# Table of contents

1 Introduction ......................................................................................................................... 4  
   1.1 An overview of the Ontario Mental Health Reporting System ................................. 4
2 Coverage ............................................................................................................................ 5  
   2.1 Population of reference .............................................................................................. 5  
   2.2 Completeness of data ............................................................................................... 6
3 Data collection and processing ........................................................................................... 7  
   3.1 Resident Assessment Instrument–Mental Health, Version 2.0 ................................. 7  
   3.2 Data collection and submission .................................................................................. 8  
   3.3 Data quality control ................................................................................................... 9  
      3.3.1 Data quality at the data collection level ............................................................ 9  
      3.3.2 Validity and consistency edits ................................................................. 9  
      3.3.3 Facility frame maintenance ....................................................................... 10  
   3.4 Submission timelines ................................................................................................10  
      3.4.1 Data submission timeline .............................................................................10
4 Data limitations ..................................................................................................................11  
   4.1 Accuracy ...................................................................................................................11  
      4.1.1 Facility frame coverage .................................................................................11  
      4.1.2 Mental health data in OMHRS .............................................................. 12  
      4.1.3 Item non-response ..................................................................................... 12  
      4.1.4 Unit non-response ..................................................................................... 14  
      4.1.5 Imputation .................................................................................................... 15  
      4.1.6 Other notes — Historical admission dates in OMHRS ................................. 15  
   4.2 Comparability ............................................................................................................16  
      4.2.1 Linkage .........................................................................................................16  
      4.2.2 Historical comparability ............................................................................. 16  
   4.3 Timeliness ....................................................................................................................19  
      4.3.1 Currency of OMHRS data .......................................................................... 19  
      4.3.2 Late submissions to OMHRS ..................................................................... 19
5 Contacts ............................................................................................................................19
1 Introduction

This document provides an overview of the Ontario Mental Health Reporting System (OMHRS) and a summary of the quality of the data submitted to the system. It is intended for users of OMHRS data and OMHRS reports to enable them to identify potential limitations of the data and to provide additional context regarding the use of information from OMHRS.

The document is organized in sections reflecting different dimensions of data quality, with a particular focus on accuracy, or how well OMHRS data reflects the reality it was designed to measure.

1.1 An overview of the Ontario Mental Health Reporting System

OMHRS was implemented in 2005 by the Canadian Institute for Health Information (CIHI) on behalf of the Ontario Ministry of Health and Long-Term Care (MOHLTC). OMHRS facilitates the collection, analysis and reporting of information submitted to CIHI about individuals admitted to the designated adult inpatient mental health beds in general and specialty facilities in the province of Ontario. Starting in 2010–2011, 1 facility in Newfoundland and Labrador began voluntarily submitting data to OMHRS. In 2013–2014, a facility in Manitoba as well as a second facility in Newfoundland and Labrador also began voluntarily submitting data to OMHRS. In 2015–2016, 2 Ontario hospitals began submitting data to OMHRS on designated child/youth mental health beds.

The OMHRS data set is based primarily on the Resident Assessment Instrument–Mental Health (RAI-MH) and includes detailed information about mental and physical health, social support and service use.

The database is longitudinal, in that hospitals collect and submit information to CIHI when an individual is admitted, discharged or has a significant change in health status, as well as every 3 months for individuals who remain in hospital longer than 3 months.

OMHRS was created to be a resource for standardized clinical and administrative information on adult inpatient mental health care in Ontario. At the clinical level, OMHRS data guides care planning and quality improvement, and supports analysis of client risks and outcomes over time. At the management and policy-making levels, the data is used to support planning and accountability mechanisms.
CIHI provides OMHRS facility comparative reports and other analyses, which include information on outcome measures, quality indicators, System for Classification of In-Patient Psychiatry (SCIPP) Weighted Patient Days and Mental Health Clinical Assessment Protocols (MH CAPs). CIHI also provides OMHRS facility-level data quality reports to help participating facilities identify data quality issues and improve data accuracy and comparability. OMHRS data is also made available to external users on request (such as the MOHLTC, researchers, the media), subject to CIHI’s Privacy Policy on the Collection, Use, Disclosure and Retention of Personal Health Information and De-Identified Data, 2010 and other requirements.

