

CIHI Data- What it tells us and how it can be used to drive decision-making

AGHPS November 9, 2022

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Canadian Institute for Health Information

Agenda



1. Introduction
2. Overview
3. OMHRS Operational Reports
4. Your Health System; Shared Health Priorities
5. Unintended Consequences of COVID
6. Schizophrenia Care in the Hospital

CIHI's mandate

Vision

**Better data.
Better decisions.
Healthier Canadians.**

Mandate

Deliver comparable and actionable information to accelerate improvements in health care, health system performance and population health across the continuum of care

Strategic goals



Be a trusted source of standards and quality data



Expand analytical tools to support measurement of health systems



Produce actionable analysis and accelerate its adoption

Priority themes and populations

Themes

Patient experience
Quality and safety
Outcomes
Value for money



Health system performance

Populations

Seniors and aging
Mental health and addictions
First Nations, Inuit and Métis
Children and youth



Foundation



Our people



Stakeholder engagement and partnerships



Privacy and security

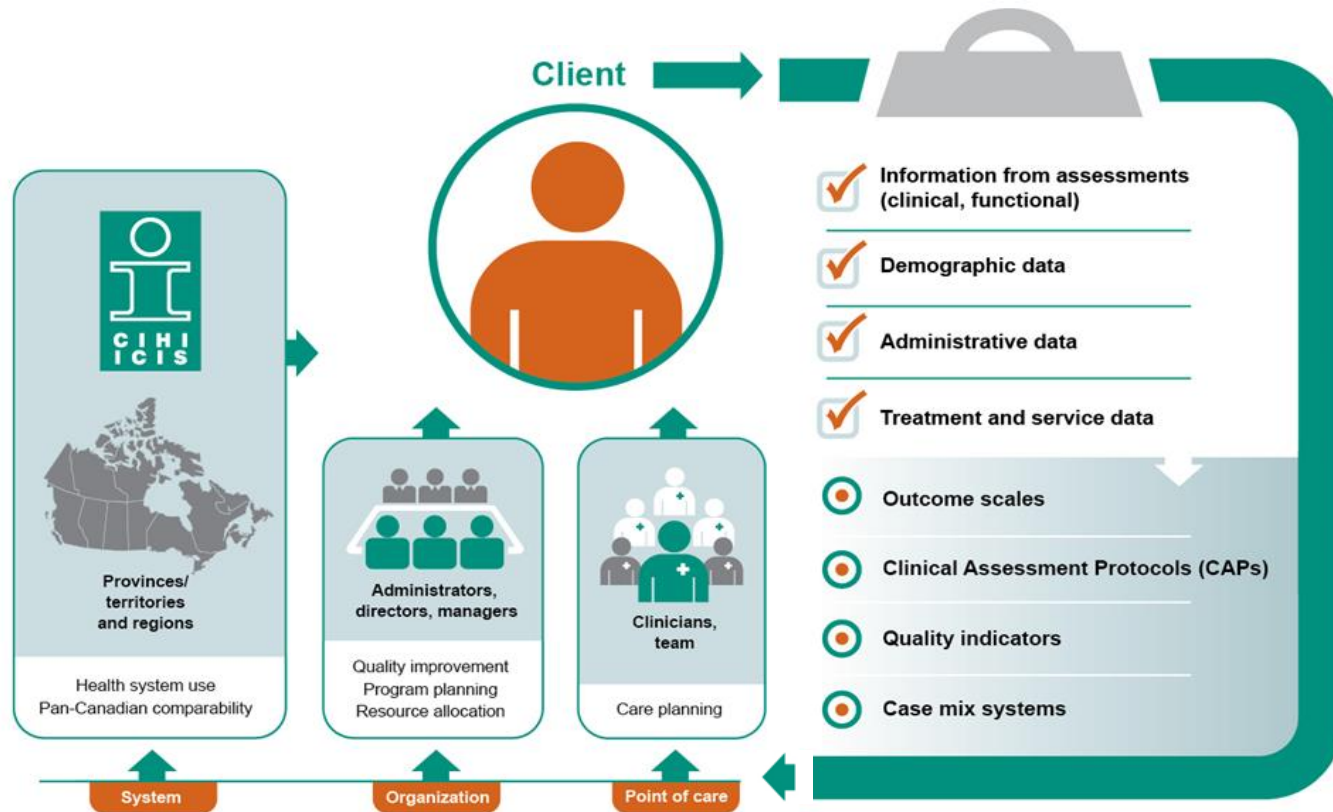


Information technology

Values

Respect • Integrity • Collaboration • Excellence • Innovation

interRAI data





The Ontario Mental Health Reporting System (OMHRS)

Implemented in 2005 by CIHI on behalf of Ontario's Ministry of Health and Long-Term Care

Used as the database and reporting system for all RAI-MH data

OMHRS captures about 96% of hospital discharges in Ontario for mental health conditions

Mandated collection and submission of OMHRS data already in place for all discharges from adult MH beds in Ontario so:

- Hospitals have software to collect and submit OMHRS data
- Completing and submitting OMHRS data is integrated into clinical practice/business processes at all Ontario hospitals with designated adult mental health beds
- Additional information collected in OMHRS (HCN, homelessness, sex, date of birth, specific DSM-5 TR codes, etc.) can be used in post data collection analytics
- Ontario MOH and others (ICES) have access to record level OMHRS data submitted to CIHI for analytics

Data to Drive Decision Making

What is data driven decision making?

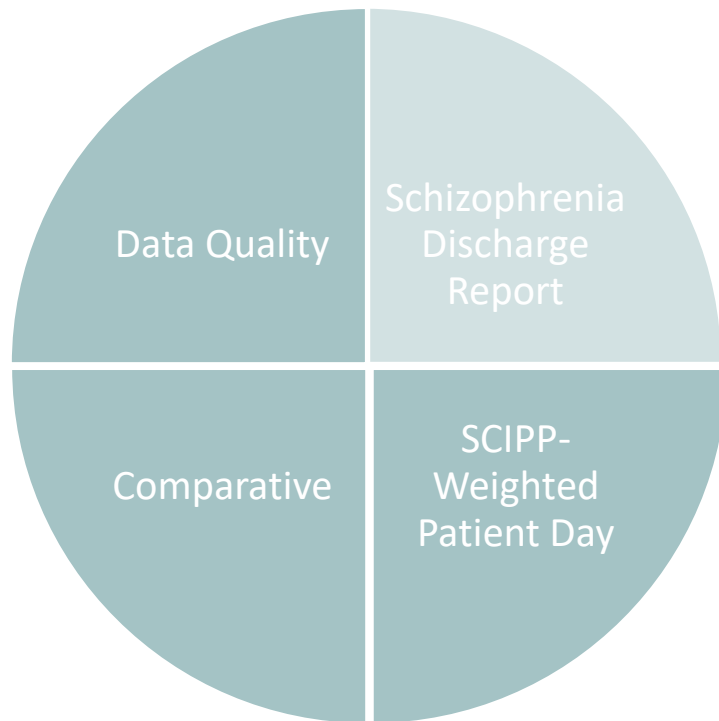
Data-driven decision-making (DDDM) is defined as using facts, metrics, and data to guide strategic business decisions that align with your goals, objectives, and initiatives.

