



**Rehabilitative
Care Alliance**

**System Performance Report
Technical Manual**

2023

Table of Contents

Expert support	4
RCA Task Groups	4
Background	6
Who Should Use This Report	7
Purpose	7
Methodology.....	7
Wait time for inpatient rehabilitative care	13
Wait time for in-home rehabilitative care services	17
Repeat ED visits for falls.....	20
Supplementary Indicators.....	24
Appendix A—Glossary of Terms	46
References	53

INTRODUCTION

EXPERT SUPPORT

The work of the RCA is dependent on the expertise and support of many individuals. Many served on the RCA's System Evaluation Task Group as well as other sub-committees and are listed in the appendices. In addition, the RCA would like to thank the following:

Institute of Clinical Evaluative Sciences

- Ruth Hall, Adjunct Scientist
- Lesley Plumptre, Staff Scientist
- Haley Golding, Epidemiologist

Ontario Health, Health System Performance and Support

- Candice Tam, Group Manager, ALC and Mental Health
- Jay Callowhill, Team Lead, Home & Community Care Information Program

Ontario Hospital Association, Performance Dashboard Development:

- Maggie Fung, Director, Data and Analytics
- Ali Sadri, Senior Business Intelligence Specialist
- Yilin Xie, Business Intelligence Specialist

System Evaluation Advisory Group Chair:

- Imtiaz Daniel, Ontario Hospital Association

University Health Network - Decision Support

- Jeffrey Ho, Senior Analyst, Data Operations
- Abigail Chern, Analyst, Data Operations

RCA TASK GROUPS

The RCA governance model engages provincial stakeholders and rehabilitative care providers from across the continuum and reports to Ontario Health (Shared Services) through a Steering Committee and Task Groups which includes the System Evaluation Task Group.

RCA Task Groups include clinicians, administrators and policy-makers from across the province.

Additional comments and suggested updates on this document are welcome for future iterations. Please send comments to info@rehabcarealliance.ca.

BACKGROUND

BACKGROUND

Through 2013-2015, just after the inception of the Rehabilitative Care Alliance (RCA), the RCA developed the [Rehabilitative Care System Evaluation Framework](#) to support a standardized approach to evaluating system performance across the rehabilitative care continuum. This standardized approach is intended to support evidence-based practice and system-wide improvement, including the prioritization of regional and provincial quality improvement opportunities. Furthermore, it will allow health system planners, health service providers and other stakeholders to demonstrate the contribution of rehabilitative care to overall health care system objectives.

In the intervening years, the work of the System Evaluation Task and Advisory Groups focused on the implementation of the framework with the goal of developing a provincial performance report and preliminary dashboard using the indicators from the framework. Using that framework, the RCA published its first *Rehabilitative Care System Performance Report* in March 2017 and the second report in November 2018. The task and advisory groups reviewed provincial data sources to confirm data availability and reliability for the indicators in the system evaluation framework. Based on this review, it was decided to focus on collecting data and reporting only those indicators for which data is available to feasibly calculate. In 2021, the Indicator Development Task Group initiated a review and re-alignment of the Framework with the Quadruple Aim and a revised [Rehabilitation Care System Evaluation Framework](#) (2022) was developed. Further refinement of the indicators and data sources to support high value rehabilitative care and drive strategic quality improvement was undertaken. In addition, an equity lens is being used to review the System Evaluation Framework to help identify, measure and address inequities in rehabilitative care planning, delivery and evaluation. As such, the Quintuple Aim will be used to include the domain of Health Equity in the work going forward.¹

The development of the performance report and dashboard was conducted in several stages, with provincial stakeholders engaged in all aspects of this work.

Below are the key principles that have guided, and continue to guide, the group's work:

- Utilize data derived from existing and reliable data sources
- Share performance data with stakeholders intentionally and sensitively
- Utilize existing targets and benchmarks where available and appropriate
- Be transparent in the methodology used
- Calculate benchmarks for indicators to drive change, when the desired change is both meaningful and the impact of the change is understood
- Include patients and caregivers in the benchmarked indicator selection process

¹ Nundy S, Cooper LA, Mate KS. The Quintuple Aim for Health Care Improvement: A New Imperative to Advance Health Equity. *JAMA*. 2022;327(6):521–522. doi:10.1001/jama.2021.25181

This report can be shared among staff and health care service providers who are involved with the planning of rehabilitative care services and who want to better understand the performance data.

More information on the System Evaluation initiative is available on the [Rehabilitative Care Alliance website](#). To obtain any of the previously released RCA Rehab System Evaluation Performance reports, please email info@rehabcarealliance.ca

WHO SHOULD USE THIS REPORT

This technical manual is designed for health care planners, health care providers, administrators and others interested in the delivery and performance of rehabilitative care services in Ontario who have read the [Rehabilitative Care System Evaluation Performance Summary](#) or reviewed [Performance Dashboard](#) and would like more detailed information.

PURPOSE OF THE TECHNICAL MANUAL

The purpose of this technical manual is to provide detailed background, definitions, and interpretation on the indicators.

METHODOLOGY

Data Sources

Data for the 14 indicators in this report were collected from:

- Complex Continuing Care Reporting System (CCRS-CCC)
- National Ambulatory Care Reporting System (NACRS)
- Ontario Health:
 - Wait Time Information System (WTIS)
 - Client Health and Related Information System (CHRIS);
- MOH
 - IntelliHealth
- Local Health Integration Network (LHIN) database
- Registered Persons Database files (RPDB)

Facility-based indicators

Nine indicators are hospital-based, meaning indicators are based on admissions or discharges from a hospital. These indicators are collected and reported based on the fiscal year. The 50th (median) and 90th percentile are reported for the two wait time indicators. All indicators are reported at the facility, legacy

LHIN, regional and provincial level. Where required, values may be suppressed or not reported due to privacy requirements.