The information presented in this data quality document is based on OMHRS data as of May 15, 2017, when a snapshot of the database was taken for the purpose of analysis and reporting. At that time, the most recent full fiscal year available for inclusion in the data was 2016–2017.

2 Coverage

2.1 Population of reference

The population of reference for OMHRS is individuals who are admitted to Ontario facilities that have designated adult inpatient mental health beds for mental health and/or addictions services (e.g., treatment of a mental health– and/or addictions-related condition, forensic assessment, detoxification), as well as individuals who receive services in designated adult mental health facilities outside Ontario that voluntarily submit data to the reporting system.

As of May 15, 2017, 84 facilities had submitted data to CIHI for OMHRS; 81 of these facilities were in Ontario, 2 were in Newfoundland and Labrador and 1 was in Manitoba. This frame changes slightly from year to year as facilities open, close, and merge or split. OMHRS updates its frame every quarter to reflect sites that are expected to submit data.

OMHRS was mandated by the Ontario MOHLTC for new admissions on and following October 1, 2005. Therefore, from some perspectives, OMHRS could be considered to contain census data for all clients admitted to a designated adult inpatient mental health bed in the province of Ontario since that time.
2.2 Completeness of data

Under the MOHLTC mandate, it is assumed that the data received from Ontario facilities includes all inpatient mental health episodes that occurred in designated beds within these facilities. At this time, there is no absolute mechanism in place for verifying this assumption. However, the MOHLTC now provides participating sites with quarterly compliance reports, which compare volumes of OMHRS submissions with patient census information. Because of this focus on compliance, the OMHRS data is expected to be complete or nearly complete for the province of Ontario.

As of May 15, 2017, the OMHRS database contained 1,184,733 records, representing 639,303 episodes of care from 84 facilities. Volumes of specific assessment types are provided in Table 1. Details about the assessment types can be found in Section 3.1 of this document.

Table 1  Volumes of assessments in OMHRS as of May 15, 2017

<table>
<thead>
<tr>
<th>Assessment type</th>
<th>Number of records</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full admission</td>
<td>467,080</td>
<td>39.4%</td>
</tr>
<tr>
<td>Discharge</td>
<td>462,511</td>
<td>39.0%</td>
</tr>
<tr>
<td>Short stay</td>
<td>172,223</td>
<td>14.5%</td>
</tr>
<tr>
<td>Quarterly</td>
<td>79,502</td>
<td>6.7%</td>
</tr>
<tr>
<td>Change in status</td>
<td>3,417</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

Source
Ontario Mental Health Reporting System, May 15, 2017, Canadian Institute for Health Information.
3 Data collection and processing

3.1 Resident Assessment Instrument–Mental Health, Version 2.0

The original OMHRS implementation incorporated version 2.0 of the RAI-MH as well as admission and discharge tracking–related data elements. The RAI-MH is a unique standardized data collection system for mental health, which is designed to include care planning, outcome measurement, quality improvement and case mix applications. In recent years, the interRAI MH instrument has replaced version 2.0 of the RAI-MH as the international standard for adult inpatient mental health. Beginning with the 2009–2010 data year, OMHRS has incorporated many of the interRAI MH instrument elements, and OMHRS is now highly compatible with the interRAI MH instrument. Data users should be mindful of possible differences in interRAI instruments when making international comparisons.

The RAI-MH is a suite of products that includes

- The Minimum Data Set for Mental Health (MDS-MH), with approximately 300 data elements;
- Mental Health Clinical Assessment Protocols (MH CAPs) for care planning;
- Quality indicators and outcome measures based on clinical scales; and
- The System for Classification of In-Patient Psychiatry (SCIPP), which is the case mix methodology developed for use with the MDS-MH data.

OMHRS data submission requirements include 5 different assessment types. Refer to the figure for a sample assessment timeline.

- A full admission assessment is completed on each client within 72 hours (3 days) of admission to the mental health bed. This assessment includes the clinical and administrative elements of the MDS-MH, as well as demographic information, which is completed at admission only.

- A short stay assessment may be completed in lieu of a full assessment when the length of stay in the mental health bed is less than or equal to 72 hours (3 days). It includes primarily administrative and demographic elements, as well as some discharge information. The additional clinical elements in the MDS-MH are not mandatory but may be submitted if information is available.

