	\$3,001,027	\$3,461,076	\$3,103,599	\$3,356,277
Lab-Grenfell	\$325,347	\$344,214	\$387,126	\$400,837	\$394,008
NL	\$38,292,087	\$41,728,574	\$47,348,710	\$47,409,816	\$44,608,941

Data Source: Provincial MIS Database 2008-09 to 2012-13



<u>Community MH&A Services Direct Operating Expense to Total RHA Operating Expense</u>

The percentage of the total operating expense related to community mental health and addictions services increased from 2008-09 to 2012-13 in all regional health authorities. Actual expenditures are reported in Table 27.

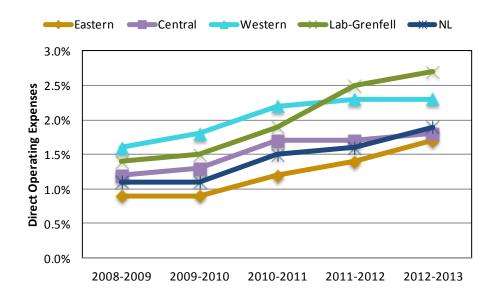


Figure 24
Proportion of Community Mental Health and Addictions Services Direct Operating Expense to Total
RHA Operating Expense, by RHA of Service, 2008-09 to 2012-13

Table 27: Community Mental Health and Addictions Services Direct Operating Expense, by RHA of Service, 2008-09 to 2012-13

RHA of Service	Community Mental Health and Addictions Services Direct Operating Expense					
	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	
Eastern	\$9,943,832	\$10,900,603	\$15,423,069	\$18,411,001	\$23,672,992	
Central	\$3,144,323	\$4,067,624	\$5,123,318	\$5,789,378	\$6,134,223	
Western	\$4,419,042	\$5,446,838	\$6,709,567	\$7,522,270	\$7,484,671	
Lab-Grenfell	\$2,063,972	\$2,519,631	\$2,917,310	\$4,197,842	\$4,614,301	
NL	\$19,571,168	\$22,934,695	\$30,173,264	\$35,920,492	\$41,906,188	

Direct Cost of MH&A Programs/Services per capita

See methodological notes page 148

The per capita spending on mental health and addictions programs and services has increased annually since 2008-09 across all regional health authorities. This includes hospital and community based services expenditures. Actual expenditures are reported in Table 28.

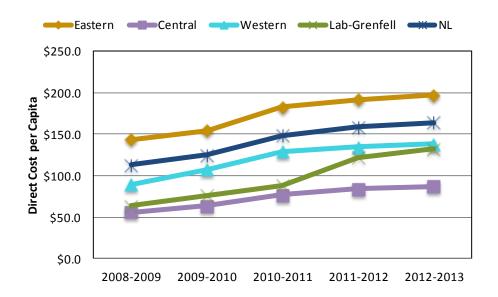


Figure 25
Direct Operating Cost of RHA Mental Health and Addictions Specific Programs and Services per capita, by RHA of Service, 2008-09 to 2012-13

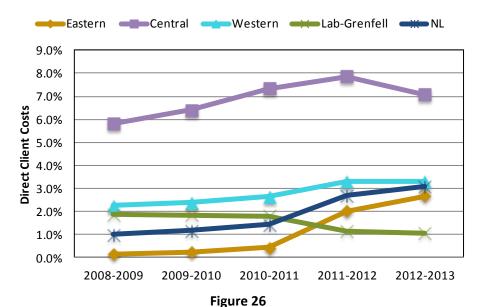
Table 28: Direct Operating Cost of RHA Mental Health and Addictions Specific Programs and Services per capita, by RHA of Service, 2008-09 to 2012-13

RHA of Service	Direct Cost of Mental Health and Addictions Programs/Services per capita					
	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	
Eastern	\$143.37	\$154.70	\$182.79	\$191.60	\$197.52	
Central	\$55.99	\$63.83	\$76.71	\$84.38	\$87.34	
Western	\$89.50	\$107.53	\$129.03	\$134.87	\$138.19	
Lab-Grenfell	\$63.83	\$76.41	\$88.13	\$122.12	\$132.46	
NL	\$113.12	\$125.14	\$148.52	\$158.71	\$164.21	



Direct Client Costs to Total MH&A Programs/Services Operating Expense

Direct client costs are consumable supplies or other expenses that can be directly associated with a particular service, procedure or drug intervention; traced to a particular service recipient. Examples include residential and living expenses, recreation fees, home support payments, etc made to or on behalf of a client. The percentage of the total operating expense for mental health and addictions programs/services attributed to direct client costs in the community has increased by approximately 2% from 2008-09 to 2012-13 provincially and in the regional health authorities with the exception of Labrador-Grenfell Health. Labrador-Grenfell Health has had an overall decrease of 0.81% over this period. Central Health has a higher proportion of direct client costs to total operating expenses for mental health and addictions programs and services than the other regions. Actual expenditures are reported in Table 29.



Community Direct Client Costs to Total Operating Expense, Mental Health and Addictions Programs/Services, by RHA of Service, 2008-09 to 2012-13

Table 29: Community Direct Client Expenditures, Mental Health and Addictions Programs/Services, by RHA of Service. 2008-09 to 2012-13

RHA of Service	Direct Client Expenditures							
	2008-2009	2008-2009 2009-2010 2010-2011 2011-2012 2012-2013						
Eastern	\$60,242	\$109,866	\$247,981	\$1,209,533	\$1,658,176			
Central	\$308,459	\$389,295	\$535,558	\$630,211	\$584,957			
Western	\$158,330	\$200,803	\$268,134	\$348,158	\$357,297			
Lab-Grenfell	\$44,498	\$52,756	\$59,128	\$52,920	\$52,799			
NL	\$571,529	\$752,721	\$1,110,802	\$2,240,822	\$2,653,230			

Drug Costs per Psychiatric Inpatient Day

See methodological notes page 153

From 2008-09 to 2012-13, drug expenditures per inpatient day in mental health and addictions inpatient nursing units has decreased over the last five years provincially by \$3.71 per inpatient day. In 2012-13, the average cost of drugs per inpatients day was \$6.44. Actual expenditures are reported in Table 30.

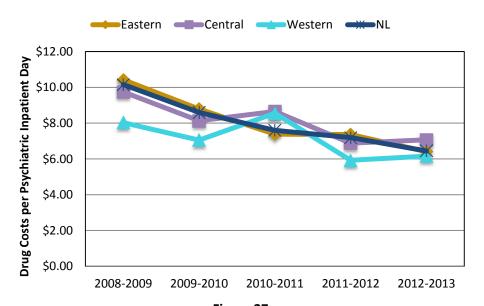


Figure 27

Drug Expenditures per Psychiatric Unit Inpatient Day-Direct Operating Costs Only, by RHA of Service, 2008-09 to 2012-13

Table 30: Drug Expenditures per Psychiatric Unit Inpatient Day-Direct Operating Costs Only, by RHA of Service, 2008-09 to 2012-13

RHA of Service	Direct Client Costs					
	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	
Eastern	\$10.42	\$8.79	\$7.38	\$7.36	\$6.41	
Central	\$9.74	\$8.13	\$8.65	\$6.88	\$7.07	
Western	\$8.03	\$7.05	\$8.55	\$5.92	\$6.16	
NL	\$10.15	\$8.60	\$7.60	\$7.19	\$6.44	

Spending

High Cost Case Mix Groups



Table 31 identifies the five most costly case mix groups (CMG's) for mental illness and addictions hospitalizations for Newfoundland and Labrador. The CMG provides an average resource intensive weight (RIW) which is then multiplied by the cost per weighted case in Newfoundland and Labrador to calculate the estimated cost of a specific case. For 2012-13, the average cost per weighted case in NL was \$6299.00. The results demonstrate how the small volumes of these costly cases have a relatively small impact on the total costs of Mental Illness/Addictions programs and services (2.9%).

Table 31: High Average Cost – Low Volume Case Mix Groups for Mental Illness and Addictions Hospitalizations, NL, 2012-13

Case Mix Group	RIW	Average Cost per CMG	Volume	Total
Bipolar Disorder, Severe Depression	7.14	\$44,974.86	5	\$224,874.30
with ECT				
Bipolar Disorder with ECT	5.70	\$35,904.30	6	\$215,425.80
Schizophrenia with ECT	5.50	\$34,644.50	5	\$173,222.50
Schizoaffective Disorder with ECT	4.24	\$26,707.76	3	\$80,123.28
Depressive Episode with ECT	4.08	\$25,699.92	69	\$1,773,294.48
	•		Total	\$2,466,940.36

Table 32 illustrates how cases with lower RIWs but higher total volumes impact program spending. This indicator identifies the five case mix groups that have the greatest impact on overall spending, representing 16.8% of the total expenses of mental health and addictions programs and services.

Table 32: Low Average Cost – High Volume Case Mix Groups for Mental Illness and Addictions Hospitalizations, NL, 2012-13

Case Mix Group	RIW	Average Cost per CMG	Volume	Total
Dementia	3.35	\$21,101.65	132	\$2,785,417.80
Organic Mental Disorder	2.67	\$16,818.33	107	\$1,799,561.31
Schizophrenia without ECT	2.54	\$15,999.46	177	\$2,831,904.42
Bipolar Disorder without ECT	1.96	\$12,346.04	225	\$2,777,859.00
Depressive Episode without ECT	1.25	\$7,873.75	550	\$4,330,562.50
	•		Total	\$14,525,305.03

Data Source: Canadian MIS Database 2012-13 and NLCHI Clinical Database Management System 2012-13

Spending

Health Outcomes

Suicide



The crude suicide rate captures the number of deaths due to intentional self-injury per 100,000 population aged ten years and older. In 2009, the overall rate of suicide in Newfoundland and Labrador was 10.7 per 100,000 population. The highest rate was observed in Labrador-Grenfell Health (24.1 per 100,000 population). Eastern Health had the lowest rate of suicide (8.3 per 100,000 population).

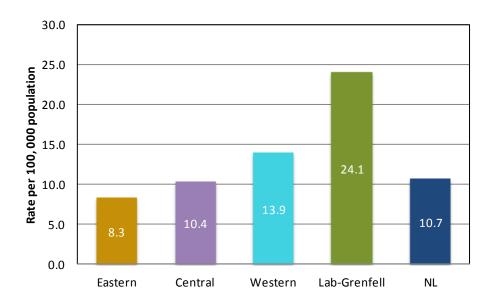


Figure 28
Rate of Suicide per 100,000 Population, Aged 10 Years or Older, by RHA of Residence, 2009

Data Source: NLCHI Suicide Database 2009

Potential Years of Life Lost due to Suicide

See methodological notes page 156

Potential years of life lost (PYLL) refers to the total number of years of life 'lost' when a person dies prematurely (before age 75). In 2009, the rate of PYLL due to suicide in Newfoundland and Labrador was 335.7 per 100,000 population. This means that for every 100,000 population aged 10 to 74 there is a potential of 337.7 years lost prematurely to suicide. Labrador-Grenfell had a rate of PYLL due to suicide that was three times higher than the other regional health authorities. This is a reflection of the younger age of individuals from Labrador-Grenfell Health who died from suicide compared to the other regions.

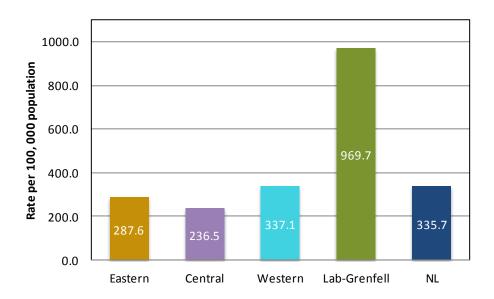


Figure 29
Potential Years of Life Lost (PYLL) due to Suicide Deaths per 100,000 Population, Aged 10 Years or Older, by RHA of Residence, 2009

Data Source: NLCHI Suicide Database 2009

Intentional Self-Injury Hospitalizations

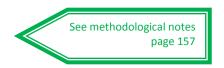


Figure 30 presents the rate of intentional self-injury hospitalization per 100,000 population. For this indicator, lower rates are desirable. Central had the lowest rate in the province (51.4 per 100,000); the highest was in Labrador-Grenfell Health (214.9 per 100,000 population).

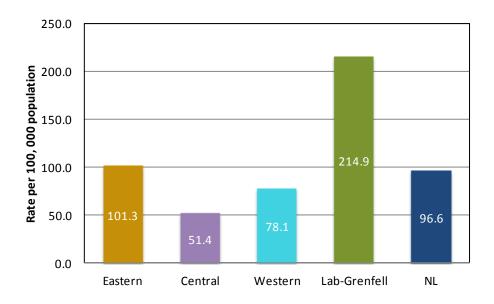


Figure 30

Rate of Intentional Self-Injury Hospitalizations per 100,000 Population, Aged 15 Years or Older, by RHA of Residence, 2012-13

Data Source: NLCHI Clinical Database Management System 2012-13

Perceived Mental Health Status

See methodological notes page 158

The perceived mental health status indicator presents the proportion of the population aged 12 years and older reporting their own mental health status as 'very good' or 'excellent.' Provincially, 73.4% of the population reported excellent or very good mental health status. Regional variations ranged from 71.8% in Western Health to 79.5% in Labrador-Grenfell Health.

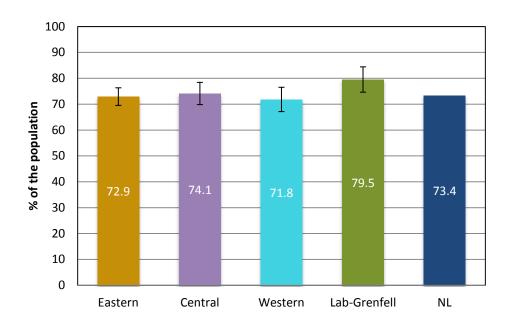


Figure 31

Percentage of the population aged 12 years and older who reported perceiving their own mental health status as being "excellent or very good," by RHA of Residence, 2011-12

Note: This graph presents the 95% confidence intervals (indicated by black bars) associated with these estimates. Differences between groups (i.e. health regions) were considered meaningful, or statistically significant, if their confidence intervals did not overlap.

Data Source: Statistics Canada, Canadian Community Health Survey, Share File, 2011-12

Prevalence of Mood Disorders



In 2011-12, seven percent of the provincial population aged 12 years and older reported that they have been diagnosed with a mood disorder such as depression, bipolar disorder, mania or dysthymia (Figure 5). Central Health and Western Health residents reported the lowest percentage of mood disorders (3.9%). This was significantly lower than Eastern Health residents (8.5%).

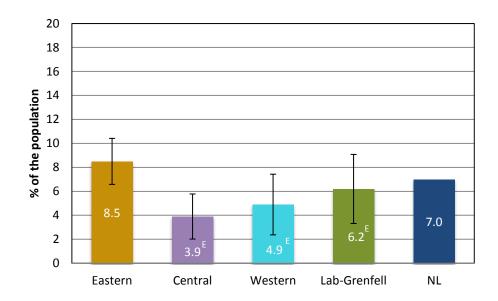


Figure 32

Percentage of the population aged 12 years and older who reported that they had been diagnosed by a health professional as having a mood disorder, RHA of Residence, 2011-12

Note: This graph presents the 95% confidence intervals (indicated by black bars) associated with these estimates. Differences between groups (i.e. health regions) were considered meaningful, or statistically significant, if their confidence intervals did not overlap.