Population-based indicators

The falls indicators are population-based indicators. These are indicators where the data is collected and reported based on patient sub-region or region of residence.

Data for wait time for in-home rehab were provided to the RCA from Ontario Health (Health System Performance and Support) via their Client Health and Related Information System (CHRIS). Data is reported based on the fiscal year for reporting the wait time for in-home rehabilitative care, for all patients who received care in the fiscal year, April 1 to March 31.

The falls indicators, were provided to the RCA from ICES through the Applied Health Research Question (AHRQ) process^[1]. The fall indicators are reported by calendar year and are population-based. Direct age standardized rates were calculated using the 2021 Ontario and legacy LHIN population estimates as based on the Canada Population Estimate Files from Statistics Canada (POPCAN) and the LHIN database respectively. Age was reported using 5-year increments (65-69, 70-74, 75-79, 80-84, 85-89, 90+).

Provincial Benchmarks

Three of the 14 rehabilitative care system indicators have benchmarks. A modified Delphi approach was used to select which indicators would have benchmarks. The criteria for selecting a benchmark included: attainable, agreeable to major stakeholders and reflective of top performance. The benchmarks were endorsed by the RCA System Evaluation Task and Advisory Groups and the Patient and Family Caregiver Advisory Group in 2016 and have been used and reported since.

Two benchmarked indicators address wait times for rehabilitative services. One, time to inpatient rehabilitative care and the other time to in-home rehabilitative care. These benchmarks were calculated through consensus after reviewing data on current and past performance and alignment with other provincial wait time benchmarks.

The third indicator selected for benchmarking was the rate of repeat Emergency Department (ED) visits for falls among community-dwelling seniors. This indicator focuses on safety and speaks to the multi-faceted approach needed to change performance in this area. The benchmark is calculated using the Achievable Benchmarks of Care (ABC) methodology¹. The principle of the ABC methodology is that the benchmark is based on data from the top performers. To calculate a benchmark using the ABC methodology, the average is calculated from the results of the top performing legacy LHINs (representing the top 20% of the total population included in this indicator). The benchmark will be re-calculated annually and the lowest benchmark past or present will be retained (see Table 2).

The benchmark of **491** was calculated by:

- Ranking legacy LHINs in descending order of performance on the indicator.

- Beginning with the highest-performing legacy LHIN, the LHINs were added until at least 20% of the total number of patients were represented (in the denominator). In this case, 20% of the total population was 550,050.
- The benchmark was calculated using only the providers selected in step two (20%), by dividing the total number of patients who received appropriate care by the total number of patients eligible for that care in the subset. This included Central West, Mississauga Halton and Central legacy LHINs.

Table 2 – 2021 benchmark calculation for repeat ED visits

Legacy LHIN	Rate of Repeat ED Visit for Falls per 100,000	Population of adults aged 65 – 90+ years
Central West	465	152266
Mississauga Halton	502	210314
Central	506	357818
Toronto Central	646	210559
Erie St. Clair	656	139820
Champlain	678	268465
Central East	699	326328
Hamilton Niagara Haldimand Brant	710	316761
North Simcoe Muskoka	687	110403
Waterloo Wellington	744	138077
South East	867	126174
South West	933	213334
North East	965	130985
North West	1040	48945
Ontario	759	2,750,249
Average top performers representing 26% of total population of patients represented	491	

Defining Inpatient Rehabilitative Care

When referring to inpatient rehabilitative care throughout this report, it includes the rehabilitative care services provided in any high intensity rehab (NRS), low intensity rehab (CCRS) or short stay convalescent care program bed (CVC) operated in a long-term care (LTC) facility, and where data is available.

However, the following caveats apply:

Data obtained from the WTIS (indicators: Wait time for in-patient rehab, ALC rate in acute care to inpatient rehab, ALC rate in high intensity rehab and low intensity rehab CCC [modified], Acute ALC designation rate for rehab within 2 days) distinguish low-intensity rehab and activation/restoration bed

types by program using the 'discharge destination detail' data element. Patients waiting for low intensity rehab services are noted as waiting for low intensity (LTLD) beds.

- Long term complex medical management (CCC-non-LTLD beds) is excluded from 'in-patient rehabilitative care'.
- Activation/restoration bed wait time from acute care, ALC rate contribution and data is available, and ALC designation rate within 2 days of acute care is available in the dashboard
- Indicators: Average change in functional score by RCG; Average admission FIM™ Score by Rehabilitation Client Group (RCG), Average active rehabilitation LOS efficiency, and Proportion of patients admitted to inpatient rehabilitation within each RCG include data from high-intensity rehab beds only.
- Indicator 'Average length of stay by Resource Utilization Grouping' is only available for low-intensity rehab beds and complex continuing care beds.

INDICATORS

The 14 rehabilitative care system indicators (Table 1) cross the care continuum and cover the five domains of the Quintuple Aim: Population Health, Patient Experience, Provider Experience, Value/Efficiency and Health Equity (in development).²

The technical definitions provide the calculations and data sources for all the indicators, including the age standardization calculation for indicators ED visits for falls for community-dwelling seniors and Repeat ED visits for falls for community-dwelling seniors. The indicators included are those from the System Evaluation Framework that are feasible to calculate and for which data is available. Three of these indicators have accompanying benchmarks. The remaining 11 supplementary indicators provide information on the quality of rehabilitative care services overall and context for interpretation of the performance against benchmarks.

