



HCRS

# Home Care Reporting System Data Users Guide

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for Health Information

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# Summary

This guide provides context and information to guide the understanding and use of data from the Home Care Reporting System (HCRS) at the Canadian Institute for Health Information (CIHI), including the assessment of data quality as defined by CIHI's Information Quality Framework.

HCRS captures longitudinal demographic, administrative, clinical, functional and utilization information on clients who receive publicly funded home care services in Canada.

The clinical standard for HCRS is the Resident Assessment Instrument–Home Care (RAI-HC ©). It is a validated clinical assessment developed by interRAI, an international research network. The RAI-HC has been modified for use in Canada by CIHI, with permission from interRAI. A newer version of the clinical assessment, called the interRAI Home Care (interRAI HC ©), is now being used in a couple of Canadian jurisdictions. In the future, this data is expected to be submitted to CIHI's new Integrated interRAI Reporting System (IRRS). This guide refers to the interRAI HC and IRRS in a few places, though its primary focus remains HCRS.

The information collected using the clinical standard supports care planning and monitoring at the point of care. In addition, once data is submitted to CIHI, it is made available across Canada for program planning, improving the quality of care, allocating resources and understanding population needs.

Users should be aware of the following when using HCRS data:

- The way in which home care services are provided and accessed varies across the provinces and territories. Services vary with respect to types of services provided; range and type of service providers available; settings where services are provided; organization size, structure and governance; and eligibility, coverage and copayment requirements and service maximums.
- The population of interest<sup>i</sup> for HCRS is all individuals who are receiving publicly funded home care services in Canada. However, as the HCRS population of reference<sup>ii</sup> does not currently contain all provinces and territories (or all regions in submitting provinces and territories) that make up the HCRS population of interest, caution should be used when interpreting results, as the HCRS data may not be representative of all Canadian home care services.
- HCRS was launched in 2006–2007, and participation varies by jurisdiction and year. Therefore, any time series changes must be interpreted carefully, as they may reflect changes in the underlying population rather than actual changes in the characteristics and resource utilization of the clients being served.

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i. The population of interest is the group of units for which information is wanted.

ii. The population of reference is the available group of units.

- Not all individuals who are accepted for publicly funded home care services are expected to receive a RAI-HC assessment. The HCRS standard expects that a RAI-HC assessment will be carried out on clients admitted to **long-term** home care.<sup>iii</sup> Assessments may be performed for other clients accepted to home care; however, there are a number of home care clients who do not receive a RAI-HC assessment.
- Receiving a RAI-HC assessment is considered a home care service for HCRS. Therefore, individuals who receive a RAI-HC assessment but no other home care services are considered to have been accepted to home care. For example, some jurisdictions use the RAI-HC assessment in a hospital setting to determine eligibility for residential care, and this data can be captured in HCRS.
- Some jurisdictions submit data to HCRS predominately for clients who have a RAI-HC assessment, while others submit data for clients accepted to home care irrespective of whether they have a RAI-HC assessment. HCRS has incorporated, with permission from interRAI, certain key demographic and administrative data elements from the RAI-HC for all home care clients regardless of whether they receive a RAI-HC assessment. Therefore, there are clients in the HCRS database who may have demographic, administrative and/or utilization data but no assessment data.
- The structure of HCRS longitudinal data is complex. There are more than 300 data elements, consisting of RAI-HC data elements plus data elements developed by CIHI. The supporting documentation will help with understanding and interpretation (e.g., *RAI-HC User's Manual*, *RAI-HC Outcome Scales and Screening Algorithms Reference Guide*, *HCRS RAI-HC Output Specifications Manual*, *HCRS Data Submission Specifications Manual*).

Please email [homecare@cihi.ca](mailto:homecare@cihi.ca) with any feedback or questions.

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iii. Also known as long-stay home care in some jurisdictions.

# Introduction

## Data and information quality at CIHI

Quality is at the heart of everything CIHI does. It is embedded in our mandate and vision:  
Better data. Better decisions. Healthier Canadians.

### Information Quality Framework

CIHI's Information Quality Framework provides an overarching structure for all of our quality management practices related to capturing and processing data and transforming it into information products.

For further information on the Information Quality Framework, including CIHI's information life cycle, quality dimensions and quality principles, please visit the [data and information quality section of our website](#).

### Provincial/territorial data quality reports

CIHI produces annual data quality reports to assess the contribution of each province and territory to 12 of CIHI's databases (including HCRS) and to inform on data advancement in key areas. These reports are shared with deputy ministers of health and key jurisdictional representatives across the country.

# Introduction to home care

## Overview of home care

Home care is an array of services that enables clients to live at home, often with the effect of preventing, delaying or substituting for long-term or acute care alternatives. These services, such as nursing and personal care, may be provided by a number of different agencies or individuals. Home care is delivered in the community in private homes and assisted-living settings, as well as in hospitals and ambulatory clinics.

## Services provided

Individuals who receive home care have a broad range of needs, from short-term needs for a single service in response to a specific event (e.g., nursing care following a stay in an acute care hospital) to long-term need for support from a range of health providers to remain living in a community setting. How jurisdictions meet these needs varies considerably. Services vary with respect to types of services provided; range and type of service providers available; settings where services are provided; organization size, structure and governance; and eligibility, coverage and copayment requirements and service maximums. Variation in home care access exists across the provinces and territories.

## Service delivery

Home care services are not publicly insured through the *Canada Health Act* in the same way as hospital and physician services. In Canada, most home and community care services are delivered by provincial, territorial and some municipal governments. The federal government provides funding support through transfer payments for health and social services.<sup>1</sup>

Service delivery models vary and include services provided by in-house personnel and contracted service providers, and/or self-managed care (where clients receive funding and are responsible for acquiring their services).

Access to home care programs in each jurisdiction is typically coordinated using a referral process. Referrals for home care services typically come from health care professionals, informal caregivers (also known as carers) and community health partners; however, persons requiring home care assistance can refer themselves.

# Introduction to HCRS

## Overview of HCRS

HCRS, launched in 2006–2007, is a database that captures longitudinal demographic, administrative, clinical, functional and utilization information on clients who receive publicly funded home care services in Canada.

### Clinical standard

The clinical standard for HCRS is the RAI-HC. It is a validated clinical assessment developed by interRAI, an international research network.<sup>iv</sup> The RAI-HC has been modified for use in Canada by CIHI, with permission from interRAI. The RAI-HC has been used across Canada since the mid-2000s.

The RAI-HC is a comprehensive assessment that is used to identify the preferences, needs and strengths of persons receiving home care services; it also provides a snapshot of the services they receive. It includes measures of cognition, communication, vision, mood and behaviour, psychosocial well-being, physical functioning, continence, disease diagnoses, nutritional status, skin condition, medications, and special treatments and procedures.

The information, which is gathered electronically at the point of care, provides real-time decision support for front-line care planning and monitoring. The data from individual clients can be aggregated and used by clinical quality champions, managers and policy-makers for planning, quality improvement and accountability.

Not all individuals who are accepted for publicly funded home care services are expected to receive a RAI-HC assessment. The HCRS standard expects that a RAI-HC assessment will be carried out on clients admitted to a long-term home care program.<sup>v</sup> For these clients, the RAI-HC should be completed upon admission to long-term home care and at regular reassessment intervals (usually 6 months to 1 year), or when the client experiences a significant change in clinical status.