Data with a coefficient of variation (CV) from 16.6% to 33.3% are identified by an (E) and should be interpreted with caution.

Data Source: Statistics Canada, Canadian Community Health Survey, Share File, 2011-12

Appendix A	A –Indicator Descri	ptions and Meth	nodological No	tes

Population Estimate	Population Estimates				
Description	Total estimated population for the province and RHAs				
Inclusions/Exclusions	Inclusion Criteria: Residents of Newfoundland and Labrador Exclusion Criteria: Non-residents of Newfoundland and Labrador				
Time Frame	2013				
Source	Statistics Canada, Population Estimates 2013				
Notes	These estimates are based on the 2006 Census counts adjusted for census net undercoverage (including adjustment for incompletely enumerated Indian reserves and population reviews).				

Population Distribu	Population Distribution, Age Groups			
Description	Total estimated population for the province and RHAs, expressed as a percentage by age group			
Inclusions/Exclusions	Inclusion Criteria: Residents of Newfoundland and Labrador Exclusion Criteria: Non-residents of Newfoundland and Labrador			
Time Frame	2013			
Source	Statistics Canada, Population Estimates 2013			
Notes	These estimates are based on the 2006 Census counts adjusted for census net undercoverage (including adjustment for incompletely enumerated Indian reserves and population reviews).			

Population Distribu	Population Distribution, Sex			
Description	Total estimated population for the province and RHAs, expressed as a percentage by sex			
Inclusions/Exclusions	Inclusion Criteria: Residents of Newfoundland and Labrador Exclusion Criteria: Non-residents of Newfoundland and Labrador			
Time Frame	2013			
Source	Statistics Canada, Population Estimates 2013			
Notes	These estimates are based on the 2006 Census counts adjusted for census net undercoverage (including adjustment for incompletely enumerated Indian reserves and population reviews).			

Population Distribu	tion, Rural/Urban
Description	Total estimated population for the province and RHAs, expressed as a percentage by Rural/Urban
Inclusions/Exclusions	Inclusion Criteria: Residents of Newfoundland and Labrador Exclusion Criteria: Non-residents of Newfoundland and Labrador
Time Frame	2013
Source	Statistics Canada, Population Estimates 2013, Rural and Small Town Canada Analysis Bulleting, Vol.3, No. 3 (November 2001) Catalogue no. 21-006-XIE
Notes	 Urban is defined as Census Metropolitan Areas (CMAs) and Census Agglomerations (CAs). CMAs have an urban core population of 50,000 or more with a total population of 100,000 or more and CAs have an urban core population of 10,000 or more with a total population of less than 100,000. Rural areas refer to non-CMA/CA areas. These estimates are based on the 2006 Census counts adjusted for census net undercoverage (including adjustment for incompletely enumerated Indian reserves and population reviews).

Percentage of the F	Percentage of the Population who are Heavy Drinkers				
Description	Percentage of the population age 12 years and older who reported drinking 5 or more drinks on at least one occasion per month in the past year.				
Inclusions/Exclusions	 Inclusion Criteria: Age 12 and older Survey respondents who have agreed to allow Statistics Canada to share their responses with their Ministry of Health Exclusion Criteria: The CCHS covers the population 12 years of age and over living in the ten provinces and the three territories. Excluded from the survey's coverage are: persons living on reserves and other Aboriginal settlements in the provinces; full-time members of the Canadian Forces; the institutionalized population and persons living in the Quebec health regions of Région du Nunavik and Région des Terres-Cries-de-la-Baie-James. Altogether, these exclusions represent less than 3% of the target population. 				
Time Frame	2011-12				
Source	Canadian Community Health Survey, Share file.				
Notes	 Data have been statistically weighted to represent the population of Newfoundland and Labrador age 12 years and older. Data with a coefficient of variation (CV) from 16.6% to 33.3% are identified by an (E) and should be interpreted with caution. Data with a coefficient of variation greater than 33.3% were suppressed (F) due to extreme sampling variability. 				

Percentage of the P	Opulation who are Current Smokers
Description	Percentage of the population age 12 years and older who report that they are a current (occasional/daily) smoker.
Inclusions/Exclusions	 Inclusion Criteria: Age 12 and older Survey respondents who have agreed to allow Statistics Canada to share their responses with their Ministry of Health Exclusion Criteria: The CCHS covers the population 12 years of age and over living in the ten provinces and the three territories. Excluded from the survey's coverage are: persons living on reserves and other Aboriginal settlements in the provinces; full-time members of the Canadian Forces; the institutionalized population and persons living in the Quebec health regions of Région du Nunavik and Région des Terres-Cries-de-la-Baie-James. Altogether, these exclusions represent less than 3% of the target population.
Time Frame	2011-12
Source	Canadian Community Health Survey, Share file
Notes	 Data have been statistically weighted to represent the population of Newfoundland and Labrador age 12 years and older. Data with a coefficient of variation (CV) from 16.6% to 33.3% are identified by an (E) and should be interpreted with caution. Data with a coefficient of variation greater than 33.3% were suppressed (F) due to extreme sampling variability. Current smokers include both daily and occasional smokers. Occasional smokers refer to those who report smoking cigarettes occasionally. This includes former daily smokers who now smoke occasionally. Does not take into account the number of cigarettes smoked.

Percentage of Population who are Inactive During Leisure Time	
Description	Percentage of the population age 12 years and older who are classified as inactive.
Inclusions/Exclusions	 Inclusion Criteria: Age 12 and older Survey respondents who have agreed to allow Statistics Canada to share their responses with their Ministry of Health Exclusion Criteria: The CCHS covers the population 12 years of age and over living in the ten provinces and the three territories. Excluded from the survey's coverage are: persons living on reserves and other Aboriginal settlements in the provinces; full-time members of the Canadian Forces; the institutionalized population and persons living in the Quebec health regions of Région du Nunavik and Région des Terres-Cries-de-la-Baie-James. Altogether, these exclusions represent less than 3% of the target population.
Time Frame	2011-12
Source	Canadian Community Health Survey, Share file
Notes	 Data have been statistically weighted to represent the population of Newfoundland and Labrador age 12 years and older. Data with a coefficient of variation (CV) from 16.6% to 33.3% are identified by an (E) and should be interpreted with caution. Data with a coefficient of variation greater than 33.3% were suppressed (F) due to extreme sampling variability. Physical activity is a derived variable based on a series of questions regarding physical activity. Respondents are classified as active, moderately active, or inactive based on the total daily Energy Expenditures (kcal/kg/day) calculated. Respondents are classified as follows: 3.0 kcal/kg/day or more = physically active; 1.5 to 2.9 kcal/kg/day = moderately active; less than 1.5 kcal per day = inactive.

April 2015 (Revised September 2015)

Percentage of the A	Adult Population (18+) who are Obese (BMI 30+)
Description	Percentage of the population with a body mass index (BMI) of 30.0 or greater.
Calculation	Body mass index (BMI) is calculated by dividing the respondent's body weight (in kilograms) by their height (in metres) squared. Height and weight are self-reported by the respondent.
Inclusions/Exclusions	 Inclusion Criteria: Age 18 and over. Survey respondents who have agreed to allow Statistics Canada to share their responses with their Ministry of Health. Exclusion Criteria: The CCHS covers the population 12 years of age and over living in the ten provinces and the three territories. Excluded from the survey's coverage are: persons living on reserves and other Aboriginal settlements in the provinces; full-time members of the Canadian Forces; the institutionalized population and persons living in the Quebec health regions of Région du Nunavik and Région des Terres-Cries-de-la-Baie-James. Altogether, these exclusions represent less than 3% of the target population The index is calculated for the population age 18 and over, excluding pregnant females and persons less than 3 feet tall or greater than 6 feet 11 inches.
Time Frame	2011-12
Source	Canadian Community Health Survey, Share file.
Notes	 Data have been statistically weighted to represent the population of Newfoundland and Labrador age 12 years and older. Data with a coefficient of variation (CV) from 16.6% to 33.3% are identified by an (E) and should be interpreted with caution. Data with a coefficient of variation (CV) greater than 33.3% were suppressed (F) due to extreme sampling variability. Body Mass Index (BMI) is method of classifying body weight according to health risk. According to the World Health Organization (CHO) and Health Canada guidelines, health risk levels are associated with each of the following BMI categories: normal weight (BMI 18.50 to 24.99) = least health risk; underweight (BMI less than 18.50) and overweight (BMI 25.00 to 29.99) = increased health risk; obese, class I (BMI 30.00 to 34.99) = high health risk; obese, class II (BMI 35.00 to 39.99) = very high health risk; obese, class III (BMI 40.00 or greater) = extremely high health risk.

Mental Health and Addictions Programs Performance Indicators April 2015 (Revised September 2015)

Prevalence of Mood Disorder	
Description	Percentage of the population age 12 and over who reported that they have been diagnosed by a health professional as having a mood disorders such as depression, bipolar disorder, mania or dysthymia.
Inclusions/Exclusions	 Inclusion Criteria: Age 12 and older Survey respondents who have agreed to allow Statistics Canada to share their responses with their Ministry of Health Exclusion Criteria:
	The CCHS covers the population 12 years of age and over living in the ten provinces and the three territories. Excluded from the survey's coverage are: persons living on reserves and other Aboriginal settlements in the provinces; full-time members of the Canadian Forces; the institutionalized population and persons living in the Quebec health regions of Région du Nunavik and Région des Terres-Cries-de-la-Baie-James. Altogether, these exclusions represent less than 3% of the target population.
Time Frame	2011-12.
Source	Canadian Community Health Survey, Share file.
Notes	 Data have been statistically weighted to represent the population of Newfoundland and Labrador age 12 years and older. Data with a coefficient of variation (CV) from 16.6% to 33.3% are identified by and (E) and should be interpreted with caution. Data with a coefficient of variation (CV) greater than 33.3% were suppressed (F) due to extreme sampling variability.

Contact with Health Professionals about Mental Health	
Description	Percentage of the population age 12 years and older who report that they have seen a health professional about their mental health in the past 12 months
Inclusions/Exclusions	 Inclusion Criteria: Age 12 and older Survey respondents who have agreed to allow Statistics Canada to share their responses with their Ministry of Health Exclusion Criteria: The CCHS covers the population 12 years of age and over living in the ten provinces and the three territories. Excluded from the survey's coverage are: persons living on reserves and other Aboriginal settlements in the provinces; full-time members of the Canadian Forces; the institutionalized population and persons living in the Quebec
	health regions of Région du Nunavik and Région des Terres-Cries-de-la-Baie-James. Altogether, these exclusions represent less than 3% of the target population.
Time Frame	2011-12.
Source	Canadian Community Health Survey, Share file.
Notes	 Data have been statistically weighted to represent the population of Newfoundland and Labrador age 12 years and older. Data with a coefficient of variation (CV) from 16.6% to 33.3% are identified by an (E) and should be interpreted with caution. Data with a coefficient of variation greater than 33.3% were suppressed (F) due to extreme sampling variability.

30-Day Readmissio	n (Refer to page 13 for results)
Description	Rate of readmission following discharge for mental illness/addiction. A case is counted as a readmission if it is for a selected mental illness/addiction diagnosis and it occurs within 30 days of the index episode of inpatient care.
Calculation	Total number of episodes with a 30-day readmission for selected mental illness/addiction between April 1, 2012 to March 31, 2013 × 100 Total number of episodes of care for selected mental illness/addiction between April 1, 2012 to March 1, 2013 The unit of analysis is an episode of care. An episode of care refers to all contiguous inpatient hospitalizations in general hospitals and psychiatric hospitals and day surgery visits regardless of diagnoses. To construct an episode of care, a transfer is assumed to have occurred if the admission to a general hospital or psychiatric hospital/day surgery facility occurs on the same day as discharge from another general/psychiatric hospital.
Inclusions/Exclusions	Denominator (Index Episode) Description: Number of episodes of care for selected mental illness/addiction. These episodes are identified as follows: Inclusion Criteria: 1. A selected mental illness is coded as the most responsible diagnosis (MRDx) 2. Diagnosis codes for selected mental illness: a) Substance-related disorders: ICD-10-CA: F55, F10 to F19; or b) Schizophrenia, delusional and non-organic psychotic disorders: ICD-10-CA: F20 (excluding F20.4), F22, F23, F24, F25, F28, F29, F53.1; or c) Mood/affective disorders: ICD-10-CA: F30, F31, F32, F33, F34, F38, F39, F53.0; or d) Anxiety disorders: ICD-10-CA: F40, F41, F42, F43, F48.8, F48.9, F93.8; or e) Selected disorders of adult personality and behaviour: ICD-10-CA: F60, F61, F62, F68, F69, F21. 3. Discharges between April 1 and March 1 of the following year (period of case selection ends on March 1 to allow for 30 days of follow-up) 4. Age at admission is 15 years or older 5. Sex recorded as male or female 6. Admission to a general hospital/psychiatric hospital 7. Newfoundland and Labrador resident Exclusion Criteria: 1. Records with an invalid health card number 2. Records with an invalid admission date 4. Records with an invalid discharge date 5. Discharged as a death

30-Day Readmission (Refer to page 13 for results)	
	Numerator
	Inclusion Criteria:
	An episode of care is considered a readmission if the two following conditions are met:
	 It has occurred within 30 days of discharge of an index episode; and A diagnosis of mental illness/addiction was recorded (see denominator for criteria to select diagnosis).
Time Frame	April 1, 2012-March 31, 2013
Source	NLCHI Clinical Database Management System
	Interpretation
Notes	Readmission to inpatient care may be an indicator of relapse or complications after an inpatient stay. Inpatient care for people living with a mental illness aims to stabilize acute symptoms. Once stabilized, the individual is discharged, and subsequent care and support are ideally provided through outpatient and community programs in order to prevent relapse or complications. High rates of 30-day readmission could be interpreted as a direct outcome of poor coordination of services and/or an indirect outcome of poor continuity of services after discharge; lower rates are desirable.
	Note *The mental illnesses selected for this indicator are substance-related disorders; schizophrenia, delusional and non-organic psychotic disorders; mood/affective disorders; anxiety disorders; and selected disorders of adult personality and behaviour.
	Mental illnesses not included in this indicator are dementia; organic mental disorders; miscellaneous mental disorders; eating disorders; other behavioural syndromes (excluding harmful use non-dependence substances); gender identity/sexual preference disorders; habit/impulse disorders; somatoform dissociative disorders; mental retardation/disorder of development; childhood/adolescence disorders and mixed disorder of conduct/emotion. Due to these exclusions patients generally admitted to geriatrics and forensic unit Waterford Hospital are excluded.