Rehabilitative care system indicators

Rehab System Indicator	Quintuple Aim Domain
Benchmarked Indicators	
Wait time for inpatient rehabilitative care: time from most recent discharge destination determined date from acute care to discharge date, where the discharge destination is inpatient rehabilitative care	Patient Experience
Wait time for in-home rehabilitative care: patient availability date to date of first therapy visit	Patient Experience
Repeat ED visits for falls for community-dwelling seniors: annual rate per 100,000 people aged 65 years and older (age standardized)	Population Health
Supplementary Indicators	
Percent contribution to ALC Rate in acute care by patients waiting for inpatient rehabilitative care	Value/Efficiency
Percent contribution to ALC Rate in a rehabilitation bed or complex continuing care bed	Value/Efficiency
Average change in functional score by Rehabilitation Client Group (RCG)	Population Health
Average Admission FIM™ Scores by Rehabilitation Client Group (RCG)	Population Health
Active rehabilitation length of stay (LOS) efficiency	Value/Efficiency
Average length of stay for patients in low intensity rehab and complex continuing care beds (CCRS reporting beds)	Value Efficiency
ED visits for falls for community-dwelling seniors: annual rate per 100,000 people aged 65 years and older (age standardized)	Population Health
ED visits for falls for community-dwelling seniors: annual rate per 100,000 people aged 65 years and older (age standardized)	Population Health
ALC designation rate within 2 days for acute care patients discharged to an inpatient rehabilitative bed	Value/Efficiency
Proportion of patients admitted to high intensity inpatient rehabilitation within each RCG	Population Health
Proportion of patients admitted to low intensity inpatient rehabilitation and complex continuing care (CCRS) within each Resource Utilization Group (RUG)	Population Health

² Nundy S, Cooper LA, Mate KS. The Quintuple Aim for Health Care Improvement: A New Imperative to Advance Health Equity. JAMA. 2022;327(6):521–522. doi:10.1001/jama.2021.25181

Wait time for inpatient rehabilitative care

OVERVIEW

This indicator measures the time a patient is waiting in acute care for inpatient rehabilitative care. It is a measure of the number of days from the patient's most recent discharge destination determined date to the actual discharge date to inpatient rehabilitative care.

This indicator measures wait time for 'inpatient rehabilitative care' in the following bed types:

- High intensity rehab beds (NRS)
- Low intensity rehab in Complex Continuing Care Beds (CCC-LTLD)
- Activation/restoration beds offered as convalescent care program beds in long term care homes (CVC)

Why is it important to measure?

Patients who are waiting for inpatient rehabilitative care are not getting the care they need when they need it. Long wait times may indicate that the current number of inpatient rehab beds is not meeting demand or that there are issues with bed utilization. It is a measure of timely access to care.

Data Sources

Wait Time Information System (WTIS)

Benchmark

A benchmark of 3 days for the 90th percentile wait for inpatient rehabilitative care was arrived at through consensus as it approximated the 25th percentile of wait time in Ontario in 2015/16, indicating an achievable benchmark that represents high quality care. Long-Term Complex Medical Management beds in Complex Continuing Care (CCC-non-LTLD) are excluded from the calculation for wait times for inpatient rehabilitative care as this patient population is not a rehabilitative care population but in need of a variety of programs including long stay Complex Continuing Care, behavior management, palliative care and other programs.

Considerations and Indicator interpretation

The wait time for inpatient rehabilitative care indicator calculation utilizes the *Most Recent Discharge Destination Detail Determination Date* as the 'start' date for counting the wait time to the final discharge date. The accuracy of the discharge destination bed type and discharge destination detail is dependent on acute care providers' knowledge of rehab programs and the patient's rehab needs. There may be some variation in how accurately bed types and program details are documented in the WTIS.

The discharge destination detail field may be updated more than once after a patient is designated as ALC. By using the ‘most recent’ discharge destination, the data should reflect the time from when a final destination has been determined to the date the patient is discharged to that destination. However, the data will not include the full time that the patient waited in the acute care bed, if the discharge destination field is changed after the patient is designated as ALC. As a result, the reported wait times may appear to be shorter than the patient experience would reflect.

It is also important to note for the interpretation of this wait time data that only patients with an ALC designation who are documented in the WTIS have their wait time reported in this indicator. Because of this, a mathematical effect could occur where, as ALC rates³ and ALC volumes⁴ decrease, median and 90th percentile wait times may appear longer. As fewer patients are waiting in ALC, only those with longer wait times will remain in the sample. With a smaller sample size, the distribution of the wait times will tend to skew relative to previous data reports. This both moves the median of the population higher and because of the inevitable tailing, the 90th percentile wait time can also be elevated. In summary, successes in reducing the number of patients designated ALC for rehab may reflect longer wait times as it is often the most complex patients who have the longest wait times and present the greatest challenges in moving to an appropriate rehabilitative care bed.

To support interpretation of this data, an analysis of ALC rates and volumes is provided in the Supplementary Indicators section of this document and the accompanying data for these indicators is provided in the data set. As always additional information on ALC rates and volumes is available from Access to Care.

Technical Definition

Indicator Description	Indicator Name	Wait time in acute care for inpatient rehabilitative care: time from most recent discharge destination determined date from acute care to discharge date, where the discharge destination is inpatient rehabilitative care
	Indicator Description	This indicator measures the time a patient is waiting in acute care for an inpatient rehabilitative care bed by measuring the time from the most recent discharge destination determined date to discharge date
	Relevance	Timely access to inpatient rehabilitative care
	Level of analysis	<ul style="list-style-type: none"> • Single admission • Facility based analysis

³ The proportion of inpatient days in Acute and Post-Acute care settings that are spent designated ALC in a specific period of time. See glossary of terms for reference.

⁴ ALC volumes refer to the number of ALC cases (i.e. patients designated ALC) that meet a select criteria. They may be presented/reported as a number or a percentage/proportion of cases. See glossary of terms for reference.