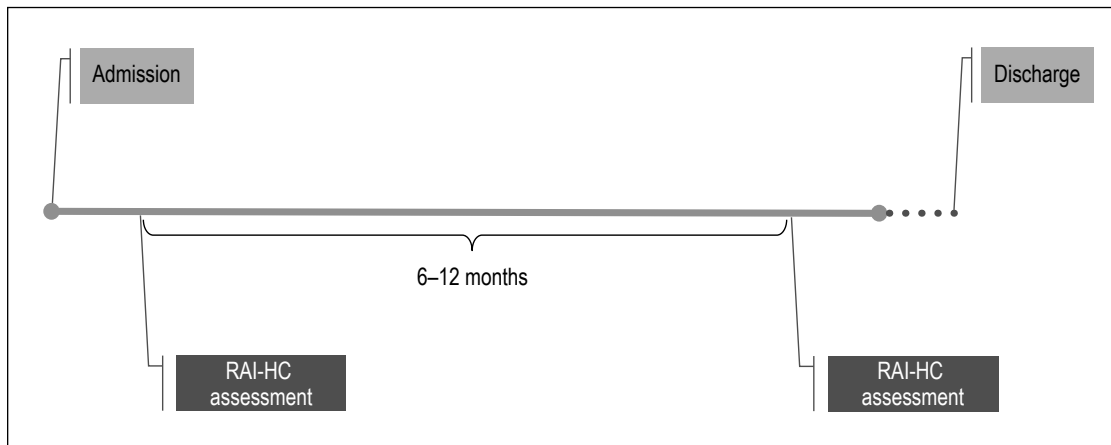
Sometimes the RAI-HC is completed for other types of clients. For example, some jurisdictions use the RAI-HC assessment in a hospital setting to determine eligibility for residential care.

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iv. A peer-reviewed paper published in 2017 found that RAI-HC data from Ontario and British Columbia behaved in a consistent manner, with stable trends in internal consistency providing evidence of good reliability.<sup>2</sup>

v. Also known as long-stay home care in some jurisdictions.



**Figure** Typical HCRS episode

Jurisdictions can also use the interRAI Contact Assessment (interRAI CA ©) to assess clients; the data from this assessment can also be submitted to HCRS. The interRAI CA captures a high-level profile of people served through screening or home care intake processes. This user guide focuses only on data generated using the RAI-HC assessment, however, and excludes interRAI CA data.

## Outputs

The RAI-HC has embedded decision-support algorithms. These algorithms summarize information from the assessment and can be used to support both clinical and organizational decision-making. The algorithms include outcome scales, Clinical Assessment Protocols (CAPs), quality indicators and the case-mix systems.

Outcome scales combine assessment items from the RAI-HC to summarize a specific clinical domain for a person, such as cognitive performance, physical functioning, depression symptoms and pain.

Person-level CAPs provide evidence-informed guidance for further assessment and intervention in areas where there is risk of decline or potential to improve (e.g., activities of daily living).

Quality indicators are organizational summary measures that reflect presumed quality of care across key domains, including safety, health status, and appropriateness and effectiveness.

Case-mix systems sort residents into similar clinical groups reflecting the relative costs of services and supports they are likely to use. This information is available to clinicians, managers and policy-makers and can be used at the point of care, at the organization level or at the system level for planning and monitoring care, understanding populations, improving quality and allocating resources.

## Record types

There are 14 different types of records that can be submitted to HCRS: 10 for the submission of client-specific information<sup>vi</sup> and 4 non-client record types required for the appropriate processing of client-specific records.<sup>vii</sup> Client-specific records can be submitted to HCRS as new, correction or deletion records.

Further details are in the *HCRS Data Submission Specifications Manual*.

## HCRS key concepts

### Population of interest

The population of interest (the group of units for which information is wanted) is all individuals who are receiving publicly funded home care services in Canada. Note that for HCRS, receiving a RAI-HC assessment is considered a home care service. Therefore, individuals who receive a RAI-HC assessment but no other home care services are considered to have been accepted to home care. For example, some jurisdictions use the RAI-HC assessment in a hospital setting to determine eligibility for residential care; this data can be captured in HCRS. Conversely, not all individuals who are accepted for publicly funded home care services are expected to receive a RAI-HC assessment. Information on clients without a RAI-HC assessment who receive home care services can also be captured in HCRS.

### Service episode

A home care service episode is the period of time between an individual's admission to and discharge from a source organization's<sup>viii</sup> home care service. During a home care service episode, an individual will have 1 or more home care visits that may be delivered by multiple service providers in multiple locations. A client can have multiple home care service episodes.

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vi. The 10 record types for the submission of client-specific data are Admission (AD), Update Client Profile (UC), RAI-HC Assessment (RH), Medication (MD), Service Start (SS), Service Details (SD), Service End (SE), ER Visits (ER), Organization Client Transfer (OT) and Discharge (DC).

vii. The 4 non-client record types required for the appropriate processing of client-specific records are Submission Profile (SP), Organization Profile (OP), Contact Information (CI) and Provincial Profile (PP).

viii. Source organizations are the organizations responsible for delivering home care services.

An individual can be readmitted to the same source organization only if they have been discharged from a previous admission. In some instances, a client can have overlapping service episodes from different source organizations.

A home care admission relates to the decision of a source organization to accept an individual for home care services. This critical event

- Defines the population scope of HCRS (only those accepted for home care service are in scope) and for whom HCRS records should be submitted to CIHI;
- Is the point at which an individual person can be considered a home care client and on the source organization's caseload; and
- Begins the individual's home care service episode.

A home care discharge is the administrative process by which a source organization records the termination of all home care services provided to an individual. The individual is no longer considered to be on the source organization's home care caseload and is no longer considered a home care client.

The date of a client's official discharge from home care may occur after the date the client receives their last service visit (or after date of death). This depends on the organization's discharge practices and the completion of all the required administrative processes.

## Client group

Client group is a high-level description of home care clients, based on their health status and assessed needs. It is a standard, client-focused categorization developed by CIHI to facilitate pan-Canadian comparative reporting. There are 5 client groups: acute, end of life, rehabilitation, long-term supportive care and maintenance. CIHI defines clients in the long-term supportive care and maintenance client groups as long-term home care clients, and it is expected that RAI-HC assessments will be carried out for these client groups.

A client is assigned to a client group at the start of the home care service episode. The assignment is done following an assessment of the client's needs. If a client's goals of care change significantly (e.g., if health status deteriorates significantly), the client may need to be reassigned to a different client group following a reassessment of their needs. This can occur at any time during a client's home care service episode.

## **Type of data collected and submitted**

The amount and type of data collected and submitted for an individual home care client will depend on

- How long the client receives home care services;
- Whether there is a provincial/territorial mandate;
- An organization's ability to collect the CIHI administrative and resource utilization data elements; and
- Whether the organization assesses the client using the RAI-HC assessment instrument.

Some jurisdictions submit data to HCRS predominately for clients who have a RAI-HC assessment, while others submit data for clients accepted to home care irrespective of whether they have a RAI-HC assessment. HCRS has incorporated, with permission from interRAI, certain key demographic and administrative data elements from the RAI-HC for all home care clients regardless of whether they receive a RAI-HC assessment. Therefore, there are clients in the HCRS database who may have demographic, administrative and/or utilization data but no assessment data.