7-Day Readmission	(Refer to page 15 for results)
Description	Rate of readmission following discharge for mental illness/addiction. A case is counted as a readmission if it is for a selected mental illness/addiction diagnosis and it occurs within 7 days of the index episode of inpatient care.
Calculation	Total number of episodes with a 7-day readmission for selected mental illness/addiction between April 1, 2012 to March 31, 2013 × 100 Total number of episodes of care for selected mental illness/addiction between April 1, 2012 to March 24, 2013 The unit of analysis is an episode of care. An episode of care refers to all contiguous inpatient hospitalizations in general hospitals and psychiatric hospitals and day surgery visits regardless of diagnoses. To construct an episode of care, a transfer is assumed to have occurred if the admission to a general hospital or psychiatric hospital/day surgery facility occurs on the same day as discharge from another general/psychiatric hospital.
Inclusions/Exclusions	Denominator (Index Episode) Description: Number of episodes of care for selected mental illness/addiction. These episodes are identified as follows: Inclusion Criteria: 1. A selected mental illness is coded as the most responsible diagnosis (MRDx) 2. Diagnosis codes for selected mental illness: a) Substance-related disorders: ICD-10-CA: F55, F10 to F19; or b) Schizophrenia, delusional and non-organic psychotic disorders: ICD-10-CA: F20 (excluding F20.4), F22, F23, F24, F25, F28, F29, F53.1; or c) Mood/affective disorders: ICD-10-CA: F30, F31, F32, F33, F34, F38, F39, F53.0; or d) Anxiety disorders: ICD-10-CA: F40, F41, F42, F43, F48.8, F48.9, F93.8; or e) Selected disorders of adult personality and behaviour: ICD-10-CA: F60, F61, F62, F68, F69, F21. 3. Discharges between April 1 and March 24 of the following year (period of case selection ends on March 27 to allow for 7 days of follow-up) 4. Age at admission is 15 years or older 5. Sex recorded as male or female 6. Admission to a general hospital/psychiatric hospital 7. Newfoundland and Labrador resident Exclusion Criteria: 1. Records with an invalid health card number 2. Records with an invalid admission date 4. Records with an invalid admission date 5. Discharged as a death

Mental Health and Addictions Programs Performance Indicators April 2015 (Revised September 2015)

7-Day Readmission (Refer to page 15 for results)	
	Numerator
	Inclusion Criteria:
	An episode of care is considered a readmission if the two following conditions are met:
	 It has occurred within 7 days of discharge of an index episode; and A diagnosis of mental illness/addiction was recorded (see denominator for criteria to select diagnosis).
Time Frame	April 1, 2012-March 31, 2013
Source	NLCHI Clinical Database Management System
	Interpretation Readmission to inpatient care may be an indicator of relapse or complications after an inpatient stay. Inpatient care for people living with a mental illness aims to stabilize acute
	symptoms. Once stabilized, the individual is discharged, and subsequent care and support are ideally provided through outpatient and community programs in order to prevent relapse or complications. High rates of 7-day readmission could be interpreted as a direct outcome of poor coordination of services and/or an indirect outcome of poor continuity of services after discharge; lower rates are desirable.
Notes	Note *The mental illnesses selected for this indicator are substance-related disorders; schizophrenia, delusional and non-organic psychotic disorders; mood/affective disorders; anxiety disorders; and selected disorders of adult personality and behaviour.
	Mental illnesses not included in this indicator are dementia; organic mental disorders; miscellaneous mental disorders; eating disorders; other behavioural syndromes (excluding harmful use non-dependence substances); gender identity/sexual preference disorders; habit/impulse disorders; somatoform dissociative disorders; mental retardation/disorder of development; childhood/adolescence disorders and mixed disorder of conduct/emotion. Due to these exclusions patients generally admitted to geriatrics and forensic unit Waterford Hospital are excluded.

Repeat Hospitalizat	tions (Refer to page 17 for results)
Description	Percentage of patients that had three or more episodes of care for selected mental illness/addiction diagnosis over all those who had at least one episode of care for a selected mental illness/addiction in general hospitals and psychiatric hospitals within a given year.
	Method of Calculation
Calculation	Total number of patients who had at least three episodes of care for selected mental illness/addictions in 2011-12-2012-13 x 100 Total number of patients who had at least one episode of care for selected mental illness/addiction in 2011-12
	The unit of analysis is unique patient.
	Admission to a general hospital or psychiatric hospital/day surgery facility occurs on the same day as discharge from another general/psychiatric hospital.
Inclusions/Exclusions	Denominator (Index Episode) Description: Number of patients with at least one episode of care for mental illness/addiction in 2012-13. An episode of care for mental illness/addiction is identified as follows: Inclusion Criteria: 1. A selected mental illness is coded as the most responsible diagnosis (MRDx) 2. Diagnosis codes for selected mental illness: f) Substance-related disorders: ICD-10-CA: F55, F10 to F19; or g) Schizophrenia, delusional and non-organic psychotic disorders: ICD-10-CA: F20 (excluding F20.4), F22, F23, F24, F25, F28, F29, F53.1; or h) Mood/affective disorders: ICD-10-CA: F30, F31, F32, F33, F34, F38, F39, F53.0; or i) Anxiety disorders: ICD-10-CA: F40, F41, F42, F43, F48.8, F48.9, F93.8; or j) Selected disorders of adult personality and behaviour: ICD-10-CA: F60, F61, F62, F68, F69, F21. 3. Discharges between April 1 and March 31 of the following year 4. Age at admission is 15 years or older 5. Sex recorded as male or female 6. Admission to a general hospital/psychiatric hospital 7. Newfoundland and Labrador resident Exclusion Criteria: 1. Records with an invalid date of birth 3. Records with an invalid admission date 4. Records with an invalid admission date 5. Discharged as a death Numerator Inclusion Criteria:
	Number of unique patients with three or more episodes of care for a mental illness in the

Repeat Hospitaliz	ations (Refer to page 17 for results)
	year. After the first episode of care all individuals have one year of follow-up; the second and other subsequent episodes of care are identified within a year of discharge of the first episode of care. Therefore, two fiscal years (2011-12 and 2012-13) are necessary to obtain the data for the numerator. An episode of care for a mental illness is identified using the same inclusion and exclusion criteria as for the denominator.
Time Frame	April 1, 2011-March 31, 2013
Source	NLCHI Clinical Database Management System
	Interpretation
	This indicator is considered an indirect measure of appropriateness of care, since the need for frequent admission to hospital depends on the person and the type of illness.
	Challenges in getting appropriate care/support in the community and/or the appropriate medication often lead to frequent hospitalizations.
	Variations in this indicator across jurisdictions may reflect differences in the services that help individuals with mental illness remain in the community for a longer period of times without the need for hospitalization.
Notes	This indicator may help to identify a population of frequent users; further investigation could provide a description of the characteristics of this group. Understanding this population can aid in developing/enhancing programs that may prevent the need for frequent re-hospitalization. Lower rates are desirable.
	Note *The mental illnesses selected for this indicator are substance-related disorders; schizophrenia, delusional and non-organic psychotic disorders; mood/affective disorders; anxiety disorders; and selected disorders of adult personality and behaviour.
	Mental illnesses not included in this indicator are dementia; organic mental disorders; miscellaneous mental disorders; eating disorders; other behavioural syndromes (excluding harmful use non-dependence substances); gender identity/sexual preference disorders; habit/impulse disorders; somatoform dissociative disorders; mental retardation/disorder of development; childhood/adolescence disorders and mixed disorder of conduct/emotion. Due to these exclusions patients generally admitted to geriatrics and forensic unit Waterford Hospital are excluded.

Child/Youth Psycho	osis and Personality Disorders Hospitalizations (Refer to page 19 for results)
Description	Proportion (%) of all hospitalizations with a MRDx of a non-organic psychotic or personality disorder who were less than years of age.
Calculation	Method of Calculation Total number of hospitalizations to patients <19 years (child/youth) with a MRDx of non-organic psychotic or personality disorder in 2012-13 x 100 Total number of hospitalizations to patients with a MRDx of non-organic psychotic or personality disorder in 2012-13 The unit of analysis is unique patient.
Inclusions/Exclusions	Denominator Description: Number of inpatient hospitalizations with at least one episode of care for non-organic psychotic/personality disorder in 2012-13. An episode of care for non-organic psychotic /personality disorder is identified as follows: Inclusion Criteria: 1. Non-organic psychotic /personality disorder is coded as the most responsible diagnosis (MRDx) 2. Diagnosis codes for non-organic psychotic /personality disorder:
Time Frame	the time of admission. April 1, 2012-March 31, 2013

Child/Youth Psych	Child/Youth Psychosis and Personality Disorders Hospitalizations (Refer to page 19 for results)	
Source	NLCHI Clinical Database Management System	
Notes	Interpretation Psychosis is a serious medical problem where an individual has difficulty telling the difference between what is real and what is not real. Psychosis often involves delusions or hallucinations. Psychosis is rare before puberty – often beginning in late teens or early 20's. This indicator may help to identify the extent of psychosis in a population not expected to be largely impacted by this condition. Lower rates are desirable. Note *The non-organic psychotic disorders and personality disorders selected for this indicator are: Acute and transient psychotic disorders Other nonorganic psychotic disorders Unspecified nonorganic psychosis Mixed and other personality disorders Enduring personality changes, not attributable to brain damage and disease	
	 Other disorders of adult personality and behaviour Unspecified disorder of adult personality and behaviour Schizotypal disorder 	

Total Adverse Inpat	tient Events (Refer to page 23 for results)
Description	The total number of mental health /addictions hospitalizations involving a reported adverse event, expressed as a rate per 1,000 mental health/addictions hospitalizations.
Calculation	Method of Calculation
	Total number of all mental health/addictions hospitalizations involving post-admission adverse events (patients age 15 and older) × 1,000
	Total mental health/addictions hospitalizations
	The unit of analysis is an episode of care. An episode of care refers to all contiguous inpatient hospitalizations in general or psychiatric hospitals regardless of diagnoses.
	Denominator
	Inclusion Criteria:
	 Diagnosis codes listed in MCC 17 (Major Clinical Category), Mental Diseases and Disorders when coded as the most responsible diagnosis (MRDx) Age at admission is 15 years or older Sex recorded as male or female Admission to a general hospital/psychiatric hospital Newfoundland and Labrador resident
	Exclusion Criteria:
	 Records with an invalid date of birth Records with an invalid admission date Records with an invalid discharge date
	Numerator
Inclusions/Exclusions	Inclusion Criteria:
merasions, Exclusions	An in-hospital adverse event was identified as follows:
	 Diagnosis type 2 (occurring post-admission) and diagnosis code in S00-T98; or diagnosis code: D52.1, D59.0, D59.2, D61.1, D64.2, D68.3, D89.3, E03.2, E06.4, E16.0, E23.1, E24.2, E27.3, E66.1, G04.0, G21.0, G21.1, G24.0, G25.1, G25.4, G25.6 G44.4, G61.1, G62.0, G72.0, H40.6, H91.0, I42.7, I95.2, J70.2, J70.3, J70.4, K85.3, L10.5, L23.3, L24.4, L25.1, L27.0, L43.2, L56.0, L56.1, M10.20, M10.22, M10.24, M10.25, M10.26, M10.27, M10.28, M10.29, M32.0, M34.2, M80.40, M80.42, M80.43, M80.45, M80.46, M80.48, M81.4, M83.5, M87.11, M87.12, M87.15, M87.16, M87.18, N14.0, N14.1, N14.2, R50.2, T80.3, T80.4, T80.5, T80.6, T80.8, T80.9, T88.1, T88.2, T88.3, T88.5, T88.6 and T88.7.
	Exclusion Criteria:
	Adverse events involving outpatient treatment in hospital emergency departments

Total Adverse Inpatient Events (Refer to page 23 for results)		
	2. Adverse events occurring prior to admission	
Time Frame	April 1, 2012-March 31, 2013	
Source	NLCHI Clinical Database Management System	
Notes	Interpretation Adverse event rates are an indicator of the safety of the environments in which services/programs are delivered. Monitoring adverse events rates can highlight possible risks/dangers, can help identify weak or insufficient processes, and is essential for developing and assessing the impact of strategies aimed at reducing harms and improving patient safety. [From: Fraser Health, Mental Health and Addictions Balanced Scorecard: Key Performance Indicator Report 2009/2010.] Lower rates are desirable. Note * The most responsible diagnosis (MRDx) codes used for this indicator are listed in MCC 17, Mental Diseases and Disorders, CIHI CMG+ Grouping Methodology, 2012.	

Drug Events (Refer to page 25 for results)
The number of mental health/addictions hospitalizations involving a reported post-admission adverse drug events (drug effects), expressed as a rate per 1,000 mental health/addictions hospitalizations.
Method of Calculation
Total number of all mental health/addictions hospitalizations involving post-admission adverse drug effects (properly administered, accidental and intentional)
Total mental health/addictions hospitalizations
The unit of analysis is an episode of care. An episode of care refers to all contiguous inpatient hospitalizations in general or psychiatric hospitals regardless of diagnoses.
Denominator
Inclusion Criteria:
 Diagnosis codes listed in MCC 17 (Major Clinical Category), Mental Diseases and Disorders when coded as the most responsible diagnosis (MRDx) Age at admission is 15 years or older Sex recorded as male or female Admission to a general hospital/psychiatric hospital Newfoundland and Labrador resident
Exclusion Criteria:
 Records with an invalid date of birth Records with an invalid admission date Records with an invalid discharge date
Numerator
Inclusion Criteria:
In-hospital adverse drug effects were identified as follows:
Properly Administered:
aDiagnosis type 2 (occurring post-admission) and diagnosis code:
b. D52.1, D59.0, D59.2, D61.1, D64.2, D68.3, D89.3, E03.2, E06.4, E16.0, E23.1, E24.2, E27.3, E66.1, G04.0, G21.0, G21.1, G24.0, G25.1, G25.4, G25.6 G44.4, G61.1, G62.0, G72.0, H40.6, H91.0, I42.7, I95.2, J70.2, J70.3, J70.4, K85.3, L10.5, L23.3, L24.4, L25.1, L27.0, L43.2, L56.0, L56.1, M10.20, M10.22, M10.24, M10.25, M10.26, M10.27, M10.28, M10.29, M32.0, M34.2, M80.40, M80.42, M80.43, M80.45, M80.46, M80.48, M81.4, M83.5, M87.11, M87.12, M87.15, M87.16, M87.18, N14.0, N14.1, N14.2, R50.2, T80.3, T80.4, T80.5, T80.6, T80.8, T80.9, T88.1, T88.2, T88.3, T88.5, T88.6 and T88.7; and.

Adverse Inpatient Drug Events (Refer to page 25 for results)		
	d. Diagnosis cluster (A-Y).	
	2. Accidental	
	a. Diagnosis type 2 (occurring post-admission) and diagnosis code:b. T36-T50; and	
	c. Diagnosis type 9 with external cause of injury code in X40-X49, Y60-Y69 (when a poisoning also meets the criteria of a misadventure); and	
	d. Diagnosis cluster (A-Y) applicable to external cause of injury codes Y60-Y69 only.	
	3. Intentional	
	a. Diagnosis type 2 (occurring post-admission) and diagnosis code:	
	b. T36-T50; and	
	c Diagnosis type 9 with external cause of injury code in X60-X84	
	Exclusions:	
	 Adverse events involving outpatient treatment in hospital emergency departments Adverse events occurring prior to admission 	
Time Frame	April 1, 2012-March 31, 2013	
Source	NLCHI Clinical Database Management System	
	Interpretation	
Notes	Adverse drug event rates, including unexpected drug side effects as well as events due to error, are an indicator of the safety of the environments in which services/programs are delivered. Monitoring these rates can highlight possible risks/dangers, can help identify weak or insufficient processes, and is essential for developing and assessing the impact of strategies aimed at reducing harms and improving patient safety. [From: Fraser Health, Mental Health and Addictions Balanced Scorecard: Key Performance Indicator Report 2009/2010.] Lower rates are desirable.	