Numerator	Data Source(s)	Access to Care Wait Time Information System
	Calculation (define the numerator)	Discharge Date – Discharge Destination Determination Date in days calculated at 50 th and 90 th percentile Volumes are also reported
	Exclusion/Inclusion Criteria	Inclusion: <ul style="list-style-type: none"> All patients ≥18 years with a discharge destination indicated as a either Rehab (NRS-reporting bed), Complex Continuing Care (CCRS-reporting bed) or Convalescent Care (CVC) Discharged from acute care during the fiscal year (allocated based on discharge date) Valid HCN number (not null or 0 and must be 10 digits - all numeric) Exclude: <ul style="list-style-type: none"> Missing discharge date Missing ALC discharge destination determination date Missing ALC discharge destination detail
Denominator	Calculation (define the denominator)	n/a
	Exclusion/Inclusion Criteria	n/a
	Timing/frequency of release	Annual
Geography & Timing	Levels of comparability	Provincial (wait times are calculated for the 50th, and 90th percentiles) Legacy LHIN (50th and 90th percentiles) Facility Discharge Destination Detail Discharge Destination rollup (NRS, CVC, CCRS-LTLC, CCRS-non-LTLD)
	Trending (what year are data available)	FY2017/18 to F2021/22
	Limitations	<p>The current data only captures those patients who have a waitlist entry (those patients waiting for rehabilitative care who have been designated ALC).</p> <p>A waitlist entry/update and determination of a discharge destination do not indicate acceptance by the receiving organization.</p> <p>The reported data is reflective of the intended rehab discharge destination from acute care and may be modified by the rehab program upon admission</p>

Additional Information	References	<ul style="list-style-type: none"> Alternative Level of Care (ALC) Reference Manual, version 2, January 2017
	Comments/Interpretation	<p>This indicator should be interpreted as the time a patient in acute care waits for a rehabilitative care bed, where that patient was designated ALC for that level of care. A lower wait time is preferred. Wait times where calculated volumes are less than 10 are suppressed and given a NV designation.</p> <p>Wait times for Long Term Complex Medical Management (CCC non-LTLD beds) are excluded from the benchmark calculation.</p> <p>The ALC discharge destination determination date is used as a proxy for the referral date, as it is defined as “The date when the decision is made by the physician or delegate in collaboration with an interprofessional team (when available), as to where a patient is to be discharged or transferred.”</p> <p>Using this method, only time spent waiting specifically for the inpatient rehabilitative care bed will be included in the wait time. If a patient has had his/her discharge destination changed multiple times, for various clinical reasons, this method may decrease the presented wait time in certain scenarios. While this approach helps to focus the calculated wait for a specific service, it may not be deemed the most reflective of the entire patient experience, i.e., it is not inclusive of the total ALC wait time.</p>
	Quintuple Aim Alignment	Patient Experience
	Improvement suggestions	<p>Move to a wait time definition that captures time from the date of rehab referral to date of admission to inpatient rehabilitative care.</p> <p>Reported in alignment with the Rehab Care Alliance definitions framework – with discharge destinations aligned to the RCA definitions of bedded levels of rehabilitative care.</p>

Wait time for in-home rehabilitative care services

OVERVIEW

This indicator measures the number of days a patient is waiting for in-home rehabilitative care from the patient availability date following service authorization to the date of the first therapy visit.

It includes the following services: Physiotherapy, Occupational Therapy, Speech Language Pathology and Social Work.

Data is calculated at the median and 90th percentile, provincially and for each legacy LHIN and includes data for both short and long stay patients.

Why is it important to measure?

Long wait times for this indicator may indicate that the level of services available in the community is not meeting demand. It is a measure of *Timely Access to Care*.

Data Sources

Client Health & Related Information System (CHRIS), Health Shared Services Ontario

Benchmark calculation

A benchmark of 5 days was selected for the 90th percentile wait time for in-home rehab to align with the current MOH benchmark for wait time for in-home nursing and personal support.

Considerations and Indicator interpretation

In general, practices across legacy LHINs may vary with respect to how referral to in-home rehab services are prioritized and health professional resources utilized. For example, a patient with a more urgent need for in-home rehab service may be prioritized over other, less urgent referrals. In other words, patients with a higher risk or more urgent need for service may be seen within the 5-day benchmark, while patients with a less urgent need may wait longer. The data reported here did not account for this triage methodology. This data does not reflect how much service the patient receives or any outcome data.

Technical Definition

Indicator Description	Indicator Name	Wait time for in-home rehabilitative care services: patient availability date to date of first therapy visit
	Indicator Description	This indicator measures the time from the patient available date following service authorization to the date of the first in-home therapy visit.
	Relevance	Timely access to in-home rehabilitative services
	Level of analysis	<ul style="list-style-type: none"> • Single episode of care per service • Population based analysis by legacy LHIN
	Data Source(s)	Health Shared Services Ontario Client Health & Related Information System
Numerator	Calculation (define the numerator)	Date of first visit - Patient Available Date (PAD) in days calculated at median and 90 th percentile Volumes are also reported
	Exclusion/Inclusion Criteria	Exclude: <ul style="list-style-type: none"> • Patients who were on hold for any reason between patient availability date and date of first therapy visit
Denominator	Calculation (define the denominator)	<ul style="list-style-type: none"> • All patients with a patient availability or service authorization date
	Exclusion/Inclusion Criteria	Include: <ul style="list-style-type: none"> • In-home care referrals • Patients who received their first visit during the fiscal year noted (April 1 to March 31st) • Adult Short Stay (Adult Short Stay-Acute, Adult Short Stay-Wound, Adult Short Stay-Oncology, Adult Short Stay-Rehab or SRC 91, 92 if no CCM population assigned) • Adult Long stay (CCM population of Adult Chronic, Adult Complex or Adult Community Independence or SRC of 93 or 94 if no CCM population assigned) • Age >=18 years at time of patient available date • Valid OHIP number
Geography & Timing	Timing/frequency of release	Annual
	Levels of comparability	<ul style="list-style-type: none"> • Provincial (wait times are calculated for the 50th, and 90th percentiles) • Legacy LHIN (50th and 90th percentiles) • Service by Regulated Health Professional (Physiotherapy, Occupational Therapy, Speech Language Pathology, Social Work) • CCM Category (Adult Long Stay / Adult Short Stay) • Referral Source (Community / Hospital)