## **HCRS organization definitions**

### **Organizations delivering home care**

HCRS is designed to capture information on publicly funded home care services, including publicly funded services delivered by private-sector agencies and those funded and delivered by the federal government (e.g., Veterans Affairs).

### **Source organizations**

Source organizations are responsible for delivering home care services and for collecting information on the clients they serve. These include regional organizations (e.g., health authorities, local health integration networks [LHINs]) and certain provincial or territorial ministries of health.

### **Submission organizations**

Submission organizations submit data to CIHI. In some jurisdictions, source organizations will submit their own data to CIHI and therefore will act as both source and submission organizations. In other jurisdictions, source organizations will send their data to another organization (e.g., their provincial ministry of health), which will then submit the data to CIHI.

# Overview of HCRS data tables

HCRS data is grouped into 5 key data tables: Organization, Episode, Assessment, Medication and Service.

## Organization data table

Organization data includes general information relating to organization identifiers, organization type and organizational hierarchies (e.g., regional health authority [RHA], province, territory).

## Episode data table

Episode data includes identifiers, demographic information and administrative data such as referral and discharge information. This data can be collected on all clients accepted for home care regardless of whether they receive a RAI-HC assessment.

## Assessment data table

Assessment data is captured during the RAI-HC assessment. It includes information about a person's functioning, needs, strengths and preferences. Assessments are expected for clients admitted to long-term home care and may be performed for other home care clients. Note that there are clients in the HCRS database who do not have clinical assessment information.

## Medication data table

The medication data includes information from the RAI-HC assessment Section Q5a–Q5e. Medication records contain specific information about each prescription drug, including the dose and frequency of administration. Medication records are linked to a specific assessment and are optional to submit.

## Service data table

The service data includes home care service utilization information, such as service start and end dates, type of service provided to client (e.g., personal care, health services), discipline providing services (e.g., nursing, physiotherapy) and number of service visits. Service data is currently received from Alberta and British Columbia only. A review of the quality of this service data is currently under way; it is therefore not included in this guide.

## HCRS coverage and participation

Data coverage is related to jurisdictional representation in the database, years of coverage in the database and data availability. The HCRS population of interest<sup>ix</sup> is defined as all individuals who are receiving publicly funded home care services in Canada. This includes clients who receive short-term care related to a time-limited, acute condition as well as clients requiring longer-term support to enable them to remain living in a community setting. It also includes individuals for whom the only home care service received is a RAI-HC assessment (e.g., to determine the need for placement to residential care).

The HCRS population of reference<sup>x</sup> is defined as all individuals receiving home care through publicly funded home care programs that were expected to submit data to HCRS during a defined time period.

The population of reference has changed over time as participation in HCRS has expanded. Therefore, any time series changes must be interpreted carefully, as they may reflect changes in the underlying population rather than actual changes in the characteristics and resource utilization of the clients being served.

As of 2019–2020, 6 provinces and territories have committed to submitting data to HCRS for all organizations: Newfoundland and Labrador, Nova Scotia, Saskatchewan, Alberta, British Columbia and Yukon; of these, 4 submitted data to HCRS in 2019–2020 (Newfoundland and Labrador, Alberta, British Columbia and Yukon). Note that 2019–2020 data was not submitted for all offices in Alberta, nor for all RHAs in British Columbia.

Data from Nova Scotia, Saskatchewan and part of Alberta (Calgary Zone) was received in the form of batch record submissions that did not comply with HCRS or IRRS submission specifications but that was submitted for the purposes of calculating Shared Health Priorities indicators; this data was not subsequently integrated into standard HCRS reports. Ontario also provided data in this fashion for use in Shared Health Priorities indicators and the annual Quick Stats report.

Ontario and the Winnipeg Regional Health Authority in Manitoba implemented the interRAI HC in 2018–2019<sup>xi</sup> and both intend to submit data to IRRS within the next year. The remaining 5 provinces and territories have no commitment to provide data to HCRS or IRRS.

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ix. The population of interest is the group of units for which information is wanted.

x. The population of reference is the available group of units.

xi. Historically, HCRS participation was mandated for Ontario, and all LHINs submitted RAI-HC data. In 2018–2019, Ontario implemented the interRAI HC across the province.

As the HCRS population of reference does not currently contain all provinces and territories (or all regions within submitting provinces and territories) that make up the HCRS population of interest, caution should be used when interpreting results, as the HCRS data may not be representative of all Canadian home care services.

For further information on participation by province/territory, see tables 3 and 4 in the section [HCRS data](#).

# Quality measures for HCRS throughout the information life cycle

This section provides information on the processes and standards CIHI uses to support data quality and information quality throughout the HCRS information life cycle (capture, submit, process, analyze and disseminate).

The process begins with data (assessment, demographic and administrative) collected electronically by front-line clinicians and stored in a vendor software system. This data is then compiled into submission files and securely submitted to CIHI. Once the data files have been submitted, CIHI processes the data and produces submission reports that identify necessary corrections to the data. Corrected records should then be resubmitted to CIHI. Records that have been accepted by the final submission deadline are included in analytical outputs that can support clinical and quality management decisions.

## Capture

### HCRS data capture

The RAI-HC is implemented in jurisdictions primarily as a comprehensive assessment to monitor client health, identify home care and possible long-term care needs, and track home care services received over time. The data submitted to HCRS is therefore a by-product of the ongoing processes of care.

For home care, assessments are usually completed by case managers or care coordinators. These people are typically nurses by background, but assessors can also be occupational therapists, physiotherapists or social workers.

Various vendor systems are used to capture the data. There are more than 300 data elements, consisting of RAI-HC data elements plus data elements developed by CIHI. The vast majority of data elements in HCRS are mandatory, including all the elements that are used to derive the key outputs (outcome scales, CAPs, quality indicators and the case-mix methodology).

## CIHI quality measures

CIHI takes measures to ensure quality control during the data capture phase of the HCRS information life cycle. These are intended to ensure standardized data collection and prevent data quality issues. They include

- Encouraging data suppliers to use electronic data capture to complete assessments and requiring them to use licensed vendors, preferably those that implement edits and audits at data capture. This allows for corrections and verifications to occur at the time of data entry;
- Providing data element definitions and data collection standards such as user manuals and job aids (see below);
- Providing education courses that address coding of RAI-HC assessment data (see below); and
- Responding to coding questions, including consultation with and approval by interRAI researchers for relevant questions, to ensure that standard, consistent responses are made available to data providers.

## Resources for assessors

CIHI has developed the following RAI-HC user manuals and associated documents to support data capture (coding). They are available by logging in to CIHI's website and visiting [eStore](#).