What are data-driven strategies?

When you employ a “data-driven” approach, it means it makes strategic decisions based on data analysis and interpretation. A data-driven approach enables you to examine and organize the data available with the goal of better serving consumers.

OMHRS Operational Reports

OMHRS Operational Reports

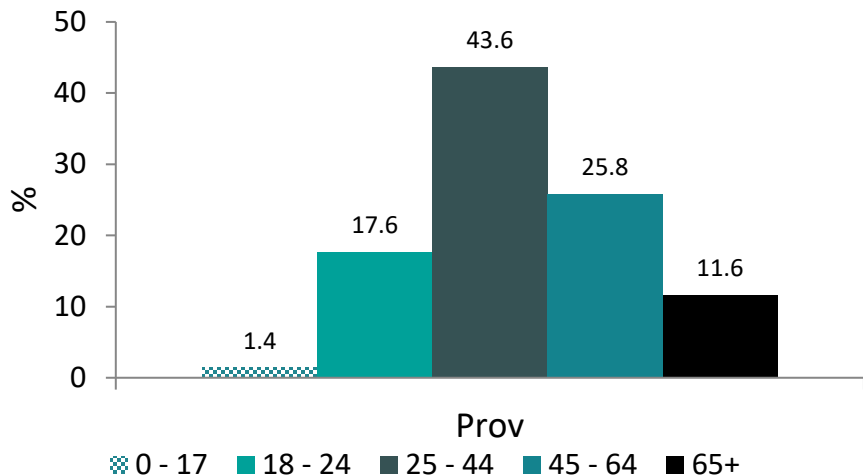


Assessment
Year-to-date
Facility identifiable
MH CAPS

Facility
Comparative

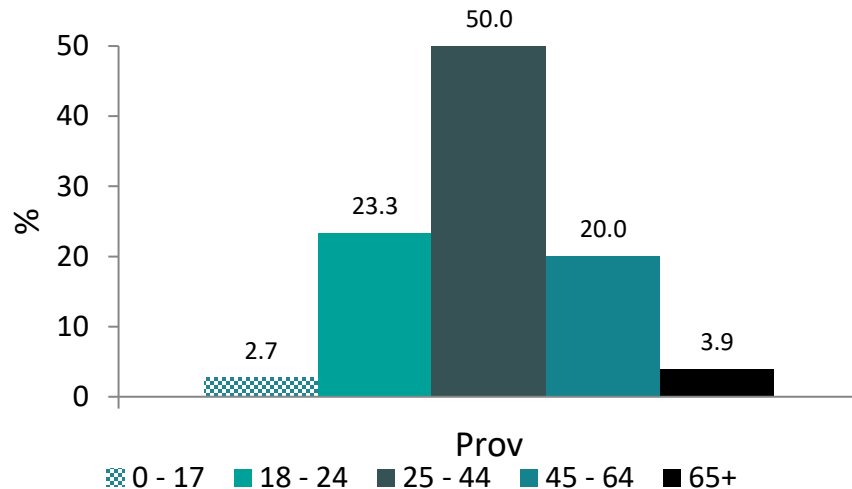
Age at Admission

Age at Admission - Admission Assessments



Total number of Admission Assessments = 44,685

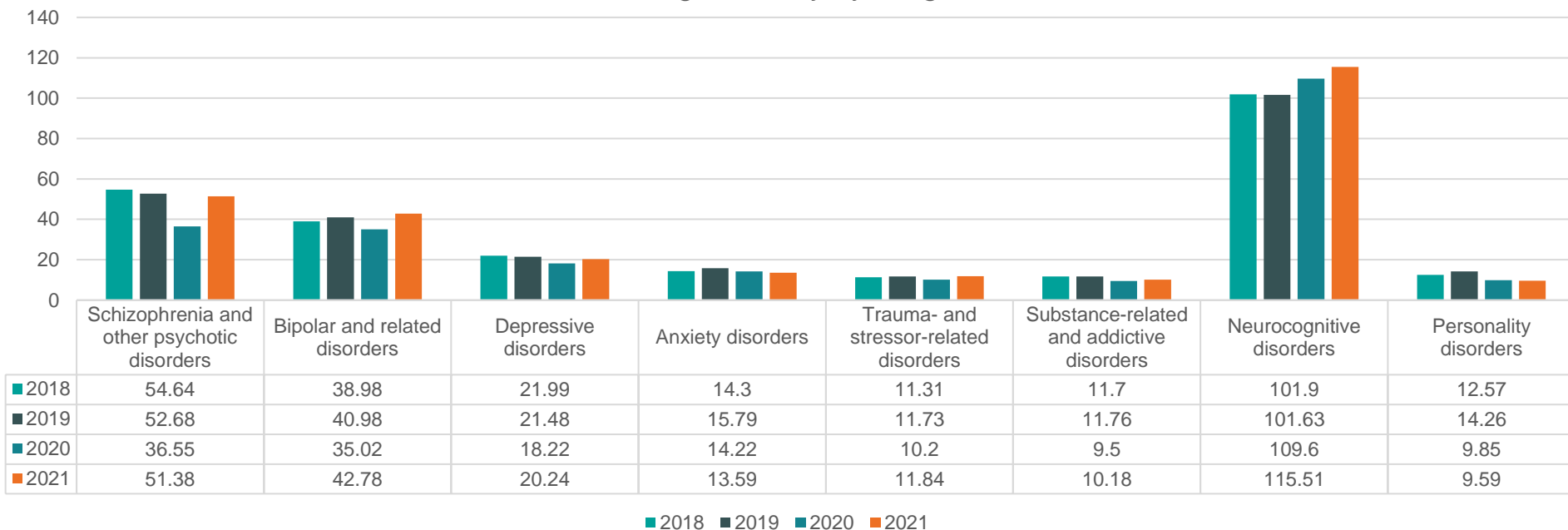
Age at Admission - Short Stay Assessments