Additional Information	Trending (what year are data available)	FY2017/18 to FY2021/22
	Limitations	None specified
	References	None
	Comments/Interpretation	<p>This indicator should be interpreted as the time a patient is waiting for in-home rehabilitative care services. A lower number is preferred.</p> <p>Services are categorized using the following functional centre ID's: Physiotherapy (1300, 2100, 2700, 4700, 6114) Occupational Therapy (1400, 2200, 2800, 4800), Speech Language Pathology (1500, 2300, 2900, 4900) Social Work (1600, 5000)</p> <p>Single episode of care per service means that if there is more than one service authorization for the same service, the earliest Patient Availability Day (PAD) before the first visit is used for the wait time start. In the event a negative wait time is produced, the wait time is set to 0 days.</p>
	Quintuple Aim Alignment	Patient Experience
	Improvement suggestions	None currently

Repeat ED visits for falls

OVERVIEW

This indicator measures the annual rate of repeat visits to the ED for falls among seniors living in the community, expressed as the age standardized rate per 100,000 people. This indicator includes seniors (≥ 65 years old) who are living in the community who were not transferred from another hospital or a long-term care home. Only unscheduled visits were included in the indicator definition.

Why is it important to measure?

Repeat ED visits for falls is a measure of the effectiveness of secondary fall prevention and ED diversion efforts across the province. Low rates of repeat ED visits for falls is desirable. Age standardization of the data using the 2021 population estimates for the current year, controls for variation in expected increases in falls with variation in age of legacy LHIN populations and allows comparison between LHINs. Meeting the benchmark for this indicator is one way to ensure community-dwelling frail seniors are receiving appropriate community-based interventions to maintain and optimize their functional status.

Data Sources

NACRS, LHIN, and RPDB via ICES

Considerations – Indicator interpretation

It has been noted throughout provincial consultation on this indicator and in discussion with experts that coding for fall related visits in the ED can be inconsistent and variable. In accordance with the NACRS-ED and ICD-10 methodology for coding problem codes and cause codes, a fall cannot be coded as the 'primary reason' for an ED visit, and is always coded as a 'secondary' problem or potential cause. For example, a head injury or other injury may be coded as the primary reason for the ED visit as a result of a secondary problem, the fall. As a result, the fall may not be consistently or accurately documented in the patient record. This can make it challenging from a data reporting perspective but also for identifying the ongoing support needed for fall prevention for those who visit the ED who have had a fall.

Further, while the definition for this indicator excludes visits to the ED that are scheduled in advance, as there have been some concerns raised around the accuracy of how these visits are coded. For example, in some cases, if a scheduled follow-up visit to ED for a fall is not coded as scheduled, while the diagnostic codes still indicated for 'fall' as is required for these follow-up visits the overall number of ED visits for falls may appear higher than the actual number, having counted the full episode twice.

Technical Definition

Indicator Description	Indicator Name	Repeat ED visits for falls for community-dwelling seniors: annual rate per 100,000 people aged 65 years and older (age standardized)	
	Indicator Description	This indicator measures the annual rate of repeat visits for falls among seniors living in the community, expressed as the age standardized rate per 100,000 people	
	Relevance	A measure of the effectiveness of fall prevention efforts across the province	
	Level of analysis	<ul style="list-style-type: none"> • Unique patient • Population based analysis (i.e. the location of the patient's residence is used to report regional performance) 	
	Data Source(s)	National Ambulatory Care Reporting System (NACRS), Canadian Institute for Health Information	
	Numerator	Calculation (define the numerator)	Total number of repeat visits (above 1) to the ED with "fall" indicated, where is "fall" = ICD-10 code WW00-WW19
		Exclusion/Inclusion Criteria	<p><u>Include</u></p> <ul style="list-style-type: none"> • All patients >=65 years • Valid OHIP number <p><u>Exclusions</u></p> <ul style="list-style-type: none"> • Visits from non-participating ED's • Scheduled ED visits are excluded, where scheduled ED visit indicator = "Y" or ED visit indicator = "0" (as of 2011–2012). • Index case • Transfers from type: home for the aged, interim long-term care, nursing home and temporary long term care home. Also exclude transfers from hospital: other hospitals, rehab hospitals, acute hosp with psych, acute hosp without psych, community psych hospital, chronic care treatment hospital, gen rehab hosp, misc psych hosp, ontario psych hosp, spec rehab hosp • Delete Encrypted_HN=7863803113"

Denominator	Calculation (define the denominator)	<p>Total number of people aged 65 years and older / 100,000</p> <p>Adjustment (age standardization) This measure is age-standardized to legacy LHIN specific fiscal year population for the crude rate and the Statistics Canada 2021 Canadian population for the expected rate for seniors 65+ calculated in 5 year age increments: 65-69, 70-74, 75-79, 80-85, 85-89, 90+</p> <p>The standardized rates for re-visits per 100,000 is calculated as follows:</p> <p>Age Standardized Rates for re-visits per 100,000=</p> $\frac{\text{Sum of all expected events (\#re-visits)} \times 100,000}{\text{Total Standard population}}$
	Data Source(s)	Ontario Ministry of Health (MOH): IntelliHealth Ontario (IntelliHealth)
	Exclusion/Inclusion Criteria	<p>Include:</p> <ul style="list-style-type: none"> • All patients >=65 years • Valid OHIP number
Geography & Timing	Timing/frequency of release	Annual
	Levels of comparability	Provincial Legacy LHIN Subregion
	Trending (what year are data available)	CY2017 – CY2021
Additional Information	Limitations	<p>Documentation of falls in NACRS-ED has been noted as generally unreliable/inconsistent across reporting organizations</p> <p>Does not include falls in the community that are not referred to the ED but are treated in the community</p>
	References	Integrated Provincial Falls Prevention Framework and Toolkit, July 2011

	Comments/Interpretation	<p>This indicator should be interpreted as the rate of repeat visits made to the ED for fall among those 65 years and older per 100,000 people</p> <p>A lower number is better</p>
	Quintuple Aim Alignment	<p>Population Health</p>
	Improvement suggestions	<p>Consider alternate data sources to capture falls that are treated in the community and outside of ED as well as the methodology for recording falls in the ED</p>

Supplementary Indicators

OVERVIEW

In addition to the three benchmarked indicators, data are reported on 11 supplementary indicators that provide context for a deeper understanding of the benchmarked indicators and their associated benchmarks. A summary of the data with some analysis on these indicators is provided below. More detail on these can be found in the accompanying System Performance [Dashboard](#).

