

Percentage of Residents Whose Bladder Continence Worsened

Name	Percentage of Residents Whose Bladder Continence Worsened
Short/Other Names	CNT03
Description	Percentage of residents with worsened bladder continence
Interpretation	A high number indicates a higher percentage of residents with worsened bladder continence; thus a lower percentage is desirable.
HSP Framework Dimension	Health System Outputs: Appropriate and effective
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/sites/default/files/document/ccrs-quick-stats-2016-2017-en.xlsx

Identifying Information

Name Percentage of Residents Whose Bladder Continence Worsened

Short/Other Names CNT03

Indicator Description and Calculation

Description Percentage of residents with worsened bladder continence

Residents whose bladder incontinence worsened (frequency of bladder incontinence increased) on their target assessment compared with their prior assessment

Description Unit of Analysis: Resident

Calculation: Geographic Assignment Place of service

Calculation: Type of Measurement Percentage or proportion

Calculation: Adjustment Applied The following covariates are used in risk adjustment:
Individual covariates: Personal Severity Index (PSI) subset 1 (diagnoses); PSI subset 2 (non-diagnoses); Cognitive Performance Scale (CPS); Resource Utilization Group (RUG); nursing Case Mix Index (CMI); age younger than 65

Calculation: Method of Adjustment Facility-level stratification: Activities of Daily Living (ADLs) Long Form Scale
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 whose bladder continence could worsen (did not have maximum score on prior assessment)

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 are comatose (B1 = 1), end-stage (J5c = 1) or receiving hospice care (P1ao = 1)

2. Residents who have the maximum score for bladder incontinence (H1b = 4) on the previous assessment (cannot get worse)

Description:
Residents with a greater value for bladder incontinence (H1b) on their target assessment than on their prior assessment

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
Numerator	c. Not be an Admission Full Assessment
	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 are comatose (B1 = 1), end-stage (J5c = 1) or receiving hospice care (P1ao = 1)
	2. Residents who were completely bladder incontinent (H1b = 4) on the previous assessment (cannot get worse)
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.
Rationale	A high number indicates a higher percentage of residents with worsened bladder continence; thus a lower percentage is desirable.
Interpretation	Health System Outputs: Appropriate and effective
HSP Framework Dimension	Living With Illness, Disability or Reduced Function
Areas of Need	CIHI: None
Targets/Benchmarks	Health Quality Ontario (external): 12% for long-term care Canadian Institute for Health Information. <i>CCRS Quality Indicators Risk Adjustment Methodology</i> . 2013. Canadian Institute for Health Information. <i>When a Nursing Home Is Home: How Do Canadian Nursing Homes Measure Up on Quality?</i> 2013. Health Quality Ontario. <i>Long-Term Care Benchmarking Resource Guide</i> . 2013. Health Quality Ontario. <i>Results From Health Quality Ontario's Benchmark Setting for Long-Term Care Indicators</i> . 2017.
References	Health Quality Ontario. <i>Health Quality Ontario Indicator Library</i> . 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. <i>Canadian Journal on Aging</i> . 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. <i>BMC Medical Informatics and Decision Making</i> . 2013. Jones RN, Hirdes JP, Poss JW, et al. Adjustment of nursing home quality indicators. <i>BMC Health Services Research</i> . 2010.
Availability of Data Sources and Results	
Data Sources	CCRS
	Type of Year: Fiscal
Available Data Years	First Available Year: 2003 Last Available Year: 2016
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)
Result Updates	
Update Frequency	Every year
	Web Tool:
Indicator Results	Quick Stats URL: https://www.cihi.ca/sites/default/files/document/ccrs-quick-stats-2016-2017-en.xlsx
Updates	Not applicable
Quality Statement	The Continuing Care Reporting System (CCRS) frame does not currently contain all facilities in all provinces and territories that make up the CCRS population of interest. Users should be cautious when interpreting results from CCRS, as the population covered by CCRS may not be representative of all continuing care facilities across Canada.
Caveats and Limitations	Coverage is incomplete in the following jurisdictions: and – Manitoba (includes all facilities in Winnipeg Regional Health Authority only) – New Brunswick – 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 impact 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).

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.

Comments 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.