

Percentage of Residents Who Had a Newly Occurring Stage 2 to 4 Pressure Ulcer

Name	Percentage of Residents Who Had a Newly Occurring Stage 2 to 4 Pressure Ulcer
Short/Other Names	PRU09
Description	Percentage of residents who had a newly occurring stage 2 to 4 pressure ulcer
Interpretation	A high number indicates a higher percentage of residents who had a newly occurring stage 2 to 4 pressure ulcer on their target assessment; thus a lower percentage is desirable.
HSP Framework Dimension	Health System Outputs: Safe
Areas of Need	Living With Illness, Disability or Reduced Function
Geographic Coverage	Newfoundland and Labrador, New Brunswick, Nova Scotia, Ontario, Manitoba, Saskatchewan, Alberta, British Columbia, Yukon
Reporting Level /Disaggregation	Province/Territory, Region, Facility, Corporation, Sector (residential and hospital-based continuing care)
Indicator Results	https://www.cihi.ca/en/quick-stats

Identifying Information

Name Percentage of Residents Who Had a Newly Occurring Stage 2 to 4 Pressure Ulcer
 Short/Other Names PRU09

Indicator Description and Calculation

Description Percentage of residents who had a newly occurring stage 2 to 4 pressure ulcer
 Residents who had a pressure ulcer at stage 2 to 4 on their target assessment and no pressure ulcer at stage 2 to 4 on their prior assessment

Calculation: Description
 Unit of Analysis: Resident

Calculation: Geographic Assignment
 Place of service

Calculation: Type of Measurement
 Percentage or proportion

The following covariates are used in risk adjustment:
 Individual Covariates:

- Age younger than 65
- Personal Severity Index (PSI): Subset 1—Diagnoses
- More dependence in toileting
- Resource Utilization Group (RUG): Cognitive Impairment

Calculation: Adjustment Applied

Facility-Level Stratification:

- Case Mix Index (CMI)

Calculation: Method of Adjustment
 Stratification, direct standardization, indirect standardization ;
Standard Population:
 3,000 facilities in 6 U.S. states and 92 residential care facilities and continuing care hospitals in Ontario and Nova Scotia

Description:
 Residents with valid assessments

Inclusions:

1. Residents with valid assessments. To be considered valid, the target assessment must
 - a. Be the latest assessment in the quarter
 - b. Be carried out more than 92 days after the Admission Date
 - c. Not be an Admission Full Assessment

Denominator

As this is an incidence indicator, the resident must also have had an assessment in the previous quarter, with 45 to 165 days between the target and prior assessments. If multiple assessments in the previous quarter meet the time period criteria, the latest assessment is selected as the prior assessment.

Exclusions:

1. Residents who had a pressure ulcer greater than or equal to stage 2 (M2a = 2 or higher) on their prior assessment

Description:

Residents who had a pressure ulcer at stage 2 to 4 on their target assessment and no pressure ulcer at stage 2 to 4 on their prior assessment

Inclusions:

1. Residents who had a pressure ulcer on their target assessment (M2a = 2 or higher)
2. Residents with valid assessments. To be considered valid, the target assessment must
 - a. Be the latest assessment in the quarter
 - b. Be carried out more than 92 days after the Admission Date
 - c. Not be an Admission Full Assessment

Numerator

As this is an incidence indicator, the resident must also have had an assessment in the previous quarter, with 45 to 165 days between the target and prior assessments. If multiple assessments in the previous quarter meet the time period criteria, the latest assessment is selected as the prior assessment.

Exclusions:

1. Residents who had a pressure ulcer greater than or equal to stage 2 (M2a = 2 or higher) on their prior assessment

Background, Interpretation and Benchmarks

CCRS quality indicators were developed by interRAI (www.interrai.org), an international research network, to provide organizations with measures of quality across key domains, including physical and cognitive function, safety and quality of life. Each indicator is adjusted for resident characteristics that are related to the outcome and independent of quality of care. The indicators can be used by quality leaders to drive continuous improvement efforts. They are also used to communicate with key stakeholders through report cards and accountability agreements.

Interpr A high number indicates a higher percentage of residents who had a newly occurring stage 2 to 4 pressure ulcer on their target assessment; thus a lower percentage is desirable.