Adaptal Harlish and Additions Decreases Declarations and instance

npatient Self-Harr	n Events (Refer to page 26 for results)
Description	The number of mental health/addictions hospitalizations involving a reported intentional self-harm event, expressed as a rate per 1,000 mental health/addictions hospitalizations.
Calculation	Method of Calculation
	Total number of all mental health/addictions hospitalizations involving post-admission intentional self-harm (patients age 15 and older) × 1,000
	Total mental health/addictions hospitalizations
	The unit of analysis is an episode of care. An episode of care refers to all contiguous inpatient hospitalizations in general or psychiatric hospitals regardless of diagnoses.
	Description: Rate of hospitalization in a general/psychiatric hospital involving post-admission intentional self-harm, per 1,000 mental health/addictions hospitalizations.
	Denominator
	Inclusion Criteria:
	 Diagnosis codes listed in MCC 17 (Major Clinical Category), Mental Diseases and Disorders when coded as the most responsible diagnosis (MRDx) Age at admission is 15 years or older Sex recorded as male or female Admission to a general hospital/psychiatric hospital Newfoundland and Labrador resident
	Exclusion Criteria:
Inclusions/Exclusions	 Records with an invalid date of birth Records with an invalid admission date Records with an invalid discharge date
	Numerator
	Inclusion Criteria:
	An in-hospital intentional self-harm event was identified as follows:
	 Diagnosis type 2 (occurring post-admission) and diagnosis code in S00-T98; and Diagnosis type 9 with external cause of injury code in X60-X64.
	Exclusions:
	 Adverse events involving outpatient treatment in hospital emergency departments Adverse events occurring prior to admission

Inpatient Self-Harm Events (Refer to page 26 for results)		
Time Frame	April 1, 2012-March 31, 2013	
Source	NLCHI Clinical Database Management System	
Notes	Interpretation Post-admission intentional self-harm rates are an indicator of the safety of the environments in which services/programs are delivered. Monitoring these rates can highlight possible risks/dangers, can help identify weak or insufficient processes, and is essential for developing and assessing the impact of strategies aimed at reducing harms and improving patient safety. [From: Fraser Health, Mental Health and Addictions Balanced Scorecard: Key Performance Indicator Report 2009/2010.] Lower rates are desirable. Note * The most responsible diagnosis (MRDx) codes used for this indicator are listed in MCC 17, Mental Diseases and Disorders, CIHI CMG+ Grouping Methodology, 2012.	

Inpatient Suicide Ev	vents (Refer to page 27 for results)
Description	The number of reported suicide events occurring during all mental health/addictions hospitalization, expressed as a rate per 1,000 mental health/addictions hospitalizations.
Calculation	Method of Calculation
	Total number of all mental health/addictions hospitalizations involving post-admission suicide (patients age 15 and older) × 1,000
Carcaración.	Total mental health/addictions hospitalizations
	The unit of analysis is an episode of care. An episode of care refers to all contiguous inpatient hospitalizations in general or psychiatric hospitals regardless of diagnoses.
	Description: Rate of hospitalization in a general/psychiatric hospital involving post-admission suicide, per 1,000 mental health/addictions hospitalizations.
	Denominator
	Inclusion Criteria:
	 Diagnosis codes listed in MCC 17 (Major Clinical Category), Mental Diseases and Disorders when coded as the most responsible diagnosis (MRDx) Age at admission is 15 years or older Sex recorded as male or female Admission to a general hospital/psychiatric hospital Newfoundland and Labrador resident
	Exclusion Criteria:
Inclusions/Exclusions	 Records with an invalid date of birth Records with an invalid admission date Records with an invalid discharge date
	Numerator
	Inclusion Criteria:
	An in-hospital suicide event was identified as follows:
	 Diagnosis type 2 (occurring post-admission) and diagnosis code in S00-T98; and Diagnosis type 9 with external cause of injury code in X60-X84 Discharge disposition = '07' (Died).
	Exclusions:
	 Adverse events involving outpatient treatment in hospital emergency departments Adverse events occurring prior to admission

Inpatient Suicide E	Inpatient Suicide Events (Refer to page 27 for results)	
Time Frame	April 1, 2012-March 31, 2013	
Source	NLCHI Clinical Database Management System	
Notes	Interpretation Post-admission suicide rates are an indicator of the safety of the environments in which services/programs are delivered. Monitoring these rates can highlight possible risks/dangers, can help identify weak or insufficient processes, and is essential for developing and assessing the impact of strategies aimed at reducing harms and improving patient safety. [From: Fraser Health, Mental Health and Addictions Balanced Scorecard: Key Performance Indicator Report 2009/2010.] Lower rates are desirable. Note * The most responsible diagnosis (MRDx) codes used for this indicator are listed in MCC 17, Mental Diseases and Disorders, CIHI CMG+ Grouping Methodology, 2012.	

Inpatient Fall Event	s (Refer to page 27 for results)
Description	The number of mental health/addictions hospitalizations with a reported adverse fall event, expressed as a rate per 1,000 mental health/addictions hospitalizations.
	Method of Calculation
Calculation	Total number of all mental health/addictions hospitalizations involving post-admissions falls (patients age 15 and older) × 1,000
	Total mental health/addictions hospitalizations
	The unit of analysis is an episode of care. An episode of care refers to all contiguous inpatient hospitalizations in general or psychiatric hospitals regardless of diagnoses.
	Denominator
	Inclusion Criteria:
	 Diagnosis codes listed in MCC 17 (Major Clinical Category), Mental Diseases and Disorders when coded as the most responsible diagnosis (MRDx) Age at admission is 15 years or older Sex recorded as male or female Admission to a general hospital/ psychiatric hospital Newfoundland and Labrador resident
	Exclusion Criteria:
Inclusions/Exclusions	 Records with an invalid date of birth Records with an invalid admission date Records with an invalid discharge date
	Numerator
	Inclusion Criteria:
	An in-hospital adverse fall event was identified as follows:
	 Diagnosis type 2 (occurring post-admission) and diagnosis code in S00-T98; and External cause of injury code W00-W19.
	Exclusions:
	 Adverse events involving outpatient treatment in hospital emergency departments Adverse events occurring prior to admission
Time Frame	April 1, 2012-March 31, 2013
Source	NLCHI Clinical Database Management System

Interpretation Adverse falls event rates are an indicator of the safety of the environments in which services/programs are delivered. Monitoring these rates can highlight possible risks/dangers, can help identify weak or insufficient processes, and is essential for developing and assessing the impact of strategies aimed at reducing harms and improving patient safety. [From: Fraser Health, Mental Health and Addictions Balanced Scorecard: Key Performance Indicator Report 2009/2010.] Lower rates are desirable. Note * The most responsible diagnosis (MRDx) codes used for this indicator are listed in MCC 17, Mental Diseases and Disorders, CIHI CMG+ Grouping Methodology, 2012.

Elopements/Unaut	horized Leave (Refer to page 28 for results)
Description	Proportion (%) of all mental illness/addictions hospitalizations where the patient left hospital but was not authorized to do so (elopement)
	Method of Calculation
Calculation	Total number of all mental illness/addictions hospitalizations among facilities with a psychiatric flag where the patient left hospital but was not authorized to do so X 100 Total number of mental illness/addictions hospitalizations among facilities with a psychiatric flag
	Denominator
Inclusions/Exclusions	 Inclusion Criteria: Diagnosis codes listed in MCC 17 (Major Clinical Category), Mental Diseases and Disorders when coded as the most responsible diagnosis (MRDx) Age at admission is 15 years or older Sex recorded as male or female Admission to a general hospital/psychiatric hospital Newfoundland and Labrador resident Facilities with a psychiatric flag set on their institution file Exclusion Criteria: Records with an invalid health card number Records with an invalid admission date Records with an invalid discharge date Numerator: Inclusion Criteria: Facilities with a psychiatric flag Mental Health Indicators Code 1 = AWOL Exclusion: Facilities without a psychiatric flag
Time Frame	April 1 2012- March 31, 2013
Source	NLCHI Clinical Database Management System
Notes	Interpretation People who leave hospital without authorization tend to do so before their treatment is complete. Compared with people who complete their treatment, those who left inpatient care without official leave are more than twice as likely to be readmitted to hospital within a month and three times as likely to visit an emergency department within a week (CIHI, 2013). Patients who leave the hospital against their physicians' advice face many health

Elopements/Unauthorized Leave (Refer to page 28 for results)

risks, because their treatments may not be complete, they may lack information on how to manage their condition and an adequate follow-up plan may not be in place. Low rates are desirable.

Note

Only facilities with a psychiatric flag are included in this analysis. The psychiatric flag is used to identify acute care facilities (with or without designated psychiatric units) submitting additional mental health information to the discharge abstract database (DAD) part of CIHI's *Mental Health Project*.

Definition:

AWOL indicates that a patient is absent without leave from the health care facility

NL facilities with a psychiatric flag set on their DAD file include:

- General Hospital Health Sciences Centre
- Janeway Children's Health and Rehabilitation Centre
- St. Clare's Mercy Hospital
- Waterford Hospital
- Western Memorial Hospital
- Sir Thomas Roddick Hospital
- Central Newfoundland Regional Health Centre
- Dr. G.B. Cross Memorial Hospital
- Burin Peninsula Health Care Centre

Left Against Medico	al Advice (Refer to page 29 for results)
Description	Proportion (%) of all mental illness/addictions hospitalizations where the patient left hospital against medical advice.
Calculation	Method of Calculation Total number of mental illness/addiction hospitalizations where the patient left hospital against medical advice X 100 Total mental health/addictions hospitalizations
Inclusions/Exclusions	 Inclusion Criteria: 1. Diagnosis codes listed in MCC 17 (Major Clinical Category), Mental Diseases and Disorders when coded as the most responsible diagnosis (MRDx) 2. Age at admission is 15 years or older 3. Sex recorded as male or female 4. Admission to a general hospital/psychiatric hospital 5. Newfoundland and Labrador resident Exclusion Criteria: 1. Records with an invalid health card number 2. Records with an invalid date of birth 3. Records with an invalid admission date 4. Records with an invalid discharge date Numerator Inclusion Criteria: Discharge Dispositions = "06" (Left against medical advice)
Time Frame	April 1 2012- March 31, 2013
Source	NLCHI Clinical Database Management System
Notes	Interpretation People who leave hospital against medical advice tend to do so before their treatment is complete and often end up returning within a short time frame. Compared with people who complete their treatment, those who left inpatient care against medical advice are more than twice as likely to be readmitted to hospital within a month and three times as likely to visit an emergency department within a week (CIHI, 2013). Patients who leave the hospital against their physicians' advice face many health risks, because their treatments may not be complete, they may lack information on how to manage their condition and an adequate follow-up plan may not be in place. Low rates are desirable.

Mental Health and	Addictions Hospitalization (Refer to page 33 for results)
Description	Proportion (%) of all inpatient hospitalizations with a most responsible diagnosis (MRDx) for all mental Illness and addictions.
	Method of Calculation
Calculation	Inpatient Hospitalizations with a MRDx of mental illness/addictions X 100 All inpatient hospitalizations in general or psychiatric hospitals
	The unit of analysis is an episode of care. An episode of care refers to all contiguous inpatient hospitalizations in general or psychiatric hospitals regardless of diagnoses.
	Denominator
	Inclusion Criteria:
	 Age at admission is 15 years or older Sex recorded as male or female Admission to a general hospital/psychiatric hospital Newfoundland and Labrador resident
	Exclusion Criteria:
Inclusions/Exclusions	 Records with an invalid health card number Records with an invalid date of birth Records with an invalid admission date Records with an invalid discharge date
	Numerator
	Inclusion Criteria:
	Diagnosis codes listed in MCC 17 (Major Clinical Category), Mental Diseases and Disorders when coded as the most responsible diagnosis (MRDx).
Time Frame	April 1,2012 – March 31, 2013
Source	NLCHI Clinical Database Management System
Notes	Interpretation
	While most people with mental illness or addiction can be treated in the community, hospitalizations due to mental illness or addiction highlights the magnitude or severity of illnesses and addictions that require hospitalization, and may also point to a lack of accessible services/resources in the community.

Hospitalizations, by	Concurrent, Mental Illness Only and Addictions Only (Refer to page 35 for results)
Description	Distribution (%) of all mental illness and addictions hospitalizations by treatment of concurrent conditions, mental illness only, and addictions only.
	Method of Calculations
Calculation	Concurrent: Hospitalizations with either MRDx of mental illness and other diagnosis codes of addiction OR MRDx of addiction and also diagnosis codes of mental illness X 100 Mental illness/addictions diagnosis as a (MRDx).
	Mental Illness Only: Hospitalizations with an MRDx of mental illness with no concurrent addiction dx X 100 Mental illness/addictions diagnosis as a (MRDx).
	Addictions Only: Hospitalizations with an MRDx of addiction with no concurrent mental illness dx X 100 Mental illness/addictions diagnosis as a (MRDx).
	Description:
	Distribution of all mental illness and addictions hospitalizations for treatment of concurrent conditions, mental illness only and addictions only.
	Denominator
	Inclusion Criteria:
	 The most responsible diagnosis (MRDx) codes used for this indicator are listed in MCC 17, Mental Diseases and Disorders, CIHI CMG+ Grouping Methodology, 2012.
	2. Age at admission is 15 years or older
	3. Sex recorded as male or female4. Admission to a general hospital/psychiatric hospital
	5. Newfoundland and Labrador resident
Inclusions/Exclusions	
	Exclusion Criteria:
	 Records with an invalid health card number Records with an invalid date of birth
	Records with an invalid admission date
	4. Records with an invalid discharge date
	Numerator
	Inclusion Criteria:
	All mental illness and addictions diagnosis as a most responsible diagnosis (MRDx), and, also a Type (1) pre-admit comorbidty, (2) post admit comorbidty and/or type (3) secondary diagnosis, as follows

Hospitalizations, k	by Concurrent, Mental Illness Only and Addictions Only (Refer to page 35 for results)
	Concurrent: Hospitalizations with either MRDx of mental illness and other diagnosis codes of addiction OR MRDx of addiction and also diagnosis codes of mental
	Mental Illness Only: Hospitalizations with an MRDx of mental illness with no concurrent addiction dx
	Addictions Only: Hospitalizations with an MRDx of addiction with no concurrent mental illness dx
Time Frame	April 1, 2012 – March 31, 2013
Source	NLCHI Clinical Database Management System
	Interpretation
Notes	Concurrent disorders is the term applied to mental health and substance use problems that occur together. The links between mental health and substance use problems are complex. These problems can develop independently as a result of common risk factors or one can lead to the other as a result of self-medication or prolonged distress.
	Concurrent disorders are a significant health issue in Canada. More than half of those seeking help for an addiction also have a mental illness. People with concurrent disorders present some of the most complex and difficult-to-treat cases and require a lot of healthcare support.
	Concurrent disorders tend to be associated with severe mental illness, relatively high care expenses due to greater use of costly hospital services, poor health trajectories and challenges accessing appropriate care along critical points in the recovery pathway.
	Note
	The most responsible diagnosis (MRDx) codes used for this indicator are listed in MCC 17, Mental Diseases and Disorders, CIHI CMG+ Grouping Methodology, 2012.