- *Resident Assessment Instrument–Home Care (RAI-HC) User's Manual, Canadian Version*
- *RAI-HC Outcome Scales and Screening Algorithms Reference Guide*
- *interRAI Clinical Assessment Protocols (CAPs) — For Use With interRAI's Community and Long-Term Care Assessment Instruments*
- *ICD-10-CA Pick-List Codes Used for the Home Care Reporting System*
- *Home and Continuing Care (HCC) Medication List*
- *CIHI Language Codes*



## Job aids

CIHI has developed a number of job aids to support data capture (coding) that are available on [CIHI's website](#). Examples include the following:

- *Using the RAI-HC Detection of Indicators and Vulnerabilities for Emergency Room Trips (DIVERT) Scale as a Decision-Support Tool*
- *Documenting Activities of Daily Living (H2)*
- *Documenting Number of Medications (Q1)*
- *Using the Method for Assigning Priority Levels (MAPLe) as a Decision-Support Tool*
- *Describing Outcome Scales (RAI-HC)*
- *Using the RAI-HC in Hospital Settings*
- *Assigning Client Group (Section X2)*

## Education courses

CIHI's Learning and Development Program includes a suite of education courses relating to home care and the RAI-HC. The course catalogue and the courses are available by logging in to [CIHI's Learning Centre](#).

## eQuery

eQuery is a web-based tool that allows CIHI's clients to search an existing repository of questions and answers about coding and other related topics. If clients do not find the answer, they can use eQuery to submit a question in English or French and a CIHI clinical specialist will respond to it. A search topic in eQuery relates to HCRS. [eQuery](#) is accessed by logging in to CIHI's website.

# Submit

## HCRS submission

CIHI can receive HCRS data from provincial/territorial ministries, RHAs and home care service providers (submitting organizations).

## CIHI quality measures

CIHI takes measures to ensure quality control during the HCRS data submission phase of the information life cycle. These are aimed at preventing, monitoring and controlling data quality issues and include

- Producing the *HCRS Data Submission Specifications Manual* and Edit Specifications, which provide information on how the data is to be submitted to HCRS and include data element specifications, valid code values, record layouts, data validation rules and error message descriptions. This documentation is reviewed on an annual cycle, and changes are made available to clients prior to the beginning of each fiscal year;
- Requiring data providers to use licensed vendors that incorporate CIHI's submission specifications into their proprietary software systems;
- Requiring all vendors to pass CIHI's testing requirements to ensure compliance with the most recent CIHI specifications;
- Checking each record on submission to ensure completeness and valid values. Any records that do not meet these specifications are either rejected (hard edit) or accepted with a warning message (soft edit), and data providers are given a report detailing the reasons for the rejection. Correction and resubmission of records that are rejected is the responsibility of the organizations collecting and submitting the data; and
- Providing direct client support by email ([homecare@cihi.ca](mailto:homecare@cihi.ca)) to assist with data submission, interpreting submission reports and correcting rejected records.

## Resources for data submitters

CIHI has developed the following manuals to support data submission. They are available by logging in to CIHI's website and visiting [eStore](#).

- *Home Care Reporting System (HCRS) Data Submission Specifications Manual*
- *Resident Assessment Instrument–Home Care (RAI-HC) User's Manual, Canadian Version*

## System edits

The edits built into the HCRS database are logical and consistent, and they are verified by both the HCRS team and the information technology team prior to implementation. Several consistency edits exist within and between data elements and also between records to ensure the longitudinal integrity of the client's information. For example, the Discharge Date submitted on the discharge record must be on or after the Admission Date submitted on the admission record. For a list of error messages, see Appendix B of the *HCRS Data Submission Specifications Manual*.

## Duplicate records

There are many edits in HCRS to prevent the submission of duplicate records. However, duplicates may still occur if the source organizations change some of the information that is used to determine the uniqueness of the records (e.g., client identifiers, dates). It is not possible to identify such duplicates, but the impact is assumed to be minimal.

## Operational reports

Operational reports are generated in a timely manner (normally within 48 hours) of when each submission file is processed in the database. These operational reports provide data suppliers with details regarding the number of records submitted, the number of records rejected and the reasons for each rejected record. Operational reports for both submission and source organizations are available online by logging in to [CIHI's Client Services](#).

## Frequency of submission

Data submission to HCRS is quarterly, but organizations can submit data any number of times within each quarter. Quarterly data submission deadlines are published annually, prior to the beginning of the data submission year. However, data can be submitted at any time and can cover time periods longer than a single quarter. To have data incorporated into reporting for a quarter, data providers have up to 2 months (60 days) after the end of that quarter to submit their data.

# Process

## Processing HCRS data

HCRS data goes through robust, automated data quality processing within CIHI's IT environment. To prepare the data for analytical use, various data operations are performed, such as deriving data elements. Data from some jurisdictions that does not comply with submission specifications can require tailored data processing, such as mapping and transforming of data elements.

## De-identification

CIHI receives a complete health card number (HCN) on HCRS records and applies a standard algorithm to encrypt this number, even if it has already been encrypted by the submitter. This standard encryption methodology is applied to all CIHI data holdings. As a result, HCRS data can be linked with other CIHI data (e.g., long-term care clinical assessments, hospital admissions).

## Data cuts

After the final submission deadline for the quarter, a cut of the HCRS data is produced; reports based on this data cut are generated 1 to 3 weeks later. While data is accepted into HCRS after the data submission deadline, it is not incorporated into reporting for that quarter. Late submissions are incorporated into subsequent reports.

# Analyze

## Resources for analysts

CIHI has developed the following resources that can aid with the analysis and interpretation of HCRS outputs. These are available from CIHI's [eStore](#) and eReporting services (available by [logging in to CIHI's website](#)). Examples include the following:

- *Home Care Reporting System (HCRS) RAI-HC Output Specifications Manual*
- *RAI-HC Outcome Scales and Screening Algorithms Reference Guide*
- *Home Care Reporting System (HCRS) Data Submission Specifications Manual*
- *HCRS eReports Reference Manual*
- *HCRS eReports FAQ*

## Education courses

CIHI's Learning and Development Program includes a suite of education courses relating to home care. An example relating to analysis of HCRS data is the course 946E — Calculating Home Care Quality Indicators (web conference). The course catalogue and a learning pathway are available by logging in to [CIHI's Learning Centre](#).

## HCRS analytical outputs

HCRS analytical outputs are summarized in the [Disseminate](#) section of this guide. Key outputs include Quick Stats and eReports.

## Geographic level

HCRS data for Alberta can be analyzed at the organization, zone and province level. Data for all other provinces/territories can be analyzed by health region and province/territory.

## Item non-response

When analyzing HCRS data, users should be aware of item non-response (or partial non-response). Item non-response occurs when a record is received with some missing or invalid data. The item response rate for HCRS depends largely on whether the data element is mandatory or optional.

The vast majority of data elements in HCRS are mandatory and therefore require a valid response for the system to accept the record; this includes all the elements that are used to derive the key outputs (outcome scales, CAPs, quality indicators and the case-mix systems) used for analysis. Some data elements are not applicable in certain situations and can therefore be left blank.

Availability of HCN is important to determine unique clients and to link records within HCRS or with other databases for longitudinal analysis. For the last 3 years, 100% of HCRS records have contained an HCN.

Item non-response rates for other data items are available on request.

## Counting clients

Data users should be aware of the different ways of counting HCRS clients. Key variations are detailed in the table below.