- A quarterly assessment is completed every quarter for all longer-stay people within a maximum of 92 days following the last full admission, quarterly or change in status assessment. This assessment includes clinical and administrative data elements.
- A **discharge** assessment is completed within 72 hours (3 days) prior to the client being discharged from the inpatient mental health bed. For all planned discharges where the length of stay is greater than 6 days, a full discharge assessment, including the clinical data elements and discharge information, is required. A shortened version of the discharge assessment is permitted if the length of stay is less than 6 days or if the patient’s discharge was unforeseen.

- A **change in status** assessment should be completed and sent to CIHI if the client has had a major physical, mental or social change/event that would render the pre-existing assessment data and care plan invalid. A change in status assessment includes clinical and administrative elements.

---

**Figure**  Sample OMHRS assessment timeline

![Sample OMHRS assessment timeline](image)

---

### 3.2 Data collection and submission

OMHRS data is collected by clinical staff within a facility as part of the routine assessment process and entered into a vendor software application. Vendors providing OMHRS data collection software to participating facilities must be licensed with CIHI and undergo annual testing to ensure that the system is compliant with OMHRS specifications.

Data is submitted to CIHI in an encrypted and secure format using the electronic Data Submission Services (eDSS) web application. Facilities receive submission reports detailing the status of the submitted files, including any rejections. Facilities are urged to correct and resubmit rejected records.
3.3 Data quality control

3.3.1 Data quality at the data collection level

A major component of data quality occurs at the level of data capture. CIHI offers a number of support channels to participating facilities in order to promote data quality:

- Documentation of coding guidelines in the *Ontario Mental Health Reporting System Resource Manual*;
- A range of face-to-face and web-based education sessions covering assessment and coding, data collection and submission, and OMHRS outputs;
- Detailed submission reports that describe errors on rejected assessments and flag potentially suspicious data on accepted records;
- Quarterly facility-level data quality reports to help facilities identify data quality issues;
- A regular internal data quality assessment report (using the CIHI Data Quality Framework);
- Ad hoc data quality analyses initiated by CIHI or by stakeholders;
- Annual vendor and facility testing to ensure that the data collection software system is compliant with OMHRS submission requirements;
- An annual review and enhancement of submission specifications; and
- Client support via email, phone or web conference on coding, data collection and submission and report interpretation.

3.3.2 Validity and consistency edits

Upon receipt of any data, standard processing at CIHI employs edits and data quality checks to assess the quality of the data:

- Hard edits trigger the rejection of any record that does not meet a particular specification. For example, a discharge record is rejected if the date of discharge is coded as prior to the date of admission for the same episode of care. Facilities are expected to correct rejected records and resubmit them to CIHI.
- Soft edits flag records that have potentially suspicious data. For example, a record will be accepted but flagged if the Weight data element was coded as less than 23 kilograms (50 pounds) or greater than 200 kilograms (440 pounds). Facilities are urged to review flagged records for accuracy and to submit a correction if an error has occurred.
3.3.3 Facility frame maintenance

The OMHRS facility frame is updated upon notification of the addition of new facilities, closures of existing facilities or hospital divisions and mergers. These changes in recent fiscal years have not been major but may impact the comparability of data over time. Before conducting any trending analysis on specific facilities, data users should send an email to omhrs@cihi.ca for more information about the facility frame.

3.4 Submission timelines

3.4.1 Data submission timeline

CIHI produces facility comparative reports and data quality reports on a quarterly basis based on a snapshot of the database taken 1.5 months after the end of each fiscal quarter. Data submissions can be made at any time during the quarter and, as long as the submissions (including the correction of any errors) are successfully completed before the snapshot is taken, the submitted data will be included in the quarterly reports.

<table>
<thead>
<tr>
<th>CIHI fiscal quarter</th>
<th>Reporting period (data collection)</th>
<th>Submission deadline</th>
<th>Quarterly reports available (approximate)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>April 1–June 30</td>
<td>August 15</td>
<td>September 1</td>
</tr>
<tr>
<td>2</td>
<td>July 1–September 30</td>
<td>November 15</td>
<td>December 1</td>
</tr>
<tr>
<td>3</td>
<td>October 1–December 31</td>
<td>February 14</td>
<td>March 1</td>
</tr>
<tr>
<td>4</td>
<td>January 1–March 31</td>
<td>May 15</td>
<td>June 1</td>
</tr>
</tbody>
</table>

Note
* The exact release date depends on CIHI’s web release schedule.