Average ALC Days (Refer to page 37 for results)
Description	Average number of alternate level of care days for all mental illness/addictions hospitalizations.
	Method of Calculation
Calculation	Total number of alternate level of care (ALC) days for all mental <u>health/addiction hospitalizations X 100</u> Total number mental health/addictions hospitalizations
	Denominator
	Inclusion Criteria:
	 Diagnosis codes listed in MCC 17 (Major Clinical Category), Mental Diseases and Disorders when coded as the most responsible diagnosis (MRDx) Age at admission is 15 years or older Sex recorded as male or female Admission to a general/psychiatric hospital Newfoundland and Labrador resident Transfer Service W,X, or Y **
Inclusions/Exclusions	Exclusion Criteria:
	 Records with an invalid health card number Records with an invalid date of birth Records with an invalid admission date Records with an invalid discharge date
	Numerator
	Inclusion Criteria:
	Patients who were assigned to the alternate level of care (ALC) patient service.
Time Frame	April 1, 2012- March 31 2013
Source	NLCHI Clinical Database Management System
Notes	An 'alternate level of care (ALC)' designation is made when a person has recovered enough to no longer require acute care hospital services but cannot be discharged because the appropriate level of care is not currently available in the community. Individuals who have been declared ALC are commonly waiting for placement in a supportive housing environment or in a Long Term Care home. This indicator shows the percent of hospital patient days that are ALC days and is one measure of access because the inability to discharge patients has an impact on the hospital's capacity to accept new patients. Non-acute hospital days are captured in hospitalization data as patients awaiting an alternate level of care (or ALC patients). The idea that hospital beds are being occupied by patients

Average ALC Days (Refer to page 37 for results)

who no longer need acute services, using limited, expensive resources while they wait to be discharged to a more appropriate setting is a concern to the health system. . Average ALC days is an effective indicator for utilization and resource management purposes and demonstrates, on average, the proportion of patients' total hospital stay that is ALC.

Lower rates are desirable.

Note

**Transfer Service – service transfer identifies the service where the patient received additional care in the health care facility.

Involuntary Admiss	ions (Refer to page 39 for results)
Description	Proportion (%) of all hospitalizations with an MRDx for all mental illness/addictions which were involuntary admissions.
	Method of Calculation
	Total number of hospitalizations for all mental illness/addictions condition which were
Calculation	involuntary admissions X 100 Total number of mental illness/addictions as a MRDx among facilities with a psychiatric flag
	Description:
	Proportion (%) of all mental illness/addictions hospitalizations which were involuntary admissions.
	Denominator
	Inclusion Criteria:
	 Diagnosis codes listed in MCC 17 (Major Clinical Category), Mental Diseases and Disorders when coded as the most responsible diagnosis (MRDx) Age at admission is 15 years or older
	3. Sex recorded as male or female4. Admission to a general hospital/psychiatric hospital
	5. Newfoundland and Labrador resident
	6. Facilities with a psychiatric flag set on their institution file
Inclusions/Exclusions	Exclusion Criteria:
	Records with an invalid health card number
	Records with an invalid date of birth Records with an invalid admission date
	Records with an invalid admission date Records with an invalid discharge date
	Numerator:
	Inclusion Criteria:
	An involuntary admission was identified as follows:
	1. Facilities with a psychiatric flag
	Mental Health Indicators Method of Admission Code = 3 (Involuntary)
	Exclusion Criteria:
	Facilities without a psychiatric flag
Time Frame	April 1, 2012- March 31, 2013
Source	NLCHI Clinical Database Management System

Interpretation

"This indicator contributes to an understanding of the frequency of involuntary mental health and addictions hospital admissions. Patients admitted involuntarily typically do not recognize that they have an illness, or do not follow a regimen of prescribed pharmaceutical treatment. These types of admissions to hospital typically involve personnel from other parts of the social system.

Involuntary patients may require a different care plan, incur longer lengths of stay, and incur more associated costs related to hospital stay than voluntary patients.

Note

Only facilities with a psychiatric flag are included in this analysis. The psychiatric flag is used by acute care facilities (with or without designated psychiatric units to identify facilities submitting additional mental health information to the discharge abstract database (DAD).

Notes

Definition:

Method of Admission indicates the status of the patient at the time of admission to the reporting facility.

Facilities with a psychiatric flag set on their institution file are:

- General Hospital Health Sciences Centre
- Janeway Children's Health and Rehabilitation Centre
- St. Clare's Mercy Hospital
- Waterford Hospital
- Western Memorial Hospital
- Sir Thomas Roddick Hospital
- Central Newfoundland Regional Health Centre
- Dr. G.B. Cross Memorial Hospital
- Burin Peninsula Health Care Centre

Mental Health and Addictions Programs Performance Indicators April 2015 (Revised September 2015)

Psychiatric/Mental	Health Providers (Refer to page 40 for results)
Description	Number of Psychiatrists, Psychologists, Occupational Therapists and Nurses working in the Mental Health/Addictions area per 100,000 population
Calculation	Method of Calculation Number of specified health professional working in Mental Health/Addictions X 100,000 Population of NL
Inclusions/Exclusions	This indicator includes health professional that work in the area of Mental Health and Addictions.
Time Frame	2012 and 2013
Source	CIHI, Supply, Distribution and Migration of Canadian Physicians, 2013 Health Personnel Database, CIHI; Population estimates: Statistics Canada. Quarterly Demographic Estimates. March 2013; 26(4). 91-002-X. CIHI, Occupational Therapist Database, 2012 CIHI, Regulated Nursing Supply 2013 (Health Workforce Database)
Notes	

Hospitalization Rat	e (Refer to page 43 for results)
Description	Crude rate of separations from general/psychiatric hospitals through discharge or death following a hospitalization for a selected mental illness/addictions per 100,000 population.
Calculation	Method of Calculation Total number of separations for selected mental illness/addictions (patients age 15 and older) x 100,000 Total population age 15 and older (calendar year)
Inclusions/Exclusions	 Inclusion Criteria: A selected mental illness is coded as the most responsible diagnosis (MRDx) Diagnosis codes for selected mental illness:
Time Frame	April 1, 2012-March 31, 2013
Source	NLCHI Clinical Database Management System, Statistics Canada Population Estimates 2012
Notes	Interpretation Hospitalization rate is a partial measure of general/psychiatric hospital utilization. It does not include patients who were using hospital services but had not yet been discharged within the fiscal year of interest. This indicator may reflect differences between jurisdictions, such as health of the population, differing health services delivery models and variations in the availability and accessibility of specialized, residential and/or ambulatory and community-based services. Monitoring hospital services use captures only the relatively small proportion of individuals who are acutely ill and require in-hospital treatment, compared to the much

Hospitalization Rate (Refer to page 43 for results)

larger contingent that receives (or fails to receive) outpatient or community services. For these reasons, this indicator cannot be used to estimate the prevalence of mental disorder in the general population.

Note

*The mental illnesses selected for this indicator are substance-related disorders; schizophrenia, delusional and non-organic psychotic disorders; mood/affective disorders; anxiety disorders; and selected disorders of adult personality and behaviour.

Patient Days (Refer to	o page 44 for results)
Description	Rate of total number of days in general/psychiatric hospitals for selected mental illness/addictions per 10,000 population (aged 15+ years).
	Method of Calculation
Calculation	Total number of days in hospital for selected mental illness/addiction (aged 15+years) x 10,000 Total population (aged 15+years)
Inclusions/Exclusions	 Inclusion Criteria: A selected mental illness is coded as the most responsible diagnosis (MRDx) Diagnosis codes for selected mental illness: a) Substance-related disorders: ICD-10-CA: F55, F10 to F19; or b) Schizophrenia, delusional and non-organic psychotic disorders: ICD-10-CA: F20 (excluding F20.4), F22, F23, F24, F25, F28, F29, F53.1; or c) Mood/affective disorders: ICD-10-CA: F30, F31, F32, F33, F34, F38, F39, F53.0; or d) Anxiety disorders: ICD-10-CA: F40, F41, F42, F43, F48.8, F48.9, F93.8; or e) Selected disorders of adult personality and behaviour: ICD-10-CA: F60, F61, F62, F68, F69, F21. Age at admission is 15 years or older Sex recorded as male or female Admission to a general hospital/psychiatric hospital Newfoundland and Labrador resident Exclusion Criteria: Records with an invalid health card number Records with an invalid admission date Records with an invalid admission date Records with an invalid discharge date
Time Frame	April 1, 2012-March 31, 2013
Source	NLCHI Clinical Database Management System, Statistics Canada Population Estimates 2012
Notes	Interpretation The patient days rate is a partial measure of general/psychiatric hospital utilization. It does not include patients who were admitted to hospital but had not yet been discharged within the fiscal year of interest. Patient days are influenced by the number of hospitalizations and the length of stay. For the same number of hospitalizations, the rate of patient days will increase as the length of stay increases. This indicator may reflect differences between jurisdictions, such as health of the population, differing health services delivery models and variations in the availability and accessibility of specialized, residential and/or ambulatory and community-based services.

Patient Days (Refer to page 44 for results)	
	Note *The mental illnesses selected for this indicator are substance-related disorders; schizophrenia, delusional and non-organic psychotic disorders; mood/affective disorders; anxiety disorders; and selected disorders of adult personality and behaviour.

High Volume Case N	Mix Groups (Refer to page 45 for results)
Description	Top 10 Case Mix Groups (CMG+) (by volume) all mental illness/addictions hospitalizations
	Method of Calculation
Calculation	Top 10 mental illness/addictions CMG+ by volume Total number of Case Mix Groups for all mental illness/addictions
	Denominator
	Inclusion Criteria:
	 Case Mix Groups within MCC 17 (Major Clinical Category), Mental Diseases and Disorders. Cases with the CMG RIW atypical code "00" (typical cases) Age at admission is 15 years or older Sex recorded as male or female Admission to a general hospital/psychiatric hospital Newfoundland and Labrador resident
	Exclusion Criteria:
	 Records with an invalid health card number Records with an invalid date of birth Records with an invalid admission date Records with an invalid discharge date
Inclusions/Exclusions	Numerator
merasions, Exclasions	Inclusion Criteria:
	Mental Disease and Disorders Case Mix Groups (CMG+) in the numerator Include: 670-Dementia 671-Organic Mental Disorder 672-Miscellaneous Mental Disorder 677- Schizophrenia without ECT 678- Schizotypal/Delusional Disorder 680- Schizoaffective Disorder without ECT 683- Disorder of Adult Personality Behaviour 686- Anxiety Disorder 687- Stress Reaction/Adjustment Disorder 689- Bipolar Disorder without ECT 692- Depressive Episode with ECT 693- Depressive Episode without ECT 698- Psychoactive Substance Use, Acute Intoxication 699- Psychoactive Substance Use, Dependence Syndrome 700- Psychoactive Substance Use, Withdrawal States
	701 1 Sychioactive Substance Ose, Witharawai States
Time Frame	April 1, 2012 – March 31, 2013

High Volume Case Mix Groups (Refer to page 45 for results)	
Source	NLCHI Clinical Database Management System
	Interpretation
	This indicator reflects the top 10 high volume CMG's (typical patients*) within MCC 17 – Mental Diseases and Disorders and demonstrates the leading groups of patients requiring hospitalization/services and service needs on discharge.
	Note
Notes	*Typical patients are those who have gone undergone a normal and expected course of treatment. They exclude cases involving transfers between acute care facilities, deaths, sign outs and long-stay cases.
	Volumes shown in this indicator are for RHA of residence and RHA of service. The region of residence is where the patient resides rather than the location of the facility where the hospitalization occurred. The region of service is the location of the facility where the hospitalization occurred rather than where the patient resides.

ECT Treatment (Ref	er to page 47 for results)
Description	Proportion (%) of inpatient and surgical day care hospitalizations with an MRDx for all mental illness and addictions during which ECT interventions were received.
	Method of Calculation
Calculation	Total number of inpatient/surgical day care hospitalizations for all mental illness and addictions during which ECT interventions were performed × 100 Total number all mental illness and addictions for inpatient/surgical day care hospitalizations
	Description:
	Proportion (%) of inpatient and surgical day care hospitalizations with an MRDx for all mental illness and addictions during which ECT interventions were performed. Denominator
	Inclusion Criteria:
	 Diagnosis codes listed in MCC 17 (Major Clinical Category), Mental Diseases and Disorders when coded as the most responsible diagnosis (MRDx) Age at admission is 15 years or older Sex recorded as male or female Admission to a general hospital/psychiatric hospital Newfoundland and Labrador resident
Inclusions/Exclusions	Exclusion Criteria:
	 Records with an invalid health card number Records with an invalid date of birth Records with an invalid admission date Records with an invalid discharge date
	Numerator
	Inclusion Criteria:
	 Where a MRDx code from MCC 17 is recorded Acute care and surgical day care hospitalizations CCI Intervention Code to identify ECT: 1.AN.09.JA-DV using external electrical stimulation (for shock or convulsion)
Time Frame	April, 1 2012 – March 31, 2013
Source	NLCHI Clinical Database Management System
	Interpretation
Notes	Electroconvulsive Therapy (ECT) utilization rates provide information on the proportion of inpatient and surgical day care ECT treatments provided to patients with a diagnosis of mental health and addictions.
	Note

The most responsible diagnosis (MRDx) codes used for this indicator are listed in MCC 17, Mental Diseases and Disorders, CIHI CMG+ Grouping Methodology, 2012.

Patient to Hospitali	ization Ratio (Refer to page 49 for results)
Description	The number of patients hospitalized with an MRDx of all mental illness/addictions compared to the total number of hospitalizations with an MRDx of all mental illness/addictions
	Method of Calculation
Calculation	The number of patients hospitalized with mental illness/addictions in specified facility Total number of hospitalizations with mental illness/addictions in specified facility
	Description:
	The number of patients hospitalized with an MRDx of all mental illness/addictions compared to the total number of hospitalizations with an MRDx of all mental illness/addictions.
	Denominator
	Inclusion Criteria:
Inclusions/Exclusions	 Diagnosis codes listed in MCC 17 (Major Clinical Category), Mental Diseases and Disorders when coded as the most responsible diagnosis (MRDx) Age at admission is 15 years or older Sex recorded as male or female Admission to a general hospital/psychiatric hospital Newfoundland and Labrador resident
	Exclusion Criteria:
	 Records with an invalid health card number Records with an invalid date of birth Records with an invalid admission date Records with an invalid discharge date
	Numerator
	Inclusion Criteria:
	Total patients with a diagnosis of mental illness/addictions (see denominator for criteria to select diagnosis).
Time Frame	April, 1 2012 – March 31, 2013
Source	NLCHI Clinical Database Management System
	Interpretation
Notes	This indicator represents the number of patients hospitalized with a mental health and addictions MRDx compared to the total number of mental health or addictions hospitalizations. The lower the number, the more hospitalizations per patient.
	Note
	The most responsible diagnosis (MRDx) codes used for this indicator are listed in MCC 17,

Mental Diseases and Disorders, CIHI CMG+ Grouping Methodology, 2012.

General vs Psychiat	ric Hospitals (Refer to page 51 for results)
Description	The distribution of total hospitalizations with a MRDx of all mental illness/addiction to general hospitals compared to psychiatric hospitals
	Method of Calculation
Calculation	Number of hospitalizations with a MRDx of all mental illness/addictions occurring in a general hospital x 100 Total Number of hospitalizations with a MRDx of all mental illness/addictions (both general and psychiatric hospitals)
	Number of hospitalizations with a MRDx of all mental illness/addictions occurring in a psychiatric hospital x 100 Total Number of hospitalizations with a MRDx of all mental illness/addictions (both general and psychiatric hospitals)
	Description:
	The distribution of total hospitalizations with a MRDx of all mental illness/addiction to general hospitals compared to psychiatric hospitals
	Denominator
	Inclusion Criteria:
Inclusions/Exclusions	 Diagnosis codes listed in MCC 17 (Major Clinical Category), Mental Diseases and Disorders when coded as the most responsible diagnosis (MRDx) Age at admission is 15 years or older Sex recorded as male or female Admission to a general hospital/psychiatric hospital Newfoundland and Labrador resident
	Exclusion Criteria:
	1. Records with an invalid health card number
	2. Records with an invalid date of birth
	3. Records with an invalid admission date
	4. Records with an invalid discharge date
	Numerator
	Inclusion Criteria:
	A diagnosis of Mental Illness/Addictions was recorded (see denominator for criteria to select diagnosis).