Total number of Short Stay Assessments=19,402

Length of Stay

Median Length of Stay by Diagnosis



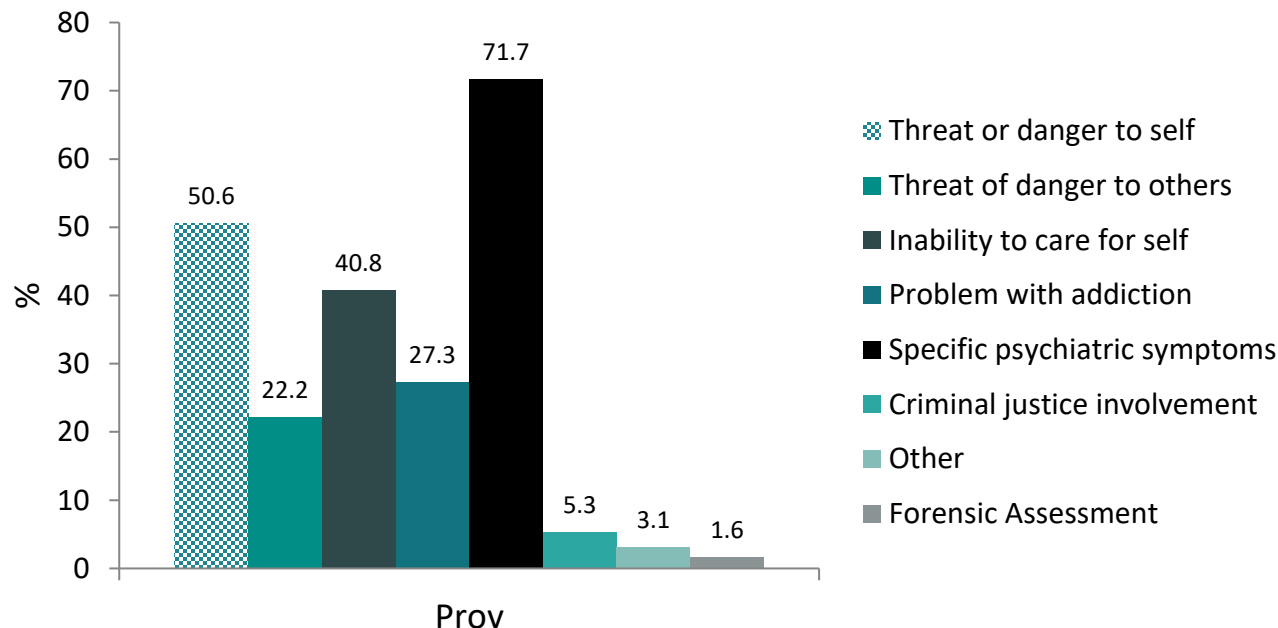
Source

Ontario Mental Health Reporting System, April 1, 2021 to March 31, 2022, Canadian Institute for Health Information.

Reasons for Admission

Reasons for Admission - Admission Assessments

All diagnostic categories



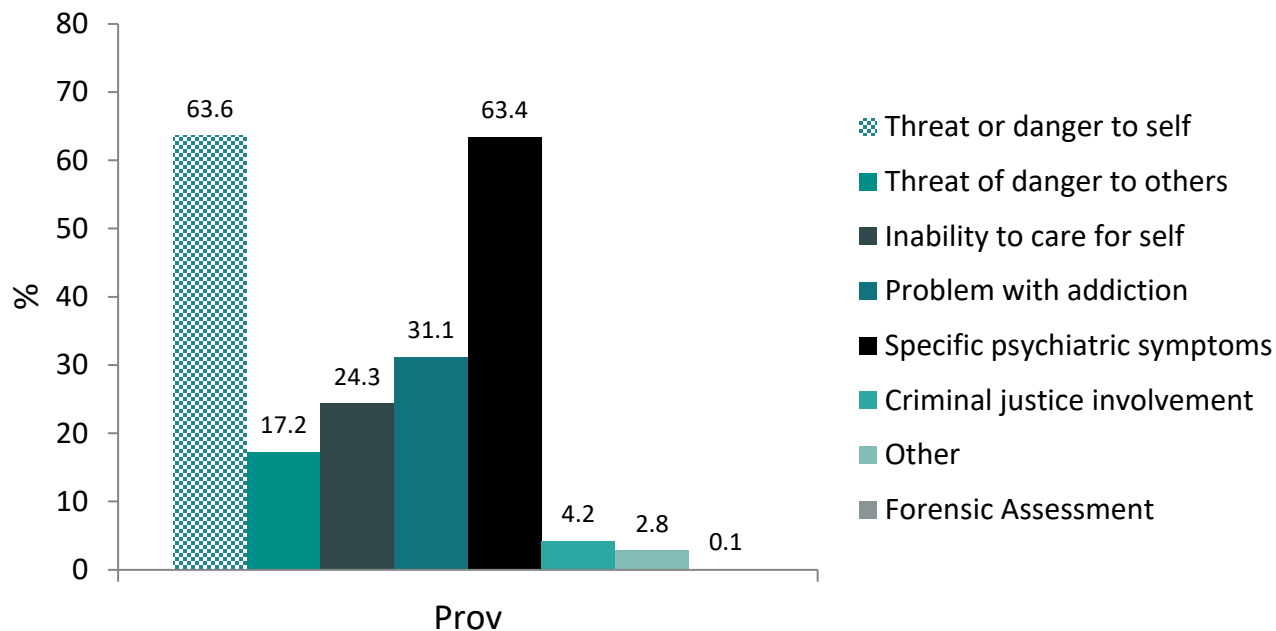
Source

Ontario Mental Health Reporting System, April 1, 2021 to March 31, 2022, Canadian Institute for Health Information.

Reasons for Admission

Reasons for Admission - Short Stay Assessments

All diagnostic categories



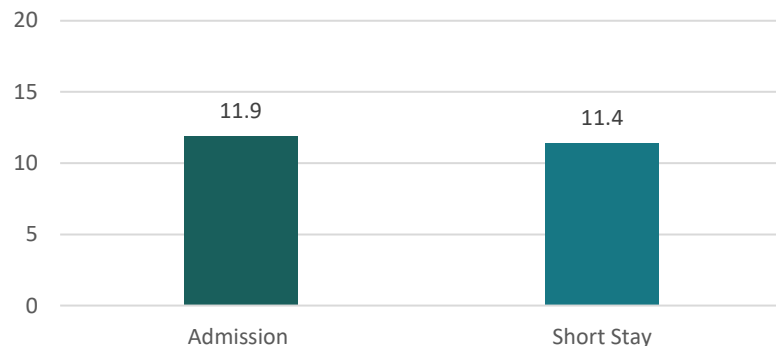
Source

Ontario Mental Health Reporting System, April 1, 2021 to March 31, 2022, Canadian Institute for Health Information.