Currently, OMHRS does not close its submissions for a given fiscal year; therefore, data is accepted after the specified submission timelines but is not included in the specified quarter’s facility comparative reports.
4 Data limitations

Data limitations are detected and investigated through data processing and data quality activities within the OMHRS program area at CIHI. CIHI’s Data Quality Framework, which was implemented in 2000–2001, provides a common strategy for assessing data quality across CIHI’s databases and registries. The framework is built upon 5 dimensions of quality: accuracy, comparability, timeliness, usability and relevance. Overall, results from the framework assessment generally show that OMHRS data is considered to be of good quality. Some of the more notable limitations are discussed in this section. Researchers with specific questions are encouraged to send an email to omhrs@cihi.ca.

4.1 Accuracy

Accuracy refers to how well information in the database reflects reality. Accuracy is the degree to which the measured value represents the actual or true value of the variable. As it applies to the OMHRS data, accuracy can be considered as how well the information collected in the various data elements represents the actual characteristics of the patient at the time of the assessment.

4.1.1 Facility frame coverage

All Ontario general and specialty facilities with designated adult inpatient mental health beds are expected to submit data on a quarterly basis for every client occupying a designated mental health bed in their facility. In addition, 1 facility in Newfoundland and Labrador has voluntarily submitted data to OMHRS since 2010–2011; 1 facility in Manitoba as well as a second facility in Newfoundland and Labrador have also voluntarily submitted data to OMHRS since 2013–2014. The OMHRS facility frame is defined as all participating facilities that have submitted data at least once to the OMHRS database since the implementation of OMHRS in October 2005. As of the end of 2016–2017, there were 84 facilities on the OMHRS frame.

Details of the submission activity are logged in a facility frame document. Every time a facility begins to operate adult inpatient mental health beds, it is added to the frame and the effective date is recorded. When a facility closes its inpatient mental health beds, it remains on the frame but the date of closure is recorded. The list also contains details of mergers and divisions, as well as facility name or MOHLTC mental health master number changes. The purpose is to track, at any point in time, which facilities should be submitting data to OMHRS on a quarterly basis.
The number of active OMHRS sites has fluctuated between 65 and 74 since the inception of OMHRS in 2005–2006. In the early years of OMHRS, between 90% and 98% of active sites submitted at least some data every quarter (the active frame excludes sites that were closed in a particular submission quarter). This rate has increased to 100% of facilities submitting data for all 4 quarters of 2016–2017.

4.1.2 Mental health data in OMHRS

OMHRS includes mental health data from Ontario facilities with designated adult mental health beds and from 3 facilities outside of Ontario that submit data on a voluntary basis. It also includes records from child/adolescent mental health beds from 2 psychiatric hospitals, and it may include records for patients younger than 18 who were admitted to an adult mental health bed.

OMHRS may include data on admissions to non–mental health designated beds where the person was admitted primarily to receive a service related to mental health and/or addictions (e.g., treatment of a mental health and/or addictions-related condition, forensic assessment, detoxification).

4.1.3 Item non-response

Item non-response occurs when a record that is received has some blank data elements that should not be blank. In OMHRS, software and database edits disallow blanks for any mandatory data elements. As such, a 100% response rate for all mandatory data elements is expected. Facilities can, however, use options such as unknown, not applicable or other for specific data fields where the information is not available or they are unable to obtain the information.
Table 3 shows the percentage of full admission assessments with unknown values coded for each applicable data element for 2016–2017.

**Table 3**  
*Unknown values in OMHRS, 2016–2017*

<table>
<thead>
<tr>
<th>Data element</th>
<th>Number of full admission assessments with unknown values</th>
<th>Percentage of all full admission assessments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country of Residence</td>
<td>5</td>
<td>0.01%</td>
</tr>
<tr>
<td>Province/Territory Issuing HCN</td>
<td>198</td>
<td>0.45%</td>
</tr>
<tr>
<td>Estimated Birthdate</td>
<td>743</td>
<td>1.71%</td>
</tr>
<tr>
<td>Responsibility for Payment</td>
<td>764</td>
<td>1.76%</td>
</tr>
<tr>
<td>Health Card Number</td>
<td>554</td>
<td>1.27%</td>
</tr>
<tr>
<td>Employment Status</td>
<td>1,402</td>
<td>3.22%</td>
</tr>
<tr>
<td>Postal Code of Patient’s Residence</td>
<td>852</td>
<td>1.96%</td>
</tr>
<tr>
<td>History of Medication Adherence</td>
<td>3,209</td>
<td>7.37%</td>
</tr>
<tr>
<td>Education</td>
<td>6,026</td>
<td>13.85%</td>
</tr>
</tbody>
</table>