Why is it important to measure?

These 11 supplementary indicators describe Ontario's rehab population and provide the necessary context for the benchmarked indicators.

Data Sources

Vary and are as noted in the technical definitions

Considerations – A note about ALC Rates (Indicators: ALC rate in acute care to inpatient rehab and ALC rate in high and low intensity rehab)

Throughout this report and the supporting data tables, technical definitions, etc., the ALC rates for open and closed cases are reported separately. Because of this the data in this report does not currently align with reporting of ALC rates by Access to Care which includes open and closed cases combined. Even though the definitions vary slightly, the data reported here, can be interpreted similarly to ALC rates reported by Access to Care. To avoid confusion with the definitions of ALC rates by ATC the technical definitions for these indicators are labeled as "Proportion of total bed days that were utilized by patients designated as ALC, open and closed cases reported separately" but for ease of reading, we will use "ALC rate" as the term interchangeably.

The ALC rate data has been provided for this report by Access to Care via the WTIS. Please note that there may be variance in reported ALC rates when compared to rates reported from iPort™ Access as methodologies vary. iPort™ Access counts ALC days using the starting designation date which is a different methodology than used on the ATC information site, and in calculations for indicator ALC rate in high and low intensity rehabA5. The methodology for indicator ALC rate in high and low intensity rehabA5 calculates ALC days only during the reporting period. Take the following example of a case where the ALC designation date = April 1, 2015, and discharged date = April 5, 2017.

- iPA validation would count the total number of days for that case (from April 1, 2015 to April 5, 2017)
- The methodology used for ALC rate in high and low intensity rehab would only count the active dates within FY 17/18 (from April 1, 2017 to April 5, 2017)

Therefore, differences in indicator results could be substantial, particularly for patients who are waiting a long time.

A decline in ALC rate indicates that more patients are getting access to the care they need when they need it. As noted in the discussion of the wait time for inpatient rehabilitative care, it is important to understand the context of the number of patients who are designated ALC for rehab as well as the ALC rates in order to understand changes in wait time.

ALC rate, the total sum of bed days used for patients who were designated ALC, over the total available bed days, can be impacted in two ways: by reducing the number of patients designated ALC for rehabilitative care and the number of days waiting for inpatient rehabilitative care services. This holds true for how ALC rates are documented in this report with open and closed cases reported separately, as the calculations are the same. In this way ALC rates and wait times are linked. What is critical to note, however, is that a decrease in ALC rate could potentially result in longer median and 90th percentile wait times for inpatient rehab if the rate is lower because fewer patients are designated ALC. For example, if wait times are decreasing disproportionately where patients with shorter waits are no longer designated ALC, the ALC rate would decrease but the median and 90th percentile waits would appear to increase (the shape of the distribution curve of 'wait time' would no longer be symmetrical).

Technical Definitions

INDICATOR: ALC rate in acute care to inpatient rehab (modified)

Indicator Description	Indicator Name	Percent contribution to ALC rate, open and closed cases separately, for patients in acute care waiting for inpatient rehabilitative care
Numerator	Indicator Description	This indicator measures the usage of acute care beds for patients awaiting inpatient rehabilitative care by measuring the total number of ALC days contributed (open and closed cases) over the total number of acute inpatient days, expressed as a percentage
	Relevance	This indicator measures the usage of acute care beds for patients awaiting inpatient rehabilitative care by measuring the total number of ALC days contributed (open and closed cases) over the total number of acute inpatient days, expressed as a percentage
	Level of analysis	<ul style="list-style-type: none"> • Single discharge • Facility based analysis (i.e. the location of the facility is used to report regional performance)
	Calculation (define the numerator)	The total number of days that patients spent designated ALC in an acute bed (non-surgical,

		surgical, and intensive/critical care beds) where the discharge destination is inpatient rehab (NRS-reporting bed), Complex Continuing Care (CCRS-reporting bed), or Convalescent Care (CVC). This includes all active patients (open and closed) during that time period.
Denominator	Data Source(s)	Access to Care, Wait Time Information System WTIS
	Exclusion/Inclusion Criteria	<p>Inclusions:</p> <p>ALC days for Acute Inpatient Services (NS + SU + IC)</p> <p>Exclusions:</p> <ol style="list-style-type: none"> ALC cases discontinued due to 'Data entry error' ALC Days are excluded for the portion of the time when Inpatient Service = Discharge Destination for Post-Acute Care ALC cases identified by the facility for exclusion
	Calculation (define the denominator)	[July 2017 onwards]: Daily Bed Census Summary Acute Patient days = the total number of patient days occupying Acute (AT) beds (includes Mental Health Children/Adolescent)
Geography & Timing	Data Source(s)	Daily Bed Census Summary (July 2017 onwards)
	Exclusion/Inclusion Criteria	<p>Exclusions:</p> <p>[Bed Census Summary] Patient days contributed by inpatients in the emergency department (Bed Type = Emergency (Emerg + PARR, Emergency + PARR)).</p>
	Timing/frequency of release	Annual
	Levels of comparability	Provincial Legacy LHIN Facility Discharge Destination rollup (NRS, CVC, CCRS)
Additional Information	Trending (what year are data available)	FY2017/18 to FY2021/22 reported quarterly
	Limitations	Please note that only those facilities (Acute & Post-Acute) submitting both ALC data (to the WTIS) and BCS data (through the HDB Web Portal) are included in ALC Rate calculation. Any master