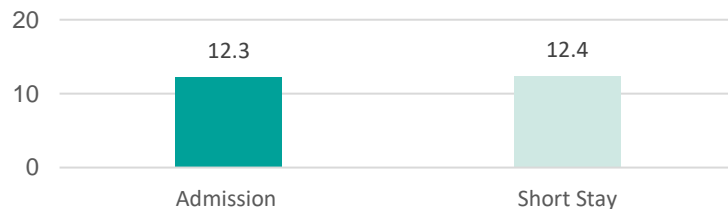
30-Day Mental Health Readmission

30 days or less since last discharge from this facility

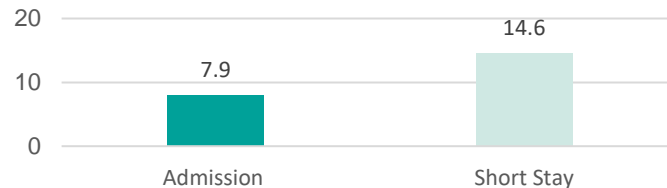
30-Day Mental Health Readmission *All diagnostic categories*



30-Day Mental Health Readmission *Schizophrenia spectrum and other psychotic...*

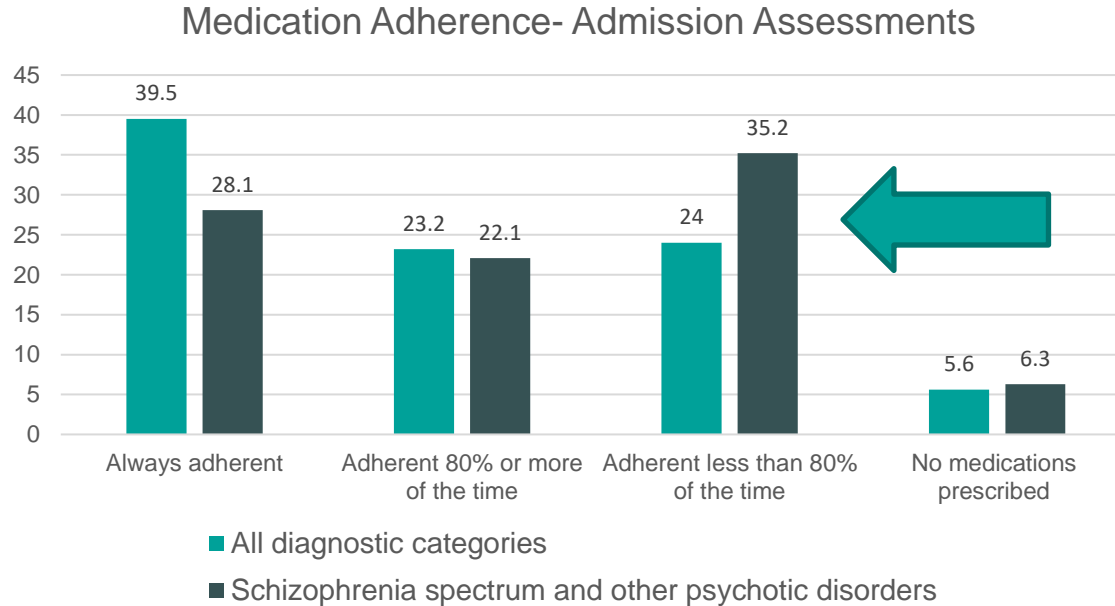


30-Day Mental Health Readmission - *Neurocognitive...*



Source
Ontario Mental Health Reporting System, April 1, 2021 to March 31, 2022, Canadian Institute for Health Information.

Medication Adherence

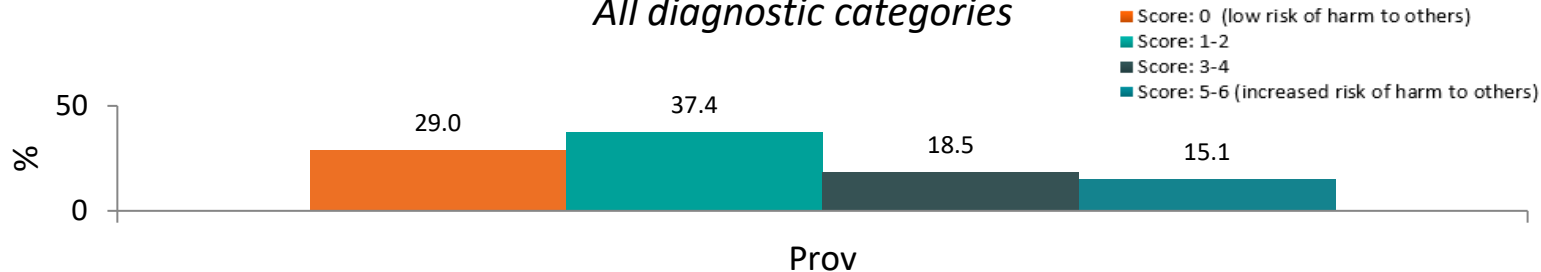


Source

Ontario Mental Health Reporting System, April 1, 2021 to March 31, 2022, Canadian Institute for Health Information.

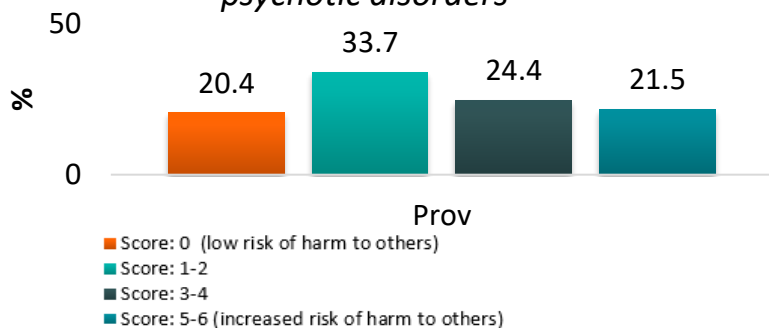
Risk of Harm to Others Scale Scores - Admission Assessments

All diagnostic categories



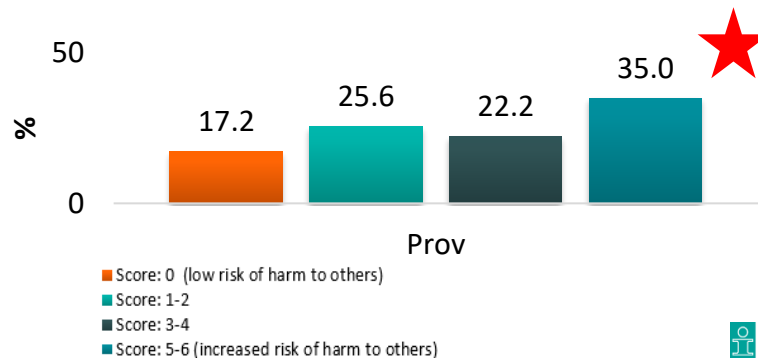
Risk of Harm to Others Scale Scores - Admission Assessments