**Table 1** HCRS counting variations

Counting variables	Variations	Comments
Identifier type	<ul style="list-style-type: none"> <li>• Encrypted HCN</li> <li>• Client ID</li> </ul>	Note that encrypted HCN and client ID will not produce the same result when counting unique clients due to different relationships between the variables within jurisdictions. Encrypted HCN is used for Quick Stats, the <i>Provincial/Territorial Data Quality Report</i> and in this guide.
Client type	• Total clients	<p>The count of total clients may be event based; if a client had an admission, assessment, discharge or service record in a given time period, they are counted. This includes but is not limited to clients who receive a RAI-HC assessment.</p> <p>Alternatively, total clients can refer to all active clients in a given time period, regardless of what year they were admitted to home care and whether they had an event in that period. If a client has not been discharged, they are considered active.</p>
	• Assessed clients	Clients assessed with the RAI-HC assessment instrument. Assessed clients are a subset of all clients. It is expected that RAI-HC assessments will be carried out on clients admitted to long-term home care. However, assessments can be carried out and assessment data submitted for other clients accepted to home care.
	• Admitted clients	Clients admitted to a home care program. Date of Acceptance to Home Care (X6) is used to calculate the number of admitted clients; however, this data element is not a required field for HCRS. When Date of Acceptance to Home Care (X6) is not available, Date Case Opened (CC1) is used.
	• Discharged clients	Clients discharged from a home care program. Note that some RHAs under-report discharge information.

Counting variables	Variations	Comments
<b>Event type</b>	<ul style="list-style-type: none"> <li>• All events</li> <li>• Latest event in given time period</li> </ul>	<p>The number of events included for analysis can differ depending on the time period and type of analysis. For example, counts may be based on all events in a given time period. If a client has multiple events, they will be counted more than once.</p> <p>Alternatively, only 1 event in a time period or episode of care may be counted. In this approach, if a client has more than one event (e.g., assessment) within a time period/episode of care, only the latest event is counted.</p>
<b>Setting type</b>	<ul style="list-style-type: none"> <li>• Hospital</li> <li>• Community</li> </ul>	<p>Clients can be assessed in the community or in a hospital. Those assessed in a community setting typically require support to remain living in the community.</p> <p>Newfoundland and Labrador, Ontario, Alberta and British Columbia assess some clients in hospital to determine eligibility for admission to a long-term care home.</p> <p>A flag is available to identify assessments carried out in hospital settings.</p>

# Disseminate

## Dissemination of HCRS data

The table below summarizes the ways CIHI disseminates HCRS data. Note that CIHI's Your Health System, an online tool used to explore health indicators, does not include HCRS data.

**Table 2** HCRS reporting outputs

Name	Description	Access	Frequency
<b>Quick Stats</b>	Standard tables of aggregate data at the province/territory level for a given year, therefore reflecting only 1 point in time. Contain administrative, clinical and resource utilization information. Include data for only the jurisdictions that submitted data for the given fiscal year.	<a href="#">Available publicly</a>	Annually
<b>eReports</b>	Secure, web-based access to comparable RAI-HC and related data in a user-friendly, interactive environment. As of fall 2017, eReports includes HCRS quality indicators. Functionality includes <ul style="list-style-type: none"> <li>• Comparative reporting (compare across regions, provinces/territories or the entire database);</li> <li>• Trending over time (5 years);</li> <li>• Customizable reports that can be saved; and</li> <li>• Graphs and tables that can be downloaded in Excel or as a PDF.</li> </ul>	Authorized users only. Available to users that meet specific criteria, such as organizations that submit data to HCRS, as well as their health authorities and ministries of health. Accessed via CIHI's Client Services application.	Quarterly
<b>Data requests</b>	Researchers, decision-makers and health managers can request specific RAI-HC and HCRS data from CIHI at an aggregate or record level to suit their information needs. Data will be released in accordance with CIHI's <i>Privacy Policy</i> .	Via <a href="#">CIHI Data Inquiry Form</a>	On request
<b>Special topic</b>	Tailored analytical outputs that use data from across CIHI's data holdings to focus on a particular health area. Examples include <i>Seniors in Transition: Exploring Pathways Across the Care Continuum</i> (2017) and <i>Dementia in Canada</i> (2018).	<a href="#">CIHI's website</a>	Varies

Before any analytical outputs are released by CIHI, they undergo internal verification and approval processes. These include both checking the accuracy of the outputs and verifying adherence to CIHI's *Privacy Policy*.

CIHI has a comprehensive program in place to protect the privacy of individuals whose personal health information it receives and to maintain the confidentiality of that information.



HCRS has a number of sensitive data elements that relate to direct personal identifiers (e.g., HCN), client/patient indirect personal identifiers (e.g., Month and Year of Birth, Postal Code, Language) and health facility/organization identifiers (e.g., Organization Name and Number). Rules for release vary for different requests (i.e., own versus third party, record level versus aggregate).

The client's HCN, month and year of birth and full 6-digit postal code are not normally made available to third-party users unless approved by CIHI's Privacy, Confidentiality and Security Committee.

- Instead of HCN, a meaningless but unique number can be provided.
- Instead of the month and year of birth, the age of the client (in years) at admission, assessment and/or discharge can be provided.
- Instead of the full 6-digit postal code, geography at higher levels of aggregation is provided.

# HCRS data

The following section presents data relating to HCRS participation, client counts and data quality indicators.

## Participation

### 2019–2020 participation

The table below presents HCRS participation by province/territory for 2019–2020.

**Table 3** HCRS participation by province/territory, 2019–2020

Province/territory	Commitment to participate*	Number suitable for participation†	Participation‡
N.L.	C	4 RHAs	4 RHAs
N.S.	C	1 HA	1 HA
Ont.	C	14 RHAs	14 RHAs
Man.	P	5 RHAs	0 RHAs
Sask.	C	11 HAs	11 HAs
Alta.	C	140 offices (5 zones)	140 offices (5 zones)
B.C.	C	5 RHAs	4 RHAs
Y.T.	C	1 territory	1 territory

#### Notes

\* *Commitment to participate* indicates the level of commitment made by the province/territory to submit to HCRS. Prince Edward Island, New Brunswick, Quebec, the Northwest Territories and Nunavut have no commitment to participate and so are not included in the table.

† *Number suitable for participation* is the total number of organizations that were suitable for participation in HCRS (or IRRS for Ontario and Manitoba) in 2019–2020. It is sourced through direct contact with the individual ministries of health and/or information provided on their websites.

‡ Ontario and the Winnipeg Regional Health Authority in Manitoba implemented the interRAI HC in 2018–2019. These jurisdictions will be submitting to IRRS in the future. In the meantime, 2019–2020 interRAI HC data was received from Ontario outside of the IRRS production system for use in calculating Shared Health Priorities indicators and for inclusion in annual Quick Stats. Home care data was also received outside of the reporting system from Nova Scotia, Saskatchewan and Alberta (Calgary Zone) to be used specifically for Shared Health Priorities indicator reporting.

C: Complete data collection expected at the provincial/territorial level, through a mandate or other type of agreement. C is assigned to any province/territory where the ministry of health has confirmed with CIHI that all organizations in the sector are required to submit data to HCRS.

P: Partial mandate or agreement (e.g., for only certain facilities and/or regional health authorities), representing partial data collection at the provincial/territorial level.

HA: Health authority.

RHA: Regional health authority.

#### Source

Home Care Reporting System, September 2020, Canadian Institute for Health Information.