	<p>number that does not have inpatient days reported to the BCS for a given month/quarter will be excluded from reporting for that month/quarter.</p> <p>Additional notes regarding ALC days:</p> <ul style="list-style-type: none"> - The day of ALC designation is counted as an ALC day but the date of discharge or discontinuation is not counted as an ALC day. - For cases with an ALC designation date on the last day of a reporting period and no discharge/discontinuation date, then ALC days = 1. - The ALC Rate indicator methodology assumes that the Inpatient Service data element (as defined in the WTIS) is comparable to the Bed Type data element (as defined in the BCS). - The total ALC days by discharge destination represents the number of ALC days contributed by patients designated ALC within the same reporting period as the Bed Census Summary data submitted who have waited for the discharge destination during the patient journey, irrespective of the current discharge destination (i.e. a patient may have waited 5 days for rehab but their final discharge destination may have not been rehab).
	<p>References Alternative Level of Care (ALC) Reference Manual, version 2, January 2017</p>
	<p>Comments/Interpretation This indicator should be interpreted as the number of days that patients use those beds waiting for a NRS, CVC or CCC bed as a proportion of available days in an acute care bed, over the period of a fiscal year. A lower percentage is preferred.</p> <p>The data source used to calculate the total patient days in the ALC Rate Report is the Daily Bed Census Summary (BCS) [previously the Daily Census Summary (DCS)]. Ontario hospitals make daily (previously monthly) data submissions to the ministry's Health Data Branch (HDB) Web Portal. ATC then takes a data cut from the Web Portal to</p>

	use for the total patient days in the ALC Rate Report. Please refer to the BCS DQ Notes tab within the ALC Rate Report for more details about the data refresh timelines.
Quintuple Aim Alignment	Value/Efficiency
Improvement suggestions	None at this time

INDICATOR: ALC rate in rehab and CCC (modified)

Indicator Description	Indicator Name	Percent contribution to ALC Rate, open and closed cases separately, for patients in a rehabilitative care bed or complex continuing care
	Indicator Description	This indicator represents the rate of ALC in inpatient rehab by measuring the total number of ALC days in Rehab and CCC (open and closed cases), contributed over the total number of inpatient days, expressed as a percentage
	Relevance	Access
	Level of analysis	<ul style="list-style-type: none"> • Single admission • Facility based analysis (i.e. the location of the facility is used to report regional performance)
	Numerator	Calculation (define the numerator) The total number of days that patients spent designated ALC in a rehabilitation bed or complex continuing care bed. This includes all active patients (open and closed) during that time period.
	Data Source(s)	Access to Care, Wait Time Information System
	Denominator	Exclusion/Inclusion Criteria Inclusions: ALC days for Inpatient Service CC + RB Exclusions: <ul style="list-style-type: none"> • ALC cases discontinued due to 'Data entry error' • ALC Days are excluded for the portion of the time when Inpatient Service = Discharge Destination for Post-Acute Care (*Exception: Bloorview Rehab, CCC to CCC) • ALC cases identified by the facility for exclusion Calculation (define the denominator) [July 2017 onwards]: Daily Bed Census Summary CCC Patient days = the total number of patient days occupying Complex Continuing Care (CR) Beds Rehab Patient days = the total number of patient days occupying in General Rehabilitation (GR) + Special Rehabilitation (SR) Beds [May 2017 and prior]: Bed Census Summary The total number of patient days contributed by inpatients in complex continuing care (Chronic) +

Geography & Timing		General Rehabilitation (Gen. Rehab) + Special Rehabilitation (Spec. Rehab)
	Data Source(s)	Daily Bed Census Summary and Bed Census Summary (BCS)
	Exclusion/Inclusion Criteria	Exclusions: [Bed Census Summary] <ul style="list-style-type: none"> • Patient days contributed by inpatients in the emergency department (Bed Type = Emergency (Emerg + PARR, Emergency + PARR)).
	Timing/frequency of release	Annually
	Levels of comparability	Provincial Legacy LHIN Facility
	Trending (what year are data available)	FY2017/18 to FY2021/22
Additional Information	<p>Limitations</p> <p>Please note that only those facilities (Acute & Post-Acute) submitting both ALC data (to the WTIS) and BCS data (through the HDB Web Portal) are included in ALC Rate calculation. Any master number that does not have inpatient days reported to the BCS for a given month/quarter will be excluded from reporting for that month/quarter.</p> <p>Additional notes regarding ALC days:</p> <ul style="list-style-type: none"> • The day of ALC designation is counted as an ALC day but the date of discharge or discontinuation is not counted as an ALC day. • For cases with an ALC designation date on the last day of a reporting period and no discharge/discontinuation date, then ALC days = 1. <p>The ALC Rate indicator methodology assumes that the Inpatient Service data element (as defined in the WTIS) is comparable to the Bed Type data element (as defined in the BCS).</p>	

	References	ALC Rate Report Methodology document, Access to Care, Cancer Care Ontario, August 2013
	Comments/Interpretation	<p>This indicator should be interpreted as the number of days that patients use an NRS or CCC reporting beds to wait for another type of bed, as a proportion of the total available days in those NRS or CCC beds, over the period of a fiscal year. A lower number is preferred.</p> <p>The data source used to calculate the total patient days in the ALC Rate Report is the Daily Bed Census Summary (BCS) [previously the Bed Census Summary and Daily Census Summary (DCS)]. Ontario hospitals make daily (previously monthly) data submissions to the ministry's Health Data Branch (HDB) Web Portal. ATC then takes a data cut from the Web Portal to use for the total patient days in the ALC Rate Report. Please refer to the BCS DQ Notes tab within the ALC Rate Report for more details about the data refresh timelines.</p>
	Alignment	Accessible
	Improvement suggestions	None at this time