*Schizophrenia spectrum and other
psychotic disorders*



Risk of Harm to Others Scale Scores - Admission Assessments




Neurocognitive disorders



Your Health System: Shared Health Priorities

Shared Health Priorities Indicators

12 Pan-Canadian indicators include:

- Hospital Stays for Harm Caused by Substance Use 
- Frequent Emergency Room Visits for Help With Mental Health and/or Addictions. 
- Self-Harm, Including Suicide 
- Wait Times for Community Mental Health Counselling 
- Navigation of Mental Health and/or Substance Use Services
- Early Intervention for Mental Health and/or Substance Use Among Children and Youth

Indicator reporting

Hospital Stays for Harm Caused by Substance Use — Key findings

Every day,
450+ Canadians are hospitalized
because of harm from alcohol or drugs



More than for
heart attacks and
strokes combined



(Source: CIHI, 2019)

Overall

2 in 3
are
men



Alcohol contributes to **more than half of hospital stays** for harm caused by substance use

Among children and youth
(age 10 to 24), hospital stays are
more likely to be caused by **cannabis**
than by alcohol or other substances



(Source: CIHI, 2019)

4 in 10
adults
(age 25+)



7 in 10
children
and youth
(age 10 to 24)

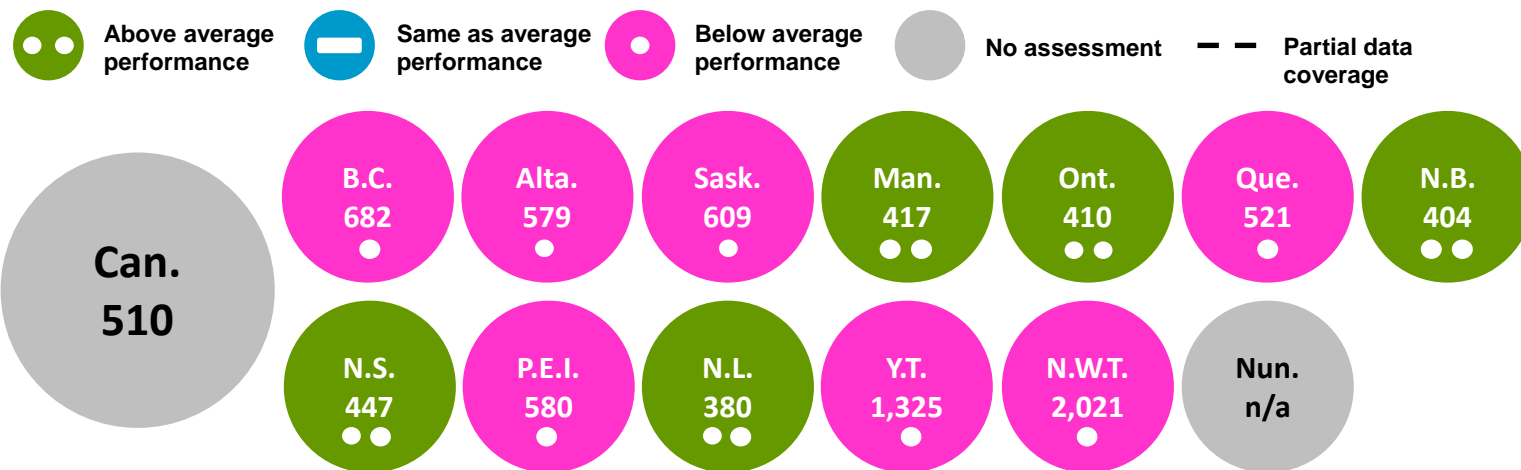
hospitalized for harm caused by substance use also have a mental
health condition such as **anxiety**, **depression** or **schizophrenia**

(Source: CIHI, 2019)

Definition: The rate of hospital stays as a direct result of using alcohol, cannabis and other substances.

Indicator reporting (continued)

Hospital Stays for Harm Caused by Substance Use, per 100,000
2019–2020 — Indicator results



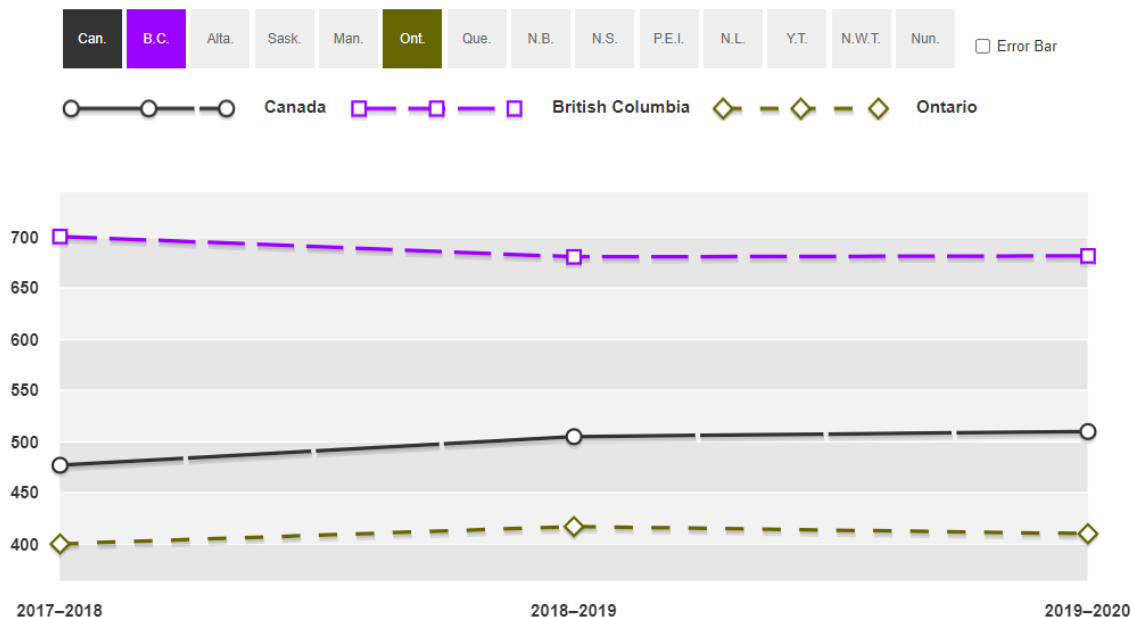
Key links

Indicator results with additional breakdowns are available in [YHS: In Brief](#).

More information on the indicator, as well as contextual information, is available in the [2019 companion report](#).

Indicator reporting (continued)

Hospital Stays for Harm Caused by Substance Use, per 100,000
(2017–2018 to 2019–2020) — Trend results



Key link
[YHS: In Brief.](#)

Source Canadian Institute for Health Information.