General vs Psychiatric Hospitals (Refer to page 51 for results)	
Time Frame	April, 1 2012 – March 31, 2013
Source	NLCHI Clinical Database Management System
Notes	Interpretation This indicator reflects the activity of patients with mental health and addictions conditions between general hospitals and psychiatric hospitals. Note The most responsible diagnosis (MRDx) codes used for this indicator are listed in MCC 17, Mental Diseases and Disorders, CIHI CMG+ Grouping Methodology, 2012.

General Hospitals (I	Refer to page 51 for results)
Description	The distribution of general hospital hospitalizations with an MRDx of all mental illness/addiction among the categories of concurrent conditions, mental illness only and addictions only.
	Method of Calculation
	For Mental Illness / addictions hospitalizations occurring only in a general hospital:
Calculation	Concurrent: Hospitalizations with either MRDx of mental illness and other diagnosis codes of addiction OR MRDx of addiction and also diagnosis codes of mental illness X 100 Mental illness/addictions diagnosis as a (MRDx).
	Mental Illness Only: Hospitalizations with an MRDx of mental illness with no concurrent addiction dx X 100 Mental illness/addictions diagnosis as a (MRDx).
	Addictions Only:
	Hospitalizations with an MRDx of addiction with no concurrent mental illness dx X 100
	Mental illness/addictions diagnosis as a (MRDx).
	Description:
	The distribution of general hospital hospitalizations with an MRDx of all mental illness/addiction among the categories of concurrent conditions, mental illness only addictions only
	Denominator
	Inclusion Criteria:
Inclusions/Exclusions	 Diagnosis codes listed in MCC 17 (Major Clinical Category), Mental Diseases and Disorders when coded as the most responsible diagnosis (MRDx) Age at admission is 15 years or older Sex recorded as male or female Admission to a general hospital Newfoundland and Labrador resident
	Exclusion Criteria:
	 Records with an invalid health card number Records with an invalid date of birth Records with an invalid admission date Records with an invalid discharge date
	Numerator
	Inclusion Criteria:
	For any general hospital hospitalization, all mental illness and addictions diagnosis as a most responsible diagnosis (MRDx), and, also a Type (1) pre-admit comorbidty, (2) post admit comorbidty and/or type (3) secondary diagnosis, as follows

General Hospitals	(Refer to page 51 for results)
	Concurrent: Hospitalizations with either MRDx of mental illness and other diagnosis codes of addiction OR MRDx of addiction and also diagnosis codes of mental
	Mental Illness Only: Hospitalizations with an MRDx of mental illness with no concurrent addiction dx
	Addictions Only: Hospitalizations with an MRDx of addiction with no concurrent mental illness dx
Time Frame	April, 1 2012 – March 31, 2013
Source	NLCHI Clinical Database Management System
Notes	Interpretation This indicator reflects patients with mental health and addictions conditions with/without concurrent mental health and addictions conditions requiring service in general hospitals. "Concurrent disorders are associated with higher levels of service use when compared with either SUD or mental illness alone. Hospital Mental Health Services for Concurrent Mental Illness and Substance Use Disorders in Canada. CIHI, May 2013. Note The most responsible diagnosis (MRDx) codes used for this indicator are listed in MCC 17, Mental Diseases and Disorders, CIHI CMG+ Grouping Methodology, 2012. Concurrent refers to: • A diagnosis of mental illness recorded as an MRDx and a diagnosis of addictions recorded as another diagnosis type; or • A diagnosis of addictions recorded as an MRDx and a diagnosis of mental illness recorded as another diagnosis type. Mental illness only refers to: • A diagnosis of mental illness recorded as an MRDx and no diagnosis of addictions recorded or; • A diagnosis of mental illness recorded as an MRDx and a diagnosis of mental illness recorded as another diagnosis type and no diagnosis of addictions
	recorded. Addictions only refers to: • A diagnosis of addictions recorded as an MRDx and no diagnosis of mental illness recorded or; • A diagnosis of addictions recorded as an MRDx and a diagnosis of addictions recorded as another diagnosis type and no diagnosis of mental illness recorded.

Psychiatric Hospital	ls (Refer to page 53 for results)
Description	The distribution of psychiatric hospital hospitalizations with an MRDx of all mental illness/addiction among the categories of concurrent conditions, mental illness only and addictions only
	Method of Calculation
	For Mental Illness / addictions hospitalizations occurring only in a psychiatric hospital:
	Concurrent: Hospitalizations with either MRDx of mental illness and other diagnosis codes of addiction OR MRDx of addiction and also diagnosis codes of mental illness X 100 Mental illness/addictions diagnosis as a (MRDx).
Calculation	Mental Illness Only: Hospitalizations with an MRDx of mental illness with no concurrent addiction dx X 100
	Mental illness/addictions diagnosis as a (MRDx).
	Addictions Only: Hospitalizations with an MRDx of addiction with no concurrent mental illness dx X 100 Mental illness/addictions diagnosis as a (MRDx).
	Description:
	The distribution of psychiatric hospital hospitalizations with an MRDx of all mental illness/addiction among the categories of concurrent conditions, mental illness only and addictions only **Denominator**
	Inclusion Criteria:
	 Diagnosis codes listed in MCC 17 (Major Clinical Category), Mental Diseases and Disorders when coded as the most responsible diagnosis (MRDx) Age at admission is 15 years or older Sex recorded as male or female Admission to a psychiatric hospital Newfoundland and Labrador resident
Inclusions/Exclusions	Exclusion Criteria:
	 Records with an invalid health card number Records with an invalid date of birth Records with an invalid admission date Records with an invalid discharge date
	Numerator
	Inclusion Criteria:
	For any psychiatric hospital hospitalization, all mental illness and addictions diagnosis as a most responsible diagnosis (MRDx), and, also a Type (1) pre-admit comorbidty, (2) post admit comorbidty and/or type (3) secondary diagnosis, as follows
	Concurrent:

Psychiatric Hospitals (Refer to page 53 for results)	
	Hospitalizations with either MRDx of mental illness and other diagnosis codes of addiction OR MRDx of addiction and also diagnosis codes of mental
	Mental Illness Only: Hospitalizations with an MRDx of mental illness with no concurrent addiction dx
	Addictions Only: Hospitalizations with an MRDx of addiction with no concurrent mental illness dx
Time Frame	April, 1 2012 – March 31, 2013
Source	NLCHI Clinical Database Management System
	Interpretation
	This indicator reflects patients with mental health and addictions conditions with/without concurrent mental health and addictions conditions requiring service in psychiatric hospitals. "Concurrent disorders are associated with higher levels of service use when compared with either SUD or mental illness alone. Hospital Mental Health Services for Concurrent Mental Illness and Substance Use Disorders in Canada. CIHI, May 2013.
	Note
	The most responsible diagnosis (MRDx) codes used for this indicator are listed in MCC 17, Mental Diseases and Disorders, CIHI CMG+ Grouping Methodology, 2012.
	Concurrent refers to:
	A diagnosis of mental illness recorded as an MRDx and a diagnosis of addictions recorded as another diagnosis type; or A diagnosis of addictions recorded as an MRDx and a diagnosis of regatal illness.
Notes	 A diagnosis of addictions recorded as an MRDx and a diagnosis of mental illness recorded as another diagnosis type.
	Mental illness only refers to:
	 A diagnosis of mental illness recorded as an MRDx and no diagnosis of addictions recorded or;
	 A diagnosis of mental illness recorded as an MRDx and a diagnosis of mental illness recorded as another diagnosis type and no diagnosis of addictions recorded.
	Addictions only refers to:
	 A diagnosis of addictions recorded as an MRDx and no diagnosis of mental illness recorded or;
	 A diagnosis of addictions recorded as an MRDx and a diagnosis of addictions recorded as another diagnosis type and no diagnosis of mental illness recorded.

Non-MH&A Hospito	alizations with MH&A as Secondary Diagnoses (Refer to page 54 for results)
Description	Proportion (%) of hospitalizations with an MRDx for non-mental illness and addictions in which the patient also had a coexisting diagnosis of mental illness or addiction.
Calculation	Method of Calculation
	Total hospitalizations with mental illness/addictions as a secondary diagnosis x 100 Total hospitalizations
	Description:
	Proportion (%) of hospitalizations with an MRDx for non-mental illness and addictions in which the patient also had a coexisting diagnosis of mental illness or addiction.
	Denominator
	Inclusion Criteria:
Inclusions/Exclusions	 Age at admission is 15 years or older Sex recorded as male or female Admission to a general hospital/psychiatric hospital Newfoundland and Labrador resident
merasions, Exclasions	Exclusion Criteria:
	 Records with an invalid health card number Records with an invalid date of birth Records with an invalid admission date Records with an invalid discharge date
	Numerator
	Inclusion Criteria:
	1. A most responsible diagnosis (MRDx) for non-mental illness/addictions and a secondary diagnosis of mental illness/addictions (MCC 17)
Time Frame	April, 1 2012 – March 31, 2013
Source	NLCHI Clinical Database Management System
	Interpretation
Notes	Patients who are hospitalized with a condition other than mental illness/addictions may also have a secondary mental illness/addictions condition which may impact the care required during the hospitalization. This indicator speaks to the magnitude of mental illness/addictions as a secondary condition in acute care settings.
	Note
	The diagnosis codes used in this indicator are listed in MCC 17, Mental Diseases and Disorders, CIHI CMG+ Grouping Methodology, 2012.
	The DAD contains up to 25 diagnosis occurrences for each separation. Any mental illness/addictions diagnosis recorded in the 2 nd to the 25 th occurrence is considered a secondary diagnosis for this indicator.

Unintentional Overdose Hospitalization (Refer to page 56 for results)	
Description	The rate of hospitalizations with a code of unintentional overdose per 100,000 population.
Calculation	Method of Calculation Total number of hospitalizations for unintentional overdose x 100,000 Total population – NL residents
Inclusions/Exclusions	Description: The rate of hospitalizations with a code of unintentional overdose per 100,000 population Inclusion Criteria: 1. An unintentional overdose is identified by the following external cause of injury codes with a diagnosis type of 9:
Time Frame	April, 1 2012 – March 31, 2013
Source	NLCHI Clinical Database Management System
Notes	Interpretation Unintentional overdose hospitalizations are those in which the overdose occurred prior to the admission to hospital.

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Inflow/Outflow (Refer to page 57 for results)	
Description	Ratio of the number of hospitalizations for all mental illness /addictions within a given region to the number of hospitalizations for all mental illness/addictions generated by residents of that region.
Calculation	Method of Calculation Number of hospitalizations for all mental illness/addiction within a given region Number of hospitalizations for all mental illness/addiction generated by residents of a given region
Inclusions/Exclusions	 Inclusion Criteria: Diagnosis codes listed in MCC 17 (Major Clinical Category), Mental Diseases and Disorders when coded as the most responsible diagnosis (MRDx) Age at admission is 15 years or older Sex recorded as male or female Admission to a general hospital/psychiatric hospital Newfoundland and Labrador resident Exclusion Criteria: Records with an invalid health card number Records with an invalid date of birth Records with an invalid admission date Records with an invalid discharge date
Time Frame	April 1, 2012 – March 31, 2013
Source	NLCHI Clinical Database Management System
Notes	Interpretation This indicator reflects the balance between the quantity of hospital stays provided to both residents and non-residents by all relevant facilities (acute care/same-day surgery) in a given region and the extent of utilization by residents of that region, whether they receive care within or outside of the region. A ratio of less than one indicates that health care utilization by residents of a region exceeded care provided within that region, suggesting an outflow effect. A ratio of greater than one indicates that care provided by a region exceeded the utilization by its residents, suggesting an inflow effect. A ratio of one indicates that care provided by a region is equivalent to the utilization by its residents, suggesting that inflow and outflow activity, if it exists at all, is balanced. A ratio of zero is an indication that none of the institutions in the region provided the service and residents received care outside of their region. Note The most responsible diagnosis (MRDx) codes used for this indicator are listed in MCC 17, Mental Diseases and Disorders, CIHI CMG+ Grouping Methodology, 2012

Total ALC Days (Refer to page 61 for results)	
Description	Proportion (%) of total length of stay that are alternate level of care days for all mental Illness/addictions hospitalizations.
Calculation	Method of Calculation Total number of days the patient was assigned to the alternate level of care (ALC) for
	all mental health/addiction hospitalizations X 100 Total length of stay for mental health/addictions hospitalizations
	Description:
	Proportion (%) total days for all mental health and addictions hospitalizations in a general/psychiatric hospital that were alternate level of care (ALC) days.
	Denominator
	Inclusion Criteria: 1. Diagnosis codes listed in MCC 17 (Major Clinical Category), Mental Diseases and Disorders when coded as the most responsible diagnosis (MRDx)
	2. Age at admission is 15 years or older
	3. Sex recorded as male or female
	4. Admission to a general hospital or psychiatric hospital
	5. Newfoundland and Labrador resident
Inclusions/Exclusions	6 .Transfer Service W,X, or Y
	Exclusion Criteria: 1. Records with an invalid health card number
	2. Records with an invalid date of birth
	3. Records with an invalid admission date
	4. Records with an invalid discharge date
	Numerator
	Inclusion Criteria:
	Patients who are alternate level of care (ALC).
	Where a MRDx code from MCC 17 is recorded (see denominator for code selection)
Time Frame	April 1, 2012 – March 31 2013
Source	NLCHI Clinical Database Management System

Total ALC Days	Total ALC Days (Refer to page 61 for results)	
	Interpretation	
Notes	ALC days is an effective indicator for utilization and resource management purposes. It reflects those patients no longer requiring the intensity of resources/services provided in an acute/mental health setting (use of acute beds for non-acute care) and demonstrates the impact of ALC patients on inpatient statistics such as length of stay.	
	Note The most responsible diagnosis (MRDx) codes used for this indicator are listed in MCC 17, Mental Diseases and Disorders, CIHI CMG+ Grouping Methodology, 2012.	

Nursing Worked Hours per Patient Day (Refer to page 63 for results)	
Description	The number of nursing worked hours spent for every day an inpatient spends on a psychiatric nursing unit. Inpatient days are the days during which services are provided to an inpatient, between the census-taking hours on successive days.
	Method of Calculation
Calculation	Nursing Worked Hours Inpatient Psychiatry Unit Inpatient Days Indicator to be calculated at the provincial, regional and facility levels.
Inclusions/Exclusions	Numerator: The functional centres related to inpatient mental health and addictions services which include the following primary accounts: 7127520 ** Mental Health General Nursing Unit 7127500 ** Mental Health Forensic Nursing Unit 7127570 ** Mental Health Geriatric Unit 7127570 ** Mental Health Geriatric Unit 7127580 ** Mental Health Crisis Nursing Unit 7127595 ** Mental Health and Addiction Services Combined Nursing Unit 71276 ** Mental Health Long-Term Care Resident Unit (Waterford Hospital only) Excluded Secondary financial accounts: 311 ** Employee Worked Hours (MOS) 351 ** Employee Worked Hours (UPP) For the following bargaining groups: 10:NS-NLNU 26:NS-NUNM 32:LN-NAPE 34:LN-CUPE Denominator: Primary Accounts: Same as noted for numerator Secondary Statistical Account: 40310 - Inpatient Days - Adult/Child)
Time Frame	2012-13
Source	Provincial MIS Database
Notes	Note This indicator is calculated only for facilities with dedicated Mental Health and Addictions inpatient units.