## Historic coverage

The following table shows jurisdictional HCRS coverage by data type across time.

**Table 4** Historic HCRS coverage by data type, participating provinces/territories\*

Province/ territory	Episode data	Assessment data	Service data	Medication data included	Comment
<b>N.L.</b>	2009–2010 to current	2014–2015 to current	None	Yes	None
<b>N.S.</b>	Incomplete	2002–2003 to 2009–2010	None	Yes	For the purposes of Shared Health Priorities indicator reporting, Nova Scotia provided a batch HCRS record submission that did not comply with submission specifications.
<b>Ont.</b>	2006–2007 to 2019–2020	RAI-HC: 2007–2008 to Q1 2018–2019 interRAI HC: 2018–2019 to 2019–2020	None	Yes	Ontario HCRS data has not been compliant with submission specifications and thus requires tailored data processing, such as mapping and transforming data elements. With the support of Health Shared Services Ontario, all 14 LHINs in Ontario have transitioned from the RAI-HC to the interRAI HC and have been using the new instrument since April 2018; submission of this data to IRRS is anticipated in 2021–2022. In the meantime, CIHI requested and received non-production 2018–2019 and 2019–2020 home care data from Ontario for use in annual reporting and calculation of Shared Health Priorities indicators.
<b>Man.</b>	Incomplete	2007–2008 to 2016–2017 for Winnipeg Regional Health Authority (WRHA)	None	No	Manitoba has provided 4 batch HCRS record submissions for the WRHA that did not comply with submission specifications. Home care agencies in the WRHA and Prairie Mountain Health have transitioned from the RAI-HC to the interRAI HC and have been using the new instrument since April 2018; submission of this data to IRRS is anticipated in 2021–2022.

Province/ territory	Episode data	Assessment data	Service data	Medication data included	Comment
<b>Sask.</b>	Incomplete	2011–2012 to 2014–2015, 2017–2018 to current	None	No	Saskatchewan has provided 14 batch HCRS record submissions that did not comply with submission specifications. Saskatchewan's data lacks administrative information and has limited use for administrative linkage or investigations, though it is used for calculation of Shared Health Priorities indicators.
<b>Alta.</b>	2011–2012 to current	2011–2012 to current	2001–2002 to current for Edmonton, North and South Zones; 2001–2002 to 2017–2018 for Calgary Zone; 2006–2007 to current for Central Zone	No	Calgary Zone provided 2019–2020 data outside of the production system for use in calculating Shared Health Priorities indicators.
<b>B.C.</b>	2005–2006 to current for Fraser Health, Interior Health, Vancouver Coastal Health and Island Health; 2007–2008 to 2009–2010 for Northern Health	2008–2009 to current for Fraser Health and Vancouver Coastal Health; 2009–2010 to current for Interior Health and Island Health; no assessment data for Northern Health	2007–2008 to current for Vancouver Coastal Health; 2008–2009 to current for Interior Health; 2007–2008 to 2014–2015 for Island Health; 2005–2006 to 2011–2012 for Fraser Health; 2007–2008 to 2009–2010 for Northern Health	Yes for Vancouver Coastal Health and Fraser Health only	The only data received for Northern Health is episode and service data for 2007–2008 to 2009–2010.
<b>Y.T.</b>	2006–2007 to current	2006–2007 to current	None	Yes	None

**Notes**

\* Years of data coverage are based on the years for which a substantive number of records are held, or the year from which record numbers started increasing to the year in which record numbers started decreasing (if applicable). Therefore, coverage is not necessarily full for the first year (and in some instances the last year) stated. Also note that there may be a small number of records for previous and subsequent years.

Prince Edward Island, New Brunswick, Quebec, the Northwest Territories and Nunavut have no commitment to participate and so are not included in the table.

**Source**

Home Care Reporting System, September 2020, Canadian Institute for Health Information.

# Client counts

All client counts have been calculated as of September 2020 (and include data submitted retroactively), so some values may differ from those calculated previously.

## HCRS total clients and assessed clients by year

Tables 5 and 6 present the number of total clients and number of assessed clients by province/territory and year. For information on admitted and discharged client counts, see Quick Stats.

**Table 5** HCRS total clients, by province/territory and year

Province/territory	2015–2016	2016–2017	2017–2018	2018–2019	2019–2020
N.L.	8,177	9,804	10,317	11,579	11,587
Ont.*	484,431	495,033	511,010	—	538,938
Man.†	11,282	11,490	—	—	—
Alta.	109,079	112,921	103,088	78,284	74,998
B.C.	86,476	89,419	88,009	89,709	89,004
Y.T.	790	822	773	1,014	833

### Notes

\* Results for 2018–2019 have not been reported due to Ontario's transition to the interRAI HC instrument that year and challenges related to merging RAI-HC and interRAI HC data. Results for 2019–2020 are based on non-production interRAI HC data received from Ontario as part of a data request.

† Manitoba's Winnipeg Regional Health Authority, which had previously submitted data outside of the HCRS production system, started transitioning to the interRAI HC in 2017–2018; as a result of this transition, submissions to HCRS stopped after 2016–2017.

— Data not available.

Total clients is the number of unique client identifiers (encrypted HCNs) for clients who were admitted, were assessed, received home care services or were discharged in the given time period.

Data for Nova Scotia is not available for these years. Data for Saskatchewan is excluded due to data quality considerations.

### Source

Home Care Reporting System, September 2020, Canadian Institute for Health Information.

**Table 6** HCRS assessed clients, by province/territory and year

Province/territory	2015–2016	2016–2017	2017–2018	2018–2019	2019–2020
<b>N.L.</b>	7,424	9,038	8,899	9,135	9,249
<b>Ont.*</b>	195,780	201,012	213,320	—	214,391
<b>Man.†</b>	11,283	11,490	—	—	—
<b>Alta.</b>	34,681	40,922	35,083	30,659	28,423
<b>B.C.</b>	38,530	37,618	36,608	38,943	39,532
<b>Y.T.</b>	244	242	283	331	323

**Notes**

\* Results for 2018–2019 have not been reported due to Ontario's transition to the interRAI HC instrument that year and challenges related to merging RAI-HC and interRAI HC data. Results for 2019–2020 are based on non-production interRAI HC data received from Ontario as part of a data request.

† Manitoba's Winnipeg Regional Health Authority, which had previously submitted data outside of the HCRS production system, started transitioning to the interRAI HC in 2017–2018; as a result of this transition, submissions to HCRS stopped after 2016–2017.

— Data not available.

Assessed clients is the number of unique client identifiers (encrypted HCNs) for clients who received a RAI-HC assessment in the given time period.

Data for Nova Scotia is not available for these years. Data for Saskatchewan is excluded due to data quality considerations.

**Source**

Home Care Reporting System, September 2020, Canadian Institute for Health Information.

## HCRS total long-term clients and assessed long-term clients by year

Tables 7 and 8 present yearly counts for long-term clients. The HCRS standard expects that a RAI-HC assessment will be carried out on clients admitted to long-term home care. CIHI defines clients in the long-term supportive care and maintenance client groups as long-term home care clients.