Frequent Use of the ER

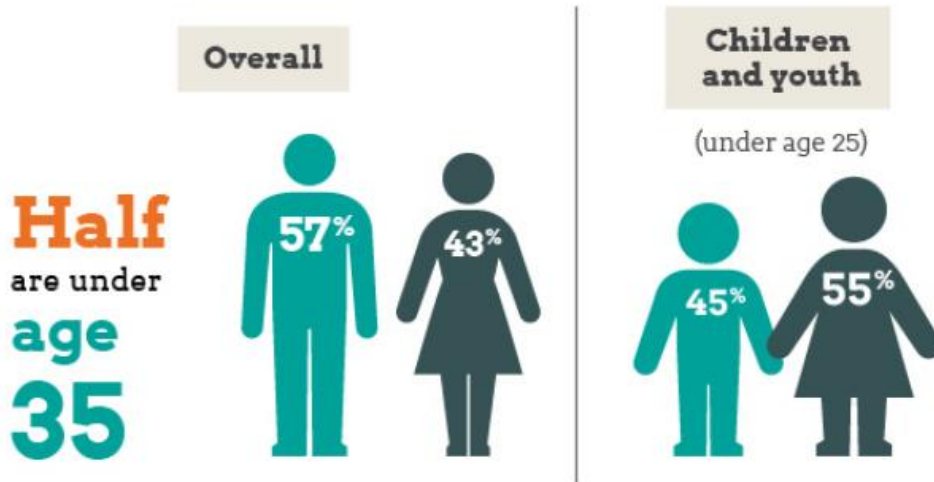
**Nearly 1 in 10
Canadians**
who visit the ER for help
with mental health and/or
addictions have

**4+ visits
a year**



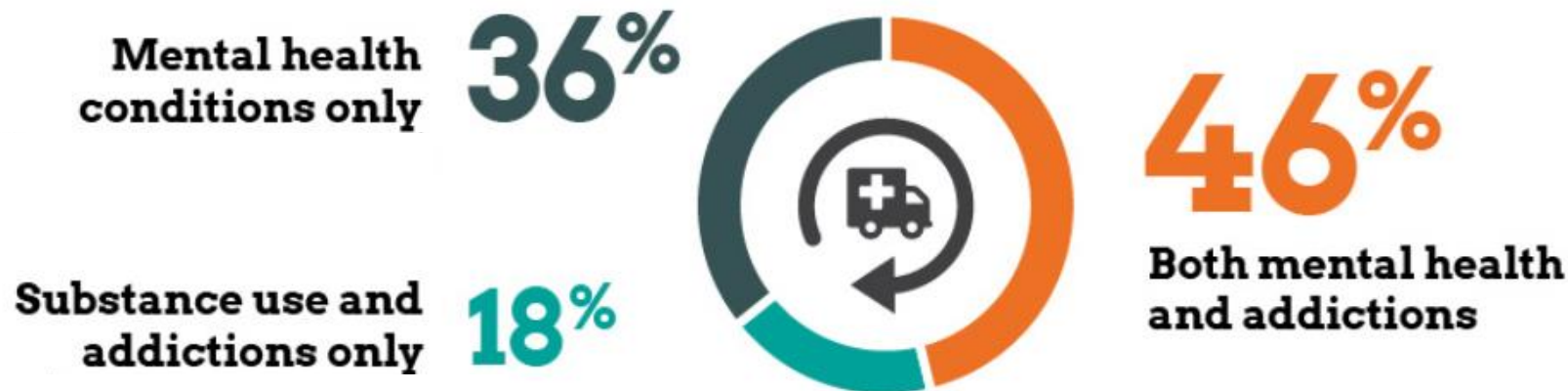
(Source: CIHI, 2019)

Who visits the ER frequently for mental health
and/or addictions help in Canada?



(Source: CIHI, 2019)

What is the reason for frequent use of the ER for help with mental health and/or addictions?



(Source: CIHI, 2019)

Repeat Hospital Stays for Mental Illness



(Source: CIHI, 2020)

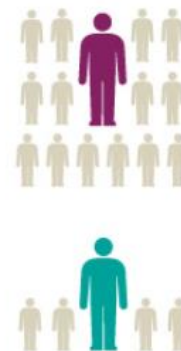
Repeat hospital stays
for mental illness are



(Source: CIHI, 2020)

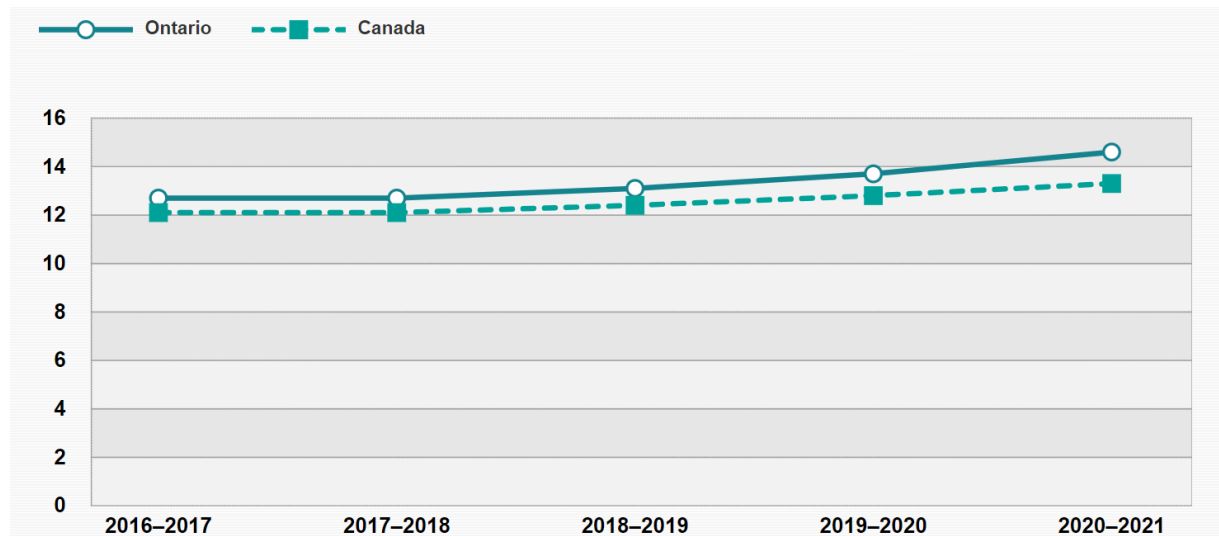
Availability and quality
of community mental
health care vary
by health region

from
1 in 15
with repeat
hospitalizations
(best)
to
1 in 5
with repeat
hospitalizations
(worst)



(Source: CIHI, 2020)

Trend Over Time: Repeat Hospital Stays for Mental Illness (Percentage)



Trend Over Time: Repeat Hospital Stays for Mental Illness (Percentage)

Comparator	Indicator results 2016–2017	Indicator results 2017–2018	Indicator results 2018–2019	Indicator results 2019–2020	Indicator results 2020–2021
Canada	12.1	12.1	12.4	12.8	13.3
Ontario	12.7	12.7	13.1	13.7	14.6

End of table

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SHP Indicators: Overall key messages

- Over time, the SHP indicators will tell a clearer story about access to care across the country, helping to identify gaps in services and to make meaningful changes to improve the experiences of Canadian patients and their families.
- Reporting on each of the indicators will not lead to immediate change. The COVID-19 pandemic has profoundly impacted these sectors. It will take time for investments to improve care at the front lines and to better meet the needs of patients and their families.
- Considerable efforts are being made by the provinces and territories to expand coverage in existing data holdings, develop common information standards and explore new data sources for public reporting.
- The results represent a baseline from which change can be measured over time.