Direct Operating Ex	pense to Total RHA Operating Expense (Refer to page 67 for results)
Description	The percentage of the direct operating expenditures of the regional health authorities related to mental health and addictions services. Direct operating expenses are defined as the operating expenses charged directly by the
	health service organization to the applicable functional centre. Operating expenses include compensation, supplies, equipment, sundry, contracted-out services and traceable supplies and other expenses.
	Method of Calculation
Calculation	Direct Operating Expenses For Mental Health And Addiction Services
Calculation	Direct Operating Expenses Of The Regional Health Authority
	Indicator to be calculated at the provincial and regional levels.
	Numerator:
	The functional centres related to mental health and addictions programs and services include the following primary accounts:
	Inpatient Psychiatric/Addictions Units
	7120522 **Mental Health Program Administration
	71275** **Mental Health and Addiction Services Nursing Unit
	71276** **Mental Health Long-Term Care Resident Unit
	Mental Health/Addictions Ambulatory programs/services
	7131070 **Emergency Mental Health Service
	7134080 **Mental Health and Addiction Services Specialty Day/Night Care
	7134082 **Mental Health Specialty Day/Night Care 7135080 **Mental Health and Addiction Services Specialty Clinic
	7135082 **Mental Health Specialty Clinic 7135082 **Mental Health Specialty Clinic
	7134084 **Addiction Services Specialty Day/Night Care
	7135084 **Addiction Services Specialty Clinic
Inclusions/Exclusions	7145540 **Mental Health Occupational Therapy
	71475** **Psychology
	Mental Health/Addictions Community-based programs/services
	7159101 **Mental Health/Addictions Program Administration (C)
	7159103 **Mental Health/Addictions Library
	7159105 **Mental Health/Addictions Case Management
	7159106 **Assertive Community Treatment Team (ACTT)
	7159107 **Early Psychosis Program
	7159110 **Mental Health Counseling Program
	7159111 **Child/Youth Mental Health Counseling Services
	7159112 **Adult Mental Health Counseling Services
	7159120 **Residential Services Program
	7159121 **Community Care Home Services
	7159122 **Family Care Home Services
	7159123 **ACCESS Services 7159124 **Non-Relative Services

Direct Operating Expense to Total RHA Operating Expense (Refer to page 67 for results) 7159125 **Relative Home Services 7159126 **Co-operative Apartment Services 7159127 **Own Apartment/Home Services 7159128 **Transition Home / Therapeutic Residence / Shelter Services 7159129 **Other Residential Services 7159130 **Vocational Support Program 7159135 **Mental Health and Addictions Inpatient Treatment Centre 7159136 **Inpatient Treatment Services for Youth 7159140 **Mental Health Promotion Program 7159150 **Mental Health and Addictions Day Programs 7159151 **Addictions Adolescent Day Services 7159152 **Addictions Adult Day Services 7159154 **Mental Health and Addictions Client Navigation Program 7159157 **Early Intervention and Outreach Services 7159160 **Addictions Counseling Program 7159170 **Addictions Methadone Treatment Program 7159180 **Detox and/or Addictions Inpatient Treatment Centre 7159190 **Addictions Health Promotion Program Secondary Financial Accounts include the following: 3 ** ** ** Compensation (includes payments to clinical physicians and management physicians; fee-for-service payments by MCP are excluded) 4 ** ** ** Supplies 5 ** ** Traceable Supplies and other Expenses 6 ** ** ** Sundry 7 ** ** ** Equipment Expenses 8 ** ** ** Contracted-Out Services 9 ** ** ** Buildings and Grounds Expense – Undistributed Excluded from numerator by request for the purpose of this request: 7159307 **Developmental Psychology Services 819** Undistributed Operating Fund 859**Undistributed Capital Fund **Denominator:** All functional centres within the following framework sections: 711** ** Administrative & Support Services 712** ** Nursing Inpatient/Resident Services 713** **Ambulatory Care Services 714** **Diagnostic and Therapeutic Services 715** **Community and Social Services 717** **Research 718** **Education 719** **Undistributed

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Secondary Financial Accounts include the following:

Direct Operating E	Expense to Total RHA Operating Expense (Refer to page 67 for results)
	3 ** ** ** Compensation (includes payments to clinical physicians and management physicians; fee-for-service payments by MCP are excluded) 4 ** ** ** Supplies 5 ** ** Traceable Supplies and other Expenses 6 ** ** Sundry 7 ** ** Equipment Expenses 8 ** ** Buildings and Grounds Expense - Undistributed
Time Frame	2008-09 to 2012-13
Source	Provincial MIS database
Notes	5 year trending data provided

Hospital-Based MH page 68 for results)	&A Services Direct Operating Expense to Total RHA Operating Expense (Refer to
Description	The percentage of the direct operating expenditures of the regional health authorities related to hospital-based mental health and addictions services. Direct operating expenses are defined as the operating expenses charged directly by the health service organization to the applicable functional centre. Operating expenses include compensation, supplies, equipment, sundry, contracted-out services and traceable supplies and other expenses.
Calculation	Method of Calculation Total Hospital-Based Mental Health/Addictions Services Direct Operating Expenses Total RHA Operating Expenses Indicator to be calculated at the provincial and regional levels.
Inclusions/Exclusions	*The functional centres related to hospital-based mental health and addictions programs and services include the following primary accounts: Inpatient Psychiatric/Addictions Units 7120522 **Mental Health Program Administration 71275** **Mental Health Addiction Services Nursing Unit 71276** **Mental Health Long-Term Care Resident Unit Mental Health/Addictions Ambulatory programs/services 7131070 **Emergency Mental Health Service 7134080 **Mental Health and Addiction Services Specialty Day/Night Care 7134080 **Mental Health Specialty Day/Night Care 7134080 **Mental Health Specialty Day/Night Care 7135080 ** Mental Health and Addiction Services Specialty Clinic 7135082 **Mental Health Specialty Clinic 7135084 **Addiction Services Specialty Clinic 7145540 **Mental Health Occupational Therapy 71475** **Psychology Exclusions include: 819** Undistributed Operating Fund 859**Undistributed Capital Fund Secondary Financial Accounts include the following: 3 *** ** ** Compensation (includes payments to clinical physicians and management physicians; fee-for-service payments by MCP are excluded) 4 ** ** ** Supplies 5 ** ** ** Traceable Supplies and other Expenses 6 ** ** ** Sundry 7 *** ** Equipment Expenses 8 ** ** ** ** Contracted-Out Services 9 ** ** ** Buildings and Grounds Expense — Undistributed
	Denominator:

Hospital-Based Mi page 68 for results	H&A Services Direct Operating Expense to Total RHA Operating Expense (Refer to
	**All functional centres within the following framework sections:
	711 ** **Administrative & Support Services
	712 ** **Nursing Inpatient/Resident Services
	713 ** **Ambulatory Care Services
	714 ** **Diagnostic and Therapeutic Services
	715 ** **Community and Social Services
	717 ** **Research
	718 ** **Education
	719 ** **Undistributed
	Secondary Financial Accounts include the following:
	3 ** ** Compensation (includes payments to clinical physicians and
	management physicians; fee-for-service payments by MCP are excluded)
	4 ** ** ** Supplies
	5 ** ** Traceable Supplies and other Expenses
	6 ** ** ** Sundry
	7 ** ** Equipment Expenses
	8 ** ** Contracted-Out Services
	9 ** ** ** Buildings and Grounds Expense — Undistributed
Time Frame	2008-09 to 2012-13
Source	Provincial MIS database
Notes	5 year trending data provided

Community-Based I	MH&A Services Direct Operating Expense to Total RHA Operating Expense (Refer to
Description	The percentage of the direct operating expenditures of the regional health authorities associated with community-based mental health and addictions programs/ services. Direct operating expenses are defined as the operating expenses charged directly by the health service organization to the applicable functional centre. Operating expenses include compensation, supplies, equipment, sundry, contracted-out services and traceable supplies and other expenses.
	Method of Calculation
Calculation	<u>Direct Operating Expenses For Community-Based Mental Health And Addiction Services</u> Total Direct Operating Expenses Of The Regional Health Authority
	Indicator to be calculated at the provincial and regional levels.
Inclusions/Exclusions	Numerator: The functional centres related to mental health and addictions programs and services include the following primary accounts: Mental Health/Addictions Community-based programs/services 7159101** Mental Health/Addictions Program Administration (C) 7159103**Mental Health/Addictions Library 7159105** Mental Health/Addictions Case Management 7159106** Assertive Community Treatment Team (ACTT) 7159107** Early Psychosis Program 7159111** Child/Youth Mental Health Counseling Services 7159112** Adult Mental Health Counseling Services 715912** Residential Services Program 7159121** Community Care Home Services 7159122** Family Care Home Services 7159123**ACCESS Services 7159124** Mon-Relative Services 7159125** Relative Home Services 7159126** Co-operative Apartment Services 7159128** Transition Home / Therapeutic Residence / Shelter Services 7159129** Other Residential Services 7159130** Vocational Support Program 7159135** Mental Health and Addictions Inpatient Treatment Centre 7159140** Mental Health and Addictions Day Programs 7159150** Mental Health and Addictions Day Programs 7159151** Addictions Adolescent Day Services
	7159152 **Addictions Adult Day Services 7159154** Mental Health and Addictions Client Navigation Program 7159157** Early Intervention and Outreach Services

Community-Based	MH&A Services Direct Operating Expense to Total RHA Operating Expense (Refer to
page 69 for results)	
	7159160**Addictions Counseling Program
	7159170** Addictions Methadone Treatment Program
	7159180** Detox and/or Addictions Inpatient Treatment Centre
	7159190**Addictions Health Promotion Program
	Secondary Financial Accounts include the following:
	3 ** ** Compensation (includes payments to clinical physicians and
	management physicians; fee-for-service payments by MCP are excluded)
	4 ** ** ** Supplies
	5 ** ** ** Traceable Supplies and other Expenses
	6 ** ** ** Sundry
	7 ** ** ** Equipment Expenses
	8 ** ** ** Contracted-Out Services
	9 ** ** Buildings and Grounds Expense – Undistributed
	Excluded by request for the purpose of this report:
	7159307** Developmental Psychology Services
	819** Undistributed Operating Fund
	859**Undistributed Capital Fund
	Denominator:
	All functional centres (primary accounts) within the following framework sections:
	711 ** ** Administrative & Support Services
	712 ** ** Nursing Inpatient/Resident Services
	713 ** **Ambulatory Care Services
	714 ** **Diagnostic and Therapeutic Services
	715 ** **Community and Social Services
	717 ** **Research
	718 ** **Education
	719 ** **Undistributed
	Secondary Financial Accounts include the following:
	9 ** ** Buildings and Grounds Expense – Undistributed
Time Frame	2008-09 to 2012-13
	Provincial MIS database
Source	- Townsia mis database
Notes	5 year trending data provided
Source	Secondary Financial Accounts include the following: 3 ** ** ** Compensation (includes payments to clinical physicians and management physicians; fee-for-service payments by MCP are excluded) 4 ** ** ** Supplies 5 ** ** ** Traceable Supplies and other Expenses 6 ** ** Sundry 7 ** ** Equipment Expenses 8 ** ** ** Contracted-Out Services 9 ** ** ** Buildings and Grounds Expense — Undistributed 2008-09 to 2012-13 Provincial MIS database

Mental Health and Addictions Programs Performance Indicators April 2015 (Revised September 2015)

Direct Cost of MH&	A Programs/Services per capita (Refer to page 70 for results)
Description	Direct operating cost of regional health authorities mental health programs and services per person within the Province/RHA. Direct costs are defined as the operating expenses charged directly by the health service organization to the applicable functional centre. Operating expenses include compensation, supplies, equipment, sundry, contracted-out services and traceable supplies and other expenses.
	Method of Calculation
Calculation	<u>Direct cost of mental health and addictions programs/services</u> Total Population in NL Indicator to be calculated at the provincial and regional levels.
Inclusions/Exclusions	**Numerator: *The functional centres related to mental health and addictions programs and services include the following primary accounts: Inpatient Psychiatric/Addictions Units **7120522 ** Mental Health Program Administration 71275** **Mental Health and Addiction Services Nursing Unit 71276** **Mental Health Long-Term Care Resident Unit Mental Health/Addictions Ambulatory programs/services 7131070 **Emergency Mental Health Service 7134084 **Addiction Services Specialty Day/Night Care 7135084 **Addiction Services Specialty Clinic 7134080 **Mental Health and Addiction Services Specialty Day/Night Care 7135082 **Mental Health Specialty Day/Night Care 7135082 **Mental Health Specialty Clinic 714 55 40 **Mental Health Occupational Therapy 71475****Psychology Mental Health/Addictions Community-based programs/services 7159101 **Mental Health/Addictions Library 7159105 **Mental Health/Addictions Case Management 7159106 **Assertive Community Treatment Team (ACTT) 7159107 **Early Psychosis Program 7159111 **Child/Youth Mental Health Counseling Services 7159111 **Child/Youth Mental Health Counseling Services 715912 **Residential Services Program 715912 **Family Care Home Services 7159121 **Community Care Home Services
	7159123 **ACCESS Services

irect Cost of MH	&A Programs/Services per capita (Refer to page 70 for results)
	7159124 **Non-Relative Services
	7159125 **Relative Home Services
	7159126 **Co-operative Apartment Services
	7159127 **Own Apartment/Home Services
	7159128 **Transition Home / Therapeutic Residence / Shelter Services
	7159129 **Other Residential Services
	7159130 **Vocational Support Program
	7159135 **Mental Health and Addictions Inpatient Treatment Centre
	7159136 **Inpatient Treatment Services for Youth
	7159140 **Mental Health Promotion Program
	7159150 **Mental Health and Addictions Day Programs
	7159151 **Addictions Adolescent Day Services
	7159152 **Addictions Adult Day Services
	7159154 **Mental Health and Addictions Client Navigation Program
	7159157 **Early Intervention and Outreach Services
	7159160 **Addictions Counseling Program
	7159170 **Addictions Methadone Treatment Program
	7159180 **Detox and/or Addictions Inpatient Treatment Centre
	7159190 **Addictions Health Promotion Program
	Secondary Financial Accounts include the following:
	3 ** ** ** Compensation (includes payments to clinical physicians and
	management physicians; fee-for-service payments by MCP are excluded)
	4 ** ** ** Supplies
	5 ** ** Traceable Supplies and other Expenses
	6 ** ** ** Sundry
	7 ** ** Equipment Expenses
	8 ** ** ** Contracted-Out Services
	9 ** ** Buildings and Grounds Expense – Undistributed
	Excluded from numerator by request :
	715 93 07 **Developmental Psychology Services
	819** Undistributed Operating Fund
	859**Undistributed Capital Fund
	Denominator:
	**The population of Newfoundland and Labrador as reported by Statistics Canada.
Time Frame	2008-09 to 2012-13
Source	Provincial MIS database, Statistics Canada Population Estimates
Notes	5 year trending data provided