HSP

Frame

work Health System Outputs: Safe

Dimen

sion

Areas

of Living With Illness, Disability or Reduced Function

Need

Target

s

/Benc None

hmarks

Canadian Institute for Health Information. [CCRS Quality Indicators Risk Adjustment Methodology \(PDF\)](#). 2013.

Canadian Institute for Health Information. [When a Nursing Home Is Home: How Do Canadian Nursing Homes Measure Up on Quality? \(PDF\)](#) 2013.

Health Quality Ontario. [Long-Term Care Benchmarking Resource Guide \(PDF\)](#). 2013.

Health Quality Ontario. [Results From Health Quality Ontario's Benchmark Setting for Long-Term Care Indicators \(PDF\)](#). 2017.

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Health Quality Ontario. [Health Quality Ontario Indicator Library](#). Accessed October 4, 2017.

Hirdes JP, Mitchell L, Maxwell CJ, White N. [Beyond the "iron lungs of gerontology": Using evidence to shape the future of nursing homes in Canada](#). *Canadian Journal on Aging*. 2011.

Hirdes JP, Poss JW, Caldarelli H, et al. [An evaluation of data quality in Canada's Continuing Care Reporting System \(CCRS\): Secondary analyses of Ontario data submitted between 1996 and 2011](#). *BMC Medical Informatics and Decision Making*. 2013.

Jones RN, Hirdes JP, Poss JW, et al. [Adjustment of nursing home quality indicators](#). *BMC Health Services Research*. 2010.

Availability of Data Sources and Results

Data Sources

CCRS

Type of Year:

Fiscal

Available Data Years

First Available Year:

2010

Last Available Year:

2019

Geographic Coverage

Newfoundland and Labrador, New Brunswick, Nova Scotia, Ontario, Manitoba, Saskatchewan, Alberta, British Columbia, Yukon

Reporting Level

Province/Territory, Region, Facility, Corporation, Sector (residential and hospital-based continuing care)

/Disaggregation

Result Updates

Update Frequency Every year

Web Tool:

Indicator Results

Quick Stats

URL: <https://www.cihi.ca/en/quick-stats>

Updates

Not applicable

Quality Statement

This measure uses data collected by long-term care facilities using the Resident Assessment Instrument–Minimum Data Set 2.0 (RAI-MDS 2.0) and submitted to the Continuing Care Reporting System (CCRS). Users should be cautious when interpreting results from CCRS because the CCRS frame does not currently contain all facilities in all provinces and territories that make up the CCRS population of interest; thus the population covered by CCRS may not be representative of all continuing care facilities across Canada.

Some jurisdictions have implemented or are in the process of implementing the new interRAI Long-Term Care Facilities (LTCF), the next-generation clinical assessment instrument for long-term care. Data collected using this assessment instrument will be submitted to the Integrated interRAI Reporting System (IRRS). Results for these jurisdictions as of the fiscal year of interRAI LTCF implementation are not available at this time. Historical results based on the RAI-MDS 2.0 are available.

Caveats and Limitations Coverage is incomplete for some fiscal years in the following jurisdictions:

- Saskatchewan (implemented and started collecting data using the interRAI LTCF in 2019–2020)
- Manitoba (includes all facilities in Winnipeg Regional Health Authority only)
- New Brunswick (implemented and started collecting data using the interRAI LTCF in 2017–2018)
- Nova Scotia

Indicators are risk-adjusted to control for potential confounding factors.

Trending Issues Since 2003, the number of facilities and jurisdictions submitting to CCRS has been increasing. With the addition of new jurisdictions, it is possible that differences in care practices may affect indicator rates; however, changes to the underlying population would be controlled for using risk adjustment. There is also evidence to suggest that trending and use of data from the entire time series is not an issue and that data quality is consistent over time (Hirdes et al., 2013).

Comments The CCRS quality indicators use four rolling quarters of data for calculations in order to have a sufficient number of assessments for risk adjustment. Since residents are assessed on a quarterly basis, each resident can contribute to the indicator up to four times.

Although the CCRS quality indicators are reported publicly at the provincial/territorial level only, indicator results are available at other levels (facility, corporation, region) to data submitters in the CCRS eReports application. Data in CCRS eReports is updated on a quarterly basis.