**Notes**
Numerator = the number of full admission assessments with unknown values for 2016–2017.  
Denominator = 43,518, the total number of full admission assessments for 2016–2017.  
**Source**
Ontario Mental Health Reporting System, April 2016 to March 2017, Canadian Institute for Health Information.

The results in Table 3 have been aggregated for all sites in 2016–2017. Considerable variation can be present at the individual facility level, however. Researchers interested in any of these fields at a facility level should contact CIHI at omhrs@cihi.ca.

### Short stay assessments in OMHRS

Facilities complete admission assessments based on 3 days of observation, starting from the admission date. If the patient stays less than 3 days, a short stay assessment is completed. This is simply a truncated version of the full assessment and includes mostly administrative data fields. Facilities have the option to capture additional items if they are able; most short stay fields are optional. Approximately 15% of assessments in the OMHRS database are short stay assessments. Short stay assessments are often removed from analysis due to the reduced amount of data available, but they can provide good information on a particular subset of patients. For a list of mandatory and optional data fields for short stay assessments, please send an email to omhrs@cihi.ca.
4.1.4 Unit non-response

Unit non-response occurs when entire records are missing from the database. Due to changes in submission activity and occupancy rates, the volume of full admission, short stay and discharge records submitted to OMHRS on a quarterly basis will fluctuate from quarter to quarter. However, any large fluctuations that are not the result of a frame change might indicate a potential data quality issue.

Analysis of assessment volumes in OMHRS over time suggests that submission patterns are fairly stable. OMHRS grows by approximately 26,000 records each quarter, with very little fluctuation in the volumes of specific assessment types submitted.

2 OMHRS data quality indicators can be used to roughly estimate the amount of missing data:

- **Rejected Assessments Not Resubmitted**
  The Rejected Assessments Not Resubmitted indicator provides a count of assessments that were rejected due to errors during processing and that were not successfully resubmitted to CIHI. Facilities are provided with information to identify these records, and they are encouraged to submit them. Typically, the number of outstanding rejected records in the OMHRS database is very low. For example, for the last quarter of 2016–2017, there were 72 outstanding rejected records, representing 0.2% of the accepted records in the database for that quarter.

- **Episodes Where Expected Assessment Not Present in the Database**
  For OMHRS, assessments are required at least every 92 days for clients that remain in the designated mental health bed longer than a fiscal quarter. Therefore, for each client with a full admission, quarterly or change in status assessment from a previous quarter, either a quarterly, change in status or discharge assessment is expected to be submitted in the current reporting quarter.

  The Episodes Where Expected Assessment Not Present in the Database indicator represents episodes where a quarterly, change in status or discharge assessment was expected during the current reporting quarter but was not received and accepted into the OMHRS database at CIHI. These are also referred to as “open episodes” and exist when an admission record has been submitted to CIHI but not a subsequent record. These open episodes are counted cumulatively by OMHRS, since an episode remains open until an updated record is submitted. The number of open episodes in OMHRS at the end of 2016–2017 was 648, representing approximately 0.1% of the total number of episodes in the database. CIHI works with facilities to help them identify open episodes and submit assessment information that will allow those episodes to be closed.
4.1.5 Imputation

Imputation is the process of determining and assigning replacement values to resolve problems with data identified at the editing stage as being missing, invalid or inconsistent. Making any changes to the data submitted by the data providers is considered imputation.

There is no imputation made for non-response or measurement errors in OMHRS. This is because there is no clear identification of cases of true non-response or measurement error in the data set.

4.1.6 Other notes — Historical admission dates in OMHRS

As part of the mandate, hospitals with designated adult inpatient mental health beds that previously reported to the Discharge Abstract Database (DAD) were required to report to both the DAD and OMHRS for the dual reporting period from October 1, 2005, to March 31, 2006, and to report to OMHRS solely beginning on April 1, 2006. The MOHLTC issued a number of instructions to participating facilities to address longer episodes of care that continued across the transition period from the DAD to OMHRS on April 1, 2006. Long-stay clients who were admitted prior to October 1, 2005, and who were still occupying a designated mental health bed in the same facility on March 31, 2006, were to be given an artificial discharge date of March 31, 2006, for the DAD and an artificial admission date of April 1, 2006, for OMHRS.