**Table 7** HCRS total long-term clients, by province/territory and year

Province/territory	2015–2016	2016–2017	2017–2018	2018–2019	2019–2020
N.L.	7,580	9,162	9,520	10,621	10,518
Ont.*	188,739	196,261	209,597	—	—
Man.†	n/a	n/a	—	—	—
Alta.	52,479	57,921	54,864	45,321	41,871
B.C.	51,169	52,614	49,729	52,540	49,664
Y.T.	212	229	261	313	285

### Notes

\* Results for 2018–2019 and 2019–2020 have not been reported due to Ontario's transition to the interRAI HC instrument and challenges related to both merging RAI-HC and interRAI HC data and linking administrative and assessment data received outside of the IRRS production system.

† Manitoba's Winnipeg Regional Health Authority, which had previously submitted data outside of the HCRS production system, started transitioning to the interRAI HC in 2017–2018; as a result of this transition, submissions to HCRS stopped after 2016–2017.

— Data not available.

n/a: Not applicable. Measure not able to be calculated for Manitoba.

Long-term clients consist of the long-term supportive care client group and the maintenance client group. Total clients is the number of unique client identifiers (encrypted HCNs) for clients who were admitted, were assessed, received home care services or were discharged in the given time period.

Data for Nova Scotia is not available for these years. Data for Saskatchewan is excluded due to data quality considerations.

### Source

Home Care Reporting System, September 2020, Canadian Institute for Health Information.

**Table 8** HCRS assessed long-term clients, by province/territory and year

Province/territory	2015–2016	2016–2017	2017–2018	2018–2019	2019–2020
<b>N.L.</b>	6,892	8,453	8,207	8,390	8,458
<b>Ont.*</b>	149,424	155,839	168,226	—	—
<b>Man.†</b>	n/a	n/a	—	—	—
<b>Alta.</b>	30,832	37,270	32,813	29,316	27,561
<b>B.C.</b>	29,605	28,914	27,665	29,285	29,559
<b>Y.T.</b>	155	162	197	224	213

**Notes**

\* Results for 2018–2019 and 2019–2020 have not been reported due to Ontario's transition to the interRAI HC instrument and challenges related to both merging RAI-HC and interRAI HC data and linking administrative and assessment data received outside of the IRRS production system.

† Manitoba's Winnipeg Regional Health Authority, which had previously submitted data outside of the HCRS production system, started transitioning to the interRAI HC in 2017–2018; as a result of this transition, submissions to HCRS stopped after 2016–2017.

— Data not available.

n/a: Not applicable. Measure not able to be calculated for Manitoba.

Long-term clients consist of the long-term supportive care client group and the maintenance client group. Assessed clients is the number of unique client identifiers (encrypted HCNs) for clients who received a RAI-HC assessment in the given time period.

Data for Nova Scotia is not available for these years. Data for Saskatchewan is excluded due to data quality considerations.

**Source**

Home Care Reporting System, September 2020, Canadian Institute for Health Information.



## HCRS total clients and assessed clients by client group, 2019–2020

Tables 9 and 10 present counts of total clients and assessed clients by client group for 2019–2020. The HCRS standard expects that a RAI-HC assessment will be carried out on clients admitted to long-term home care. CIHI defines clients in the long-term supportive care and maintenance client groups as long-term home care clients. Other client groups can also have RAI-HC assessments.

**Table 9** HCRS total clients, by client group and province/territory, 2019–2020

Client group		N.L.	Ont.*	Man.†	Alta.	B.C.	Y.T.
Long-term home care	Long-term supportive care	6,757	—	—	18,653	12,749	36
	Maintenance	3,761	—	—	23,218	36,915	249
	<b>Total long-term home care</b>	<b>10,518</b>	<b>—</b>	<b>—</b>	<b>41,871</b>	<b>49,664</b>	<b>285</b>
Other	Acute	661	—	—	28,372	14,372	354
	End of life	30	—	—	3,587	4,220	34
	Rehabilitation	54	—	—	1,168	14,775	160
	Client group unavailable‡	324	—	—	0	5,973	0
	<b>Total other</b>	<b>1,069</b>	<b>—</b>	<b>—</b>	<b>33,127</b>	<b>39,340</b>	<b>548</b>
<b>Total</b>	<b>Total all client groups</b>	<b>11,587</b>	<b>538,938</b>	<b>—</b>	<b>74,998</b>	<b>89,004</b>	<b>833</b>

### Notes

\* Ontario implemented the interRAI HC in 2018–2019. The overall total for 2019–2020 is based on non-production interRAI HC data received from Ontario as part of a data request, but this data could not be parsed into different client groups.

† Manitoba's Winnipeg Regional Health Authority, which had previously submitted data outside of the HCRS production system, started transitioning to the interRAI HC in 2017–2018; as a result of this transition, submissions to HCRS stopped after 2016–2017.

‡ *Client group unavailable* includes client group not provided, not applicable and missing.

— Data not available.

Total clients is the number of unique client identifiers (encrypted HCNs) for clients who were admitted, were assessed, received home care services or were discharged in the given time period.

Client group is a high-level description of home care clients, based on their health status and assessed needs. For this table, client group is based on the latest client group at admission.

Data for Nova Scotia is not available for these years. Data for Saskatchewan is excluded due to data quality considerations.

### Source

Home Care Reporting System, September 2020, Canadian Institute for Health Information.

**Table 10** HCRS assessed clients, by client group and province/territory, 2019–2020

Client group		N.L.	Ont.*	Man.†	Alta.	B.C.	Y.T.
Long-term home care	Long-term supportive care	5,536	—	—	14,773	10,787	28
	Maintenance	2,922	—	—	12,788	18,772	185
	<b>Total long-term home care</b>	<b>8,458</b>	<b>—</b>	<b>—</b>	<b>27,561</b>	<b>29,559</b>	<b>213</b>
Other	Acute	484	—	—	302	2,671	85
	End of life	20	—	—	527	1,421	3
	Rehabilitation	46	—	—	33	4,476	22
	Client group unavailable‡	241	—	—	0	1,405	0
	<b>Total other</b>	<b>791</b>	<b>—</b>	<b>—</b>	<b>862</b>	<b>9,973</b>	<b>110</b>
<b>Total</b>	<b>Total all client groups</b>	<b>9,249</b>	<b>214,391</b>	<b>—</b>	<b>28,423</b>	<b>39,532</b>	<b>323</b>

**Notes**

\* Ontario implemented the interRAI HC in 2018–2019. The overall total for 2019–2020 is based on non-production interRAI HC data received from Ontario as part of a data request, but this data could not be parsed into different client groups.

† Manitoba's Winnipeg Regional Health Authority, which had previously submitted data outside of the HCRS production system, started transitioning to the interRAI HC in 2017–2018; as a result of this transition, submissions to HCRS stopped after 2016–2017.

‡ *Client group unavailable* includes client group not provided, not applicable and missing.

— Data not available.

Assessed clients is the number of unique client identifiers (encrypted HCNs) for clients who received a RAI-HC assessment in the given time period.

Client group is a high-level description of home care clients, based on their health status and assessed needs. For this table, client group is based on the latest client group at admission.

Data for Nova Scotia is not available for these years. Data for Saskatchewan is excluded due to data quality considerations.

**Source**

Home Care Reporting System, September 2020, Canadian Institute for Health Information.