Looking ahead: December 2022 release

- 2 new indicators for MHSU, updated results for 4 MHSU indicators, and a companion report focused on the new indicators
- This public release includes more timely results, region-level reporting, and trend information for several indicators, where data supports.
- Results are reported via CIHI's Your Health System: In Brief web tool, along with key message infographics and a brief companion report.
- Trend information is expected for Year 1 and Year 2 indicators, where data supports

Visit the [Shared Health Priorities](#) page for more information

2 new indicators :

- Navigation of Mental Health and/or Substance Use Services
- Early Intervention for Mental Health and/or Substance Use Among Children and Youth

Updated data for the following access to MHSU services indicators:

- Wait Times for Community Mental Health Counselling
- Self-Harm, Including Suicide
- Hospital Stays for Harm Caused by Substance Use
- Frequent Emergency Room Visits for Help with MHSU

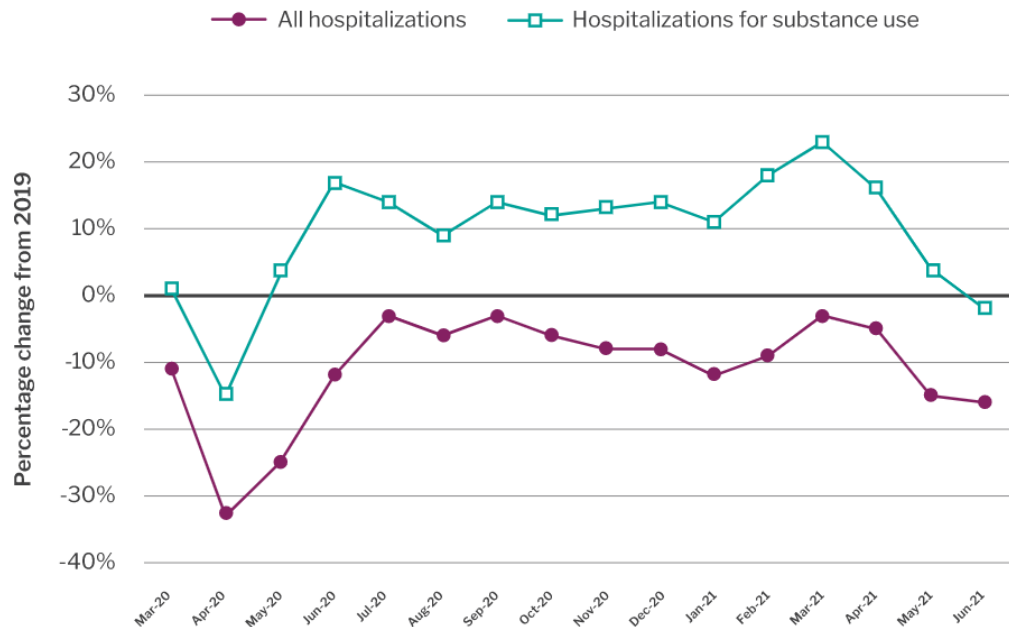
Unintended Consequences of COVID-19



Unintended Consequences
of COVID-19

Impact on Harms Caused
by Substance Use

Change in hospitalization



Sources

National Ambulatory Care Reporting System, Hospital Morbidity Database and Ontario Mental Health Reporting System, 2018–2019 to 2020–2021, Canadian Institute for Health Information.

ED visits and hospitalizations for top 4 substances, March to September 2020 compared with March to September 2019

Substance type	ED visits			Hospitalizations		
	2019	2020	Percentage change	2019	2020	Percentage change
Alcohol	109,784	98,060	-11%	42,334	44,506	5%
Opioids	22,895	24,622	8%	10,264	10,960	7%
Cannabis	15,201	16,470	8%	10,023	10,524	5%
Stimulants (excluding cocaine)	14,909	15,709	5%	9,530	10,280	8%

Notes

Reflects data from March to September 2020, submitted as of January 1, 2021.

Full regional coverage is available for emergency departments (EDs) in Quebec, Ontario, Alberta and Yukon. Partial regional coverage is available for Prince Edward Island, Nova Scotia, Saskatchewan and British Columbia. Combined, these regions represent about 80% of Canadian ED visits.

Hospitalization data for Quebec was not available at the time of analysis.


Data for 2020–2021 is provisional. See the [Notes and limitations](#) section of this report.

Sources

National Ambulatory Care Reporting System, Hospital Morbidity Database and Ontario Mental Health Reporting System, 2018–2019 to 2020–2021, Canadian Institute for Health Information.

Schizophrenia Care

Pay for Quality Initiative for MHA

**Ontario**

Health Data Branch Service Announcement

Ontario Mental Health Reporting System (OMHRS) - Resident Assessment Instrument – Mental Health (RAI-MH) Update

With more than one million Ontarians experiencing mental health and addictions challenges, the Ministry of Health has prioritized these population to be served under the integrated care agenda. The OMHRS is a valuable tool to support measurement-based care, quality improvement and performance measurement for mental health and addictions.

The Ontario Hospital Association (OHA) and Canadian Institute for Health Information (CIHI), through the Chairs of the Hospital Advisory Committee's Mental Health Funding initiative, have been selected to manually collect information from mental health facilities on the following quality standards:

Health Quality Ontario Quality Statements based on the [Quality Standard – Schizophrenia: Care](#) ([links](#)):

- Quality Statement 6: Treatment with Clozapine
- Quality Statement 7: Treatment with Long-Acting Injectable Antipsychotic Medication
- Quality Statement 10: Follow-Up Appointment After Discharge
- Quality Statement 11: Transitions in Care

The OMHRS is a valuable tool implemented by CIHI on behalf of the Ministry to standardize the collection of this important quality of care information within a singular reporting framework.


The OMHRS will add 5 new mandatory data elements (related to treatment for schizophrenia) to the OMHRS: Long-Acting Injectable Antipsychotic Medication, Short Discharge Assessment, and Short Stay Record. **Change is effective April 1, 2022.** New validation rules to support this change will only apply to submissions received after this date, and submissions that reference assessments received after this date. More information on these changes will follow.