For assessments in which the admission occurred prior to October 1, 2005, the true admission date is not directly available in the OMHRS database. In these cases, an artificial admission date of April 1, 2006, was coded on the OMHRS assessment, in accordance with the directions of the MOHLTC, CIHI and others to facilitate OMHRS implementation. For some of these episodes, the true admission dates were extracted from the DAD, when possible, by using personal identifiers to link information between OMHRS and the DAD. When it was not possible to link information from OMHRS to the DAD, the artificial admission date of April 1, 2006, remained as the admission date in the OMHRS database for a relatively small number of records (fewer than 500 records). These artificial admission dates may significantly shorten length of stay (LOS) relating to some longer-term psychiatric inpatient episodes.
4.2 Comparability

Comparability is defined as the extent to which data sets are consistent over time and use standard conventions (such as data elements or reporting periods), making them similar to other data sets.

4.2.1 Linkage

Linkage refers to the process of joining records from 2 or more databases by the use of 1 or more common linking data elements, or joining records within a database or registry through a common data element. Some data quality issues could affect the linkage of records.

Health Card Number

Health Card Number (HCN) is the data element used most frequently to identify unique clients in OMHRS and is used in conjunction with the Province Issuing Health Card Number data element. A key data quality concern should be noted when using the HCN, which could potentially affect any patient-level analysis:

- **HCN unknown or not applicable**
  
  It is valid to code HCN as *unknown or not applicable*. When the HCN field is coded as *unknown or not applicable*, this data element cannot be used to uniquely identify a client for linking records within OMHRS or for approved linkages with other data holdings. Approximately 1.74% of full admissions had *unknown or not applicable* coded for HCN in OMHRS in 2016–2017. This is an aggregate percentage; facility-level rates of coding *unknown or not applicable* for HCN may vary.

4.2.2 Historical comparability

Historical comparability refers to the consistency of data concepts and methods over time, which in turn allows one to make valid comparisons of different estimates at different points in time.