Mental Health and Addictions Programs Performance Indicators

Direct Client Costs t	to Total MH&A Programs/Services Operating Expenses (Refer to page 71 for
results)	o rotal tillant riogiams, services operating expenses (neger to page 7 2 joi
Description	Percentage of operating expenses for mental health and addictions programs/services associated with direct client costs. Direct client costs are consumable supplies or other expenses that can be directly associated with a particular service, procedure or drug intervention; traced to a particular service recipient. Examples include residential and living expenses, recreation fees, home support payments, etc made to or on behalf of a client.
	Method of Calculation
	Direct Client Costs
Calculation	Total Direct Operating Expenses For Mental Health And Addiction Services
	Indicator to be calculated at the provincial and regional levels.
	Numerator:
	Primary accounts include:
	Mental Health/Addictions Community-based programs/services 7159101** Mental Health/Addictions Program Administration (C)
	7159103**Mental Health/Addictions Library
	7159105** Mental Health/Addictions Case Management 7159106** Assertive Community Treatment Team (ACTT)
	7159100** Assertive Community Treatment Team (ACTT) 7159107** Early Psychosis Program
	7133107 Early 1 Sychosis 1 Togram
	7159110** Mental Health Counseling Program
	7159111** Child/Youth Mental Health Counseling Services
	7159112** Adult Mental Health Counseling Services
	7159120** Residential Services Program
	7159121** Community Care Home Services
	7159122** Family Care Home Services
Inclusions/Exclusions	7159123**ACCESS Services
	7159124**Non-Relative Services
	7159125** Relative Home Services
	7159126** Co-operative Apartment Services
	7159127** Own Apartment/Home Services
	7159128** Transition Home / Therapeutic Residence / Shelter Services
	7159129** Other Residential Services
	7159130** Vocational Support Program
	7159135** Mental Health and Addictions Inpatient Treatment Centre
	7159136** Inpatient Treatment Services for Youth
	7159140** Mental Health Promotion Program
	7159150** Mental Health and Addictions Day Programs
	7159151** Addictions Adolescent Day Services
	7159152 **Addictions Adult Day Services
	7159152 Addictions Addictions Client Navigation Program
	. 12010 1 Michigan Teanth and Management Havingation Frogram

Direct Client Costs to Total MH&A Programs/Services Operating Expenses (Refer to page 71 for results)

7159157** Early Intervention and Outreach Services 7159160**Addictions Counseling Program

7159170** Addictions Methadone Treatment Program

7159180** Detox and/or Addictions Inpatient Treatment Centre 7159190**Addictions Health Promotion Program

Secondary financial accounts:

5 ** ** Traceable Supplies and other Expenses

Excluded by request for the purpose of this report:

7159307** Developmental Psychology Services

819** Undistributed Operating Fund

859**Undistributed Capital Fund

Denominator:

The functional centres related to mental health and addictions program and services include the following primary accounts.

Inpatient Psychiatric/Addictions Units

7120522 **Mental Health Program Administration

71275** **Mental Health and Addiction Services Nursing Unit

71276** **Mental Health Long-Term Care Resident Unit

Mental Health/Addictions Ambulatory programs/services

7131070 **Emergency Mental Health Service

7134080 **Mental Health and Addiction Services Specialty Day/Night Care

7134082 **Mental Health Specialty Day/Night Care

7135080 **Mental Health and Addiction Services Specialty Clinic

7135082 **Mental Health Specialty Clinic

7134084 **Addiction Services Specialty Day/Night Care

7135084 **Addiction Services Specialty Clinic

7145540 **Mental Health Occupational Therapy

71475** **Psychology

Mental Health/Addictions Community-based programs/services

7159101 **Mental Health/Addictions Program Administration (C)

7159103 **Mental Health/Addictions Library

7159105 **Mental Health/Addictions Case Management

7159106 **Assertive Community Treatment Team (ACTT)

7159107 **Early Psychosis Program

7159110 **Mental Health Counseling Program

7159111 **Child/Youth Mental Health Counseling Services

7159112 **Adult Mental Health Counseling Services

7159120 **Residential Services Program

7159121 **Community Care Home Services

t Client Cost. ts)	s to Total MH&A Programs/Services Operating Expenses (Refer to page 71 for
	7159122 **Family Care Home Services
	7159123 **ACCESS Services
	7159124 **Non-Relative Services
	7159125 **Relative Home Services
	7159126 **Co-operative Apartment Services
	7159127 **Own Apartment/Home Services
	7159128 **Transition Home / Therapeutic Residence / Shelter Services
	7159129 **Other Residential Services
	7159130 **Vocational Support Program
	7159135 **Mental Health and Addictions Inpatient Treatment Centre
	7159136 **Inpatient Treatment Services for Youth
	7159140 **Mental Health Promotion Program
	7159150 **Mental Health and Addictions Day Programs
	7159151 **Addictions Adolescent Day Services
	7159151 Addictions Adolescent Bdy Services 7159152 **Addictions Adult Day Services
	7139132 Addictions Addit Day Services
	7159154 **Mental Health and Addictions Client Navigation Program
	7159157 **Early Intervention and Outreach Services
	7159160 **Addictions Counseling Program
	7159170 **Addictions Methadone Treatment Program
	7159180 **Detox and/or Addictions Inpatient Treatment Centre
	7159190 **Addictions Health Promotion Program
	Secondary Financial Accounts include the following:
	3 ** ** ** Compensation (includes payments to clinical physicians and
	management physicians; fee-for-service payments by MCP are excluded)
	4 ** ** ** Supplies
	5 ** ** ** Traceable Supplies and other Expenses
	6 ** ** ** Sundry
	7 ** ** ** Equipment Expenses
	8 ** ** ** Contracted-Out Services
	9 ** ** ** Buildings and Grounds Expense - Undistributed
Time Frame	2008-09 to 2012-13
Source	Provincial MIS database
Notes	5 year trending data provided

Drug Costs per Psyc	hiatric Inpatient Day (Refer to page 72 for results)
Description	Drug expenditures per mental health and addictions inpatient/resident day. An inpatient or resident day is the days during which services are provided to an inpatient or resident, between the census-taking hours on successive days. This indicator calculates the costs related to drug expenses for inpatient psychiatric nursing units. This was calculated including and excluding resident days in Mental Health Long Term Care (pertinent to the Waterford Hospital in Eastern Health and Total RHA calculations only)
	Method of Calculation
Calculation	Total Psychiatric Inpatient Unit Drug Expenses Psychiatric Unit Inpatient/Resident Days Indicator to be calculated at the provincial, regional and facility levels.
nclusions/Exclusions	Numerator: The functional centres related to inpatient mental health and addictions services which include the following primary accounts: 7127520 ** Mental Health General Nursing Unit 7127560 ** Mental Health Forensic Nursing Unit 7127570 ** Mental Health Geriatric Unit 7127580 ** Mental Health Crisis Nursing Unit 7127595 ** Mental Health and Addiction Services Combined Nursing Unit 71276 ** Mental Health Long-Term Care Resident Unit (Waterford Hospital only) Secondary financial accounts: 465 ** ** ** Supplies — Drugs Denominator: Primary Accounts: Same as noted for numerator Secondary Statistical Account: 40310 — Inpatient Days — Adult/Child) 404 — Resident Days (included where noted only)
Time Frame	2008-09 to 2012-13
Source	Provincial MIS database
Notes	 5 year trending data provided This indicator is calculated only for facilities with dedicated Mental Health and Addictions inpatient and/or resident units.

High Cost Case Mix	Groups (Refer to page 73 for results)
Description	This indicator identifies the top 5 average resource-intensive case mix groups (CMG's) for mental illness/addictions hospitalizations for NL. The CMG provides an average Resource Intensive Weight (RIW) which is then multiplied by the cost per weighted case (CPWC) in NL. The result indicates an estimated average cost of each identified CMG for mental illness/addictions hospitalizations for a one year period.
	Method of Calculation
Calculation	Average RIW X CPWC
	This indicator is calculated provincially.
Inclusions/Exclusions	This indicator includes typical cases, all age groups, and includes general/psychiatric hospitals. The provincial CPWC is calculated by the Canadian Institute for Health Information (CIHI).
Time Frame	2012-13
Source	2012-13 CMDB HFP indicators, NLCHI Clinical Database Management System
Notes	This provides an estimated average cost for a typical patient in a CMG for mental illness/addictions in a general/psychiatric hospital.

Suicide (Refer to page 77 for results)				
Description	Crude rate of suicide per 100,000 population age 10 years and older			
Calculation	Method of Calculation Total number of suicide deaths for individuals age 10 years and older x 100,000 Total mid-year population age 10 years and older			
Inclusions/Exclusions	Description: Crude rate of suicide per 100,000 population age 10 years and older Inclusion Criteria: 1. Includes suicide deaths to residents of Newfoundland and Labrador only 2. Age at death is 10 years and older 3. Sex recorded as male or female Exclusion Criteria: 1. Records with unknown sex 2. Non-residents of Newfoundland and Labrador			
Time Frame	2009			
Source	NLCHI Suicide Database			
Notes	Note: This is a composite database comprised of data collected from the Office of the Ch Medical Officer and Statistics Canada Annual Mortality Data files. Interpretation Suicide is a major cause of premature and preventable death. Suicide is a complex issue involving many factors such as mental illness, addiction, relationship problems, and financial problems. While no single factor its own causes a suicide, mental illness and addiction are major risk factors for suicide. Suicide is considered to be an action rather than an illness. Suicidal behaviour is associate with mental/psychological and physical disorders, including schizophrenia, personality disorder, eating disorders, substance abuse and dependence, and terminal illness. Most mental health professionals consider suicidal behaviour to be a result of irrational menta states (distorted perceptions, impaired judgment, extreme moods, and feelings of hopelessness, loss of interest or pleasure) brought on by mental illness Reference: 1. Health Canada. Suicide in Canada: Update of the report of the task force on suicide in Canada. 1994.			

Potential Years of L	ife Lost due to Suicide (Refer to page 78 for results)			
Description	Total number of years of life "lost" when person(s) die 'prematurely' (before age 75) from suicide per 100,000 population age between 10 and 74 years			
	Method of Calculation			
Calculation	Total number of years of life "lost" when person(s) die 'prematurely' (before age 75) from suicide x 100,000			
Calculation	Total population age between 10 and 74 years			
Inclusions/Exclusions	Description: Total number of years of life "lost" when person(s) die 'prematurely' (before age 75) from suicide per 100,000 population age between 10 and 74 years			
	 Inclusion Criteria: Includes suicide deaths to residents of Newfoundland and Labrador only Age at death is 10 years and older Sex recorded as male or female Exclusion Criteria:			
	Records with unknown sex Non-residents of Newfoundland and Labrador			
Time Frame	2009			
Source	NLCHI Suicide Database; Statistics Canada Population Estimates 2009			
Notes	Note: This is a composite database comprised of data collected from the Office of the Chief Medical Officer and Statistics Canada Annual Mortality Data files. Interpretation			
	Potential year of life lost is useful for measuring and understanding the magnitude of premature deaths (before age 75 years).			
	Suicide is considered to be an action rather than an illness. Suicidal behaviour is associated with mental/psychological and physical disorders, including schizophrenia, personality disorder, eating disorders, substance abuse and dependence, and terminal illness. Most mental health professionals consider suicidal behaviour to be a result of irrational mental states (distorted perceptions, impaired judgment, extreme moods, and feelings of hopelessness, loss of interest or pleasure) brought on by mental illness.			

Intentional Self-Inju	ry Hospitalization (Refer to page 79 for results)			
Description	Crude rate of hospitalization involving self -injury per 100,000 population			
	Method of Calculation			
	Total number of hospitalizations involving self-injury for patients age 15 and older x 100,000			
Calculation	Total mid-year population age 15 and older			
	The unit of analysis is an episode of care. An episode of care refers to all contiguous inpatient hospitalizations in general or psychiatric hospitals regardless of diagnoses.			
	Description: Crude rate of hospitalization (general/psychiatric hospitals) due to self-injury per 100,000 population			
	Inclusion Criteria:			
Inclusions/Exclusions	 ICD-10-CA self-injury codes of X60-X84 Inpatient separations from general/psychiatric hospitals through discharge or death following self-injury Age at admission is 15 years or older Sex recorded as male or female Admission to a general/psychiatric hospital Newfoundland and Labrador resident 			
	Exclusion Criteria:			
	 Records with an invalid date of birth Records with an invalid admission date Records with an invalid discharge date 			
Time Frame	April 1, 2012-March 31, 2013			
Source	NLCHI Clinical Database Management System			
	Interpretation			
Notes	Self-injury is defined as a deliberate bodily injury that may or may not result in death. This type of injury is the result of either suicidal or self-harming behaviours, or both. Self -injury can be prevented, in many cases, by early recognition, intervention and treatment of mental illnesses. While some risk factors for self-injury are beyond the control of the health system, high rates of self-injury hospitalization can be interpreted as the result of a failure of the system to prevent self-injuries that are severe enough to require hospitalizations.			

Perceived Mental H	lealth Status (Refer to page 80 for results)		
Description	Population (aged 12+ years) who reported perceiving their own mental health status as being "excellent or very good"		
	 Inclusion Criteria: Age 12 and older Survey respondents who have agreed to allow Statistics Canada to share their responses with their Ministry of Health 		
Inclusions/Exclusions	Exclusion Criteria: The CCHS covers the population 12 years of age and over living in the ten provinces and the three territories. Excluded from the survey's coverage are: persons living on reserves and other Aboriginal settlements in the provinces; full-time members of the Canadian Forces; the institutionalized population and persons living in the Quebec health regions of Région du Nunavik and Région des Terres-Cries-de-la-Baie-James. Altogether, these exclusions represent less than 3% of the target population.		
Time Frame	2011/12		
Source	Canadian Community Health Survey		
Notes	 Data have been statistically weighted to represent the population of Newfoundland and Labrador age 12 years and older. Data with a coefficient of variation (CV) from 16.6% to 33.3% are identified by an (E) and should be interpreted with caution. Data with a coefficient of variation greater than 33.3% were suppressed (F) due to extreme sampling variability. 		

Prevalence of Mood	d Disorders (Refer to page 81 for results)		
Description	Percentage of the population (aged 12+ years) who report that they have been diagnosed by a health professional as having a mood disorder, such as depression, bipolar disorder, mania or dysthymia.		
Inclusions/Exclusions	 Inclusion Criteria: Age 12 and older Survey respondents who have agreed to allow Statistics Canada to share their responses with their Ministry of Health Exclusion Criteria: The CCHS covers the population 12 years of age and over living in the ten provinces and the three territories. Excluded from the survey's coverage are: persons living on reserves and other Aboriginal settlements in the provinces; full-time members of the Canadian Forces; the institutionalized population and persons living in the Quebec health regions of Région du Nunavik and Région des Terres-Cries-de-la-Baie-James. Altogether, these exclusions represent less than 3% of the target population. 		
Time Frame	2011/12		
Source	Canadian Community Health Survey		
Notes	 Data have been statistically weighted to represent the population of Newfoundland and Labrador age 12 years and older. Data with a coefficient of variation (CV) from 16.6% to 33.3% are identified by an (E) and should be interpreted with caution. Data with a coefficient of variation greater than 33.3% were suppressed (F) due to extreme sampling variability. 		

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