The new data elements will inform evidence-based provincial benchmarks for these interventions and the strategies needed to ensure value-based care from hospital to community for patients with conditions of mental health and addictions.

Please share with the relevant staff within your organization.


- For questions related to the Service Announcement, please contact AskHealthData@ontario.ca
- For questions on the Mental Health Funding initiative, please contact HSF@ontario.ca
- For Guidance on completing assessments, please contact specializedcare@cihi.ca

Health Data Support Team


**Canadian Institute for Health Information**
Better data. Better decisions. Healthier Canadians.




Hospital Advisory Committee
Mental Health and Addictions Funding Initiative
Monday, November 29, 2021



OHA Ontario Hospital Association
Confidential. Please do not distribute.



Health Quality Ontario
Let's make our health system healthier

**Ontario**

Quality Statement 6: Treatment With Clozapine

Quality Statement 7: Treatment With Long-Acting Injectable Antipsychotic Medication

Quality Statement 10: Follow-Up Appointment After Discharge

Quality Statement 11: Transitions in Care

New Data Elements for OMHRS FY2022-2023

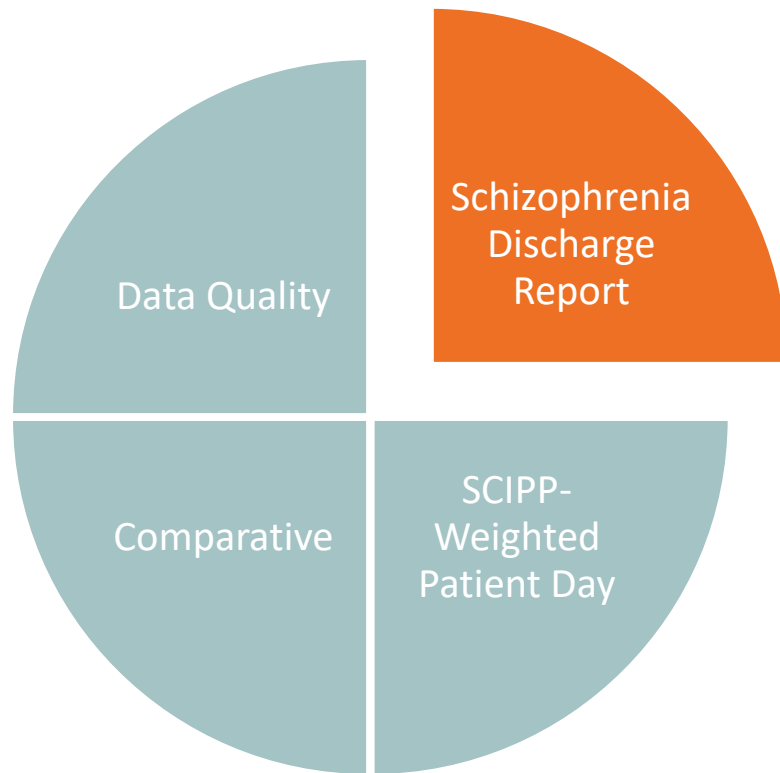
F20.9 Schizophrenia
Unspecified

F25.0 Schizoaffective Disorder,
Bipolar

F25.1 Schizoaffective Disorder

- **Q2a.** Psychiatric Diagnosis (existing)
- **X160.** Schizophrenia Primary Diagnosis
- **X161.** Long-Acting Injectable Medication
- **X162.** Treatment Resistant
- **X163.** Treatment with Clozapine
- **X164.** Care Plan Sent

New OMHRS Operational Report



Data collection began
April 1, 2022

Schizophrenia Discharge Report



Ontario
Facilities
65



Discharge
Assessments
9,537



Schizophrenia
Patients
2,051

- **Age 25-44: 70%**
- **Average Age: 37**
- **Male: 75%**
- **Employed: 11%**
- **Homeless: 8%**
- **Discharged to private residence: 75%**
- **Median LOS: 16 days**
- **Average LOS: 41 days**

Source

Ontario Mental Health Reporting System, Schizophrenia Discharge Report, April 1, 2022 to June 20, 2022, Canadian Institute for Health Information.

Quality Indicators: Schizophrenia Discharge Report



Prescribed
Clozapine
45%



Prescribed Long
Acting
Injectable
54%

5.8%

Prior to admission

48.5%

During hospital stay



Treatment
Resistant
18%



Care Plan
Available
75%

Revised November 25, 2022

Source

Ontario Mental Health Reporting System, Schizophrenia Discharge Report, April 16, 2022 to June 20, 2022, Canadian Institute for Health Information.

New Supporting Documentation

How To | August 2022

Operational Reports, Finding Your Way Around



FAQ | September 2022

Get started!

1. Navigate to CIHI's home page at www.cihi.ca.
2. Click **Log In** at the top of the page.

Note: If you don't have a CIHI username and password (page) and follow the instructions. If you need help,



3. Enter your CIHI username and password, then click

Note: If you don't have a CIHI username and password (page) and follow the instructions. If you need help, send

Schizophrenia Care in Hospital Frequently Asked Questions

New data elements for OMHRS

In consultation and collaboration with the Ontario Ministry of Health, the Canadian Institute for Health Information (CIHI) has added [quality statements](#) based on the Quality Standard. [Schizophrenia](#) elements have been added to the Resident Assessment Mental Health Reporting System (OMHRS) to assist in the care of schizophrenia care. These new data elements will take effect on March 2023 and will replace the document dated for March 2022.

Background

1. What are Quality Standards?

Quality Standards are sets of specifications that outline the best practices. They focus on conditions or topics where

In 2016, Health Quality Ontario developed [Schizophrenia](#) Quality Standards for mental health conditions. A panel of experts developed 11 quality statements for adults with

In 2018, Health Quality Ontario developed [Schizophrenia](#) Standard focuses on standardized care provided in the community, care, rehabilitation, care in correctional facilities, and correctional

2. Why do the new data elements focus on persons with schizophrenia or schizoaffective disorder?

Based on previous system-level analyses completed by CIHI, persons diagnosed with schizophrenia account for the largest proportion

Schizophrenia Care in Hospital v. 1. 2



Available for download on
the CIHI eStore and the
operational reports page.

Ontario Mental Health Reporting System Guide to Interpreting Quarterly Schizophrenia Discharge Reports

2022–2023

Education



- 980E – Introduction to Using Your OMHRS Data (eLearning)
- 1151E-RAI-MH: Beginners 1 — Introduction to the Assessment (eLearning)
- 1152E-RAI-MH: Beginners 2 — Completing the Assessment (Part 1)
- 1153E-RAI-MH: Beginners 2 — Completing the Assessment (Part 2)
- 1154E-RAI-MH: Beginners 3 — Outcome Scales and CAPs (eLearning)

Contact us



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