# Data quality indicators

This section of the guide presents results for 4 data quality indicators. For further information relating to the indicator methodology, please see the [Provincial/Territorial Data Quality Report: Indicators and Contextual Measures — Reference Guide](#). All indicators have been calculated as of September 2020 (and include data submitted retroactively), so some values may differ from those calculated previously.

## Assessed Long-Term Clients

The Assessed Long-Term Clients indicator measures the percentage of admitted long-term home care clients who were assessed in the reporting fiscal year. The optimal value is 100%. This indicator relates to the capture and submit stages of the data life cycle and the quality dimension accuracy and reliability.

**Table 11** HCRS long-term clients who were admitted and had their assessment within the current fiscal year, by province/territory and year (%)

Province/territory	2015–2016	2016–2017	2017–2018	2018–2019	2019–2020
N.L.	84.7	90.3	89.3	88.4	94.1
Ont.*	68.7	67.4	68.4	—	—
Man.†	n/a	n/a	—	—	—
Alta.	38.3	42.0	34.6	38.0	38.1
B.C.	43.7	40.9	40.4	39.0	41.4
Y.T.	70.1	65.6	76.6	72.6	74.6

### Notes

\* Results for 2018–2019 and 2019–2020 have not been reported due to Ontario's transition to the interRAI HC instrument and challenges related to both merging RAI-HC and interRAI HC data and linking administrative and assessment data received outside of the IRRS production system.

† Manitoba's Winnipeg Regional Health Authority, which had previously submitted data outside of the HCRS production system, started transitioning to the interRAI HC in 2017–2018; as a result of this transition, submissions to HCRS stopped after 2016–2017.

— Data not available.

n/a: Not applicable. Measure not able to be calculated for Manitoba.

Data for Nova Scotia is not available for these years. Data for Saskatchewan is excluded due to data quality considerations.

### Source

Home Care Reporting System, September 2020, Canadian Institute for Health Information.

## Reassessment Rate

Participating jurisdictions complete a RAI-HC assessment upon a person's admission to home care and at regular reassessment intervals (usually 6 months to 1 year).

A client may also be reassessed when they experience a significant change in clinical status while receiving home care.

The Reassessment Rate indicator measures the percentage of assessed clients with a prior assessment in the same episode of care where the time between the 2 assessments was within 12 months and was greater than 15 months. The optimal value is 100% within 12 months. Reassessments that occurred more than 15 months from the prior assessment (within a single episode) are excluded from calculations of the Home Care quality indicators.

This indicator relates to the capture and submit stages of the data life cycle and the quality dimension comparability and coherence.

**Table 12** Reassessment rate within 12 months, by province/territory and year (%)

Province/territory	2015–2016	2016–2017	2017–2018	2018–2019	2019–2020
<b>N.L.</b>	81.8	58.4	44.8	38.4	45.0
<b>Ont.*</b>	75.8	78.0	80.3	—	—
<b>Man.†</b>	47.5	47.6	—	—	—
<b>Alta.</b>	48.6	54.0	57.1	56.3	57.3
<b>B.C.</b>	55.8	55.4	51.0	53.1	54.1
<b>Y.T.</b>	34.5	27.7	34.9	27.7	41.5

### Notes

\* Results for 2018–2019 and 2019–2020 have not been reported due to Ontario's transition to the interRAI HC instrument and challenges related to both merging RAI-HC and interRAI HC data and linking administrative and assessment data received outside of the IRRS production system.

† Manitoba's Winnipeg Regional Health Authority, which had previously submitted data outside of the HCRS production system, started transitioning to the interRAI HC in 2017–2018; as a result of this transition, submissions to HCRS stopped after 2016–2017.

— Data not available.

Data for Nova Scotia is not available for these years. Data for Saskatchewan is excluded due to data quality considerations.

### Source

Home Care Reporting System, September 2020, Canadian Institute for Health Information.

**Table 13** Reassessment rate greater than 15 months, by province/territory and year (%)

Province/territory	2015–2016	2016–2017	2017–2018	2018–2019	2019–2020
N.L.	1.4	9.7	17.2	22.0	18.0
Ont.*	15.4	14.1	13.1	—	—
Man.†	32.3	27.5	—	—	—
Alta.	22.9	18.7	10.9	10.6	9.9
B.C.	21.1	21.0	26.9	23.6	22.8
Y.T.	40.3	31.1	40.9	45.7	25.9

**Notes**

\* Results for 2018–2019 and 2019–2020 have not been reported due to Ontario's transition to the interRAI HC instrument and challenges related to both merging RAI-HC and interRAI HC data and linking administrative and assessment data received outside of the IRRS production system.

† Manitoba's Winnipeg Regional Health Authority, which had previously submitted data outside of the HCRS production system, started transitioning to the interRAI HC in 2017–2018; as a result of this transition, submissions to HCRS stopped after 2016–2017.

— Data not available.

Data for Nova Scotia is not available for these years. Data for Saskatchewan is excluded due to data quality considerations.

**Source**

Home Care Reporting System, September 2020, Canadian Institute for Health Information.

## Late Submissions: Record Level

The Late Submissions: Record Level indicator is a measure of the timeliness of the province's/territory's data submission to HCRS. It calculates the percentage of records for a given year that are submitted after the Quarter 4 deadline.<sup>xii</sup> The optimal value is 0%.

This indicator relates to the capture and submit stages of the data life cycle and the quality dimension timeliness and punctuality.

**Table 14** HCRS record-level late submissions, by province/territory and year (%)

Province/territory	2015–2016	2016–2017	2017–2018	2018–2019	2019–2020
N.L.	1.1	1.5	1.2	1.3	0.0
Ont.*	n/a	n/a	n/a	n/a	n/a
Man.†	n/a	n/a	—	—	—
Alta.	n/a	42.4	13.4	7.9	0.0
B.C.	17.7	17.3	19.1	14.2	2.0
Y.T.	3.1	2.2	2.6	0.0	0.6

### Notes

\* Results for 2018–2019 and 2019–2020 have not been reported due to Ontario's transition to the interRAI HC instrument and challenges related to both merging RAI-HC and interRAI HC data and linking administrative and assessment data received outside of the IRRS production system.

† Manitoba's Winnipeg Regional Health Authority, which had previously submitted data outside of the HCRS production system, started transitioning to the interRAI HC in 2017–2018; as a result of this transition, submissions to HCRS stopped after 2016–2017.

— Data not submitted.

n/a: Not available. Measure could not be calculated for batch submissions received outside of the production system. Data submission for Alberta began in 2015–2016 and included data for all years dating back to when Alberta started collecting HCRS data.

Data for Nova Scotia is not available for these years. Data for Saskatchewan is excluded due to data quality considerations.

### Source

Home Care Reporting System, September 2020, Canadian Institute for Health Information.

## References

1. Health Canada. [Home and community health care](#). Accessed August 7, 2018.
2. Hogeveen SE, Chen J, Hirdes JP. [Evaluation of data quality of interRAI assessments in home and community care](#). *BMC Medical Informatics and Decision Making*. 2017.

xii. Note that the methodology for this indicator differs from that used in the *Provincial/Territorial Data Quality Report: Indicators and Contextual Measures — Reference Guide* in that it calculates late submissions for the fiscal year rather than by quarter.



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