Table 4 shows the summary of key changes implemented over the years to the OMHRS database to enhance the quality of data. This is a summary table only. Data users should send an email to omhrs@cihi.ca for specific details on any historical changes to data fields of interest.
<table>
<thead>
<tr>
<th>Year</th>
<th>Data elements and edits changes</th>
</tr>
</thead>
</table>
| 2006–2007  | • Modified edits to ensure that valid out-of-sequence full admission and short stay assessments would not be rejected during processing.  
• Added new edits to prevent multiple discharge assessments from being accepted for a single episode.                                                                                                                                                                                                                                                                                                                                                     |
| 2007–2008  | • Added new edits to ensure consistent coding of Sources of Income.  
• Modified edits to ensure that service interruptions are greater than 3 days and less than or equal to 30 days.  
• Added new edits to ensure that service interruption periods are sequential if multiple service interruptions were reported.  
• Added new edits to ensure that the service interruption end dates are before or the same as the discharge date.  
• Added new edits to ensure that the Total Days Away From Bed are greater than or equal to total days of service interruption.  
• Added new edits to ensure that the assessment date of a quarterly, change in status or discharge assessment is after the assessment date of the related full admission assessment.  
• Added new edits to ensure that the assessment date of a quarterly or change in status assessment is before the assessment date of the related discharge assessment.  
• Removed the 2-year submission restriction, enabling submission of data for previous fiscal years to the OMHRS database at CIHI.                                                                                                                                                                                                                     |
| 2008–2009  | • Added new edits to ensure that facility profile must be submitted before data file can be submitted.  
• Added new edits to ensure that Age at First Hospitalization must be in the appropriate range, per (Date Stay Began – Birthdate).  
• Added new edits to ensure that Responsibility for Payment must be coded.  
• Added new edits to ensure that Reasons for Admission must be coded.  
• Added new edits to ensure that Provisional Diagnostic Category must be coded in order of importance.  
• Added new edits to ensure that the first character of a facility number must be a valid province/territory code.  
• Added a new value to Provisional Diagnostic Category for patients admitted to mental health beds for reasons not related to mental health.                                                                                                                                                                                                                     |
| 2009–2010  | • Added new data element to capture wait time.  
• Added new data element to capture number of electroconvulsive therapy (ECT) treatments since last assessment.  
• Increased number of mandatory elements on short stay and short discharge assessments.  
• Modified a list of existing data elements to align with the interRAI MH instrument.  
• Added new edits to ensure logic coding consistency for data elements related to a history of involvement in the justice system.  
• Added new edits to ensure that new data elements are coded properly.                                                                                                                                                                                                                                                                                                                                               |
<table>
<thead>
<tr>
<th>Year</th>
<th>Data elements and edits changes</th>
</tr>
</thead>
</table>
| 2010–2011 | • Added new data element to capture Health Card Number status.  
• Added new data element to indicate primary diagnosis.  
• Added new data element to support the capture of special projects information.  
• Changed service interruption time frame to align with the Ontario Mental Health Act.  
• Enhanced longer-term unit identifier options.  
• Included service interruption data elements for admission and short stay assessments.  
• Enhanced edits to further validate Health Card Numbers.  
• Enhanced edits to further validate DSM-IV codes. |
| 2011–2012 | • Replaced Wait Time data fields with Date Admitted to Mental Health Bed.  
• Added forensic category to Reason for Admission data field.  
• Tightened rules around requirements for short stay and full discharge assessments. |
| 2012–2013 | • Added new coding option to Self-Rated Health data element: 8 — Could not (would not) respond.  
• Increased number of mandatory elements on short stay assessments.  
• Added 2 new unit types to Unit Identifier data element: Longer term dual diagnosis and Longer term combined.  
• Added new data elements to record whether patient was admitted via the emergency department. |
| 2013–2014 | • Added new data elements to record patient forensic status at the time of admission and/or assessment.  
• Added new data elements to record patient days away from bed and service interruptions.  
• Added new edits to ensure that new data elements are coded properly.  
• Enhanced rules to ensure logic coding consistency of data elements related to referrals from and discharges to other health facilities, as well as date of patient arrival in inpatient unit. |
| 2014–2015 | • Tightened rules around postal codes of homeless patients. |
| 2015–2016 | • Modified the list of possible language codes to exclude languages not currently spoken in Canada.  
• Retired data elements capturing total service interruptions.  
• Enhanced capture of days away from bed in a previous fiscal quarter to capture all days away from bed in a previous fiscal year.  
• Enhanced rules to ensure logic coding consistency of days away from bed. |
| 2016–2017 | • Transitioned from using DSM-IV to DSM-5 diagnostic codes and categories to capture information on psychiatric diagnoses.  
• Added 1 new unit type to Unit Identifier data element: Child/adolescent unit.  
• Modified Aboriginal Origin data element to allow distinction between patient identity as First Nations, Métis and/or Inuit.  
• Tightened coding options for Forensic Status data elements.  
• Updated edit rules to ensure that modified data elements are coded properly. |
4.3 Timeliness

Timeliness refers primarily to how current the data is at the time of release.

4.3.1 Currency of OMHRS data

OMHRS quarterly submission deadlines occur approximately 1.5 months after the end of each reporting quarter, and OMHRS data is typically available within 30 days of the most recent submission deadline. Refer to Table 2 for specific quarterly deadlines. The OMHRS database is longitudinal, so each data cut includes cumulative data up to and including the most recent quarter. Researchers may request data based on the most recent data cut or the most recent full fiscal year.

4.3.2 Late submissions to OMHRS

Due to the longitudinal nature of the OMHRS database, late data is accepted as long as it meets the current submission specifications. This means that later data cuts may include records from a previous quarter that were submitted after the submission deadline for that previous quarter. As of May 15, 2017, late submissions accounted for approximately 4.2% of OMHRS records with an assessment reference date in 2016–2017. This rate may vary by facility.

5 Contacts

This document provides a high-level overview of OMHRS and a summary of the quality of the data submitted to the system. It is intended for users of OMHRS data and OMHRS reports to enable them to identify potential limitations of the data and to provide additional context regarding the use of information from OMHRS.

Please send any comments, suggestions regarding further or future analyses, or inquiries regarding this document to omhrs@cihi.ca.