INDICATOR: Average total functional change (FIM™) by RCG

Indicator Description	Indicator Name	Average change in functional score (FIM™) by Rehabilitation Client Group (RCG)
	Indicator Description	Average change in functional score (FIM™) by Rehabilitation Client Group (RCG) for patients in an NRS reporting bed
	Relevance	Effectiveness of high intensity inpatient rehab
	Level of analysis	<ul style="list-style-type: none"> • Single admission/unique patient • Facility based analysis (i.e. the location of the facility is used to report regional performance)
Numerator	Data Source(s)	IntelliHealth
	Calculation (define the numerator)	Mean and median total functional change (FIM™ change = discharge total FIM™-admission total FIM™)
Denominator	Exclusion/Inclusion Criteria	N/A
	Calculation (define the denominator)	All patients >=18 years admitted into inpatient rehabilitation
	Exclusion/Inclusion Criteria	Include: <ul style="list-style-type: none"> • Patients admitted to an NRS reporting bed • Discharged alive • ≥18 years • Admitted into inpatient rehab during the fiscal year • Valid OHIP number Exclude: <ul style="list-style-type: none"> • Hospital transfers within a facility or between facilities within 24 hours • Missing Admission FIM™ score • Missing Discharge FIM™ score
Geography & Timing	Timing/frequency of release	Annual
	Levels of comparability	Provincial Legacy LHIN Facility RCG
	Trending (what year are data available)	FY2017/18 to FY2021/22
Additional Information	Limitations	None
	References	None
	Comments/Interpretation	The indicator should be interpreted as measuring functional change over a high-intensity inpatient rehab episode of care. A larger number is better.
	Quintuple Aim Alignment	Population Health
	Improvement suggestions	None at this time

INDICATOR: Average admission FIM™ scores by RCG

Indicator Description	Indicator Name	Average admission FIM™ Score by Rehabilitation Client Group (RCG)
	Indicator Description	Mean admission FIM™ score by RCG for patients in an NRS reporting bed
	Relevance	Provides context on complexity of patients at admission
	Level of analysis	<ul style="list-style-type: none"> • Single admission/unique patient • Facility based analysis (i.e. the location of the facility is used to report regional performance)
Numerator	Calculation (define the numerator)	Mean admission FIM™ score
	Data Source(s)	IntelliHealth
	Exclusion/Inclusion Criteria	N/A
Denominator	Calculation (define the denominator)	All patients >=18 years admitted into inpatient rehab
	Data Source(s)	IntelliHealth
	Exclusion/Inclusion Criteria	Include: <ul style="list-style-type: none"> • Patients admitted to an NRS reporting bed ≥ 18 years • Admitted into inpatient rehab during the fiscal year • Valid OHIP number Exclude: <ul style="list-style-type: none"> • Hospital transfers within a facility or between facilities within 24 hours • Missing discharge date • Missing Admission FIM™ score • Missing discharge FIM™ score
Geography & Timing	Timing/frequency of release	Annual
	Levels of comparability	Provincial Legacy LHIN Facility RCG
	Trending (what year are data available)	Annual
Additional Information	Limitations	None
	References	FY2013/14 to FY2017/18
	Comments/Interpretation	This indicator should be interpreted as the functional level as measured by the FIM™ tool of patients at admission. A higher score denotes the more independent a patient is at completing tasks.
	Quintuple Aim Alignment	Population Health
	Improvement suggestions	None at this time

INDICATOR: Average active rehab LOS efficiency

Indicator Description	Indicator Name	Average active rehabilitation LOS efficiency
	Indicator Description	This indicator measures the average change in Total Function Score per day of client participation in a NRS inpatient rehabilitation program
	Relevance	Effective
	Level of analysis	<ul style="list-style-type: none"> • Single admission/unique patient • Facility based analysis (i.e. the location of the facility is used to report regional performance)
	Data Source(s)	Canadian Institute for Health Information National Rehabilitation Reporting System
Numerator	Calculation (define the numerator)	Mean LOS efficiency (FIM™ change (discharge total FIM™ – total admission FIM™) /total LOS)
	Exclusion/Inclusion Criteria	Excludes clients with incomplete admission and discharge Function Scores
Denominator	Calculation (define the denominator)	All patients admitted to inpatient rehab
	Exclusion/Inclusion Criteria	Include: <ul style="list-style-type: none"> • All admissions to inpatient rehab (NRS reporting bed) • Discharged alive • ≥18 years • Admitted into inpatient rehab by fiscal year • Valid OHIP number Exclude: <ul style="list-style-type: none"> • Hospital transfers within a facility or between facilities within 24 hours • Missing discharge date • Missing Admission FIM™ score • Missing discharge FIM™ score
Geography & Timing	Timing/frequency of release	Annual
	Levels of comparability	Provincial Legacy LHIN Facility RPG
	Trending (what year are data available)	FY2017/18 to FY2021/22
Additional Information	Limitations	
	References	FIM™ efficiency is the change in total FIM™ score divided by total length of stay; it provides information on the average amount of functional recovery per day of inpatient high-intensity rehab.

	Comments/Interpretation	This indicator should be interpreted as the average functional change per day of high-intensity inpatient rehab.
	Quintuple Aim Alignment	Value/Efficiency
	Improvement suggestions	None at this time

INDICATOR: Average Length of Stay in a Complex Continuing Care Bed (CCRS)

Indicator Description	Indicator Name	Average CCRS Length of Stay
Indicator Description	Indicator Description	This indicator measures the average length of stay for patients discharged from CCRS reporting bed in the reporting year
	Relevance	Effective
	Level of analysis	<ul style="list-style-type: none"> • Single admission/unique patient • Facility based analysis (i.e. the location of the facility is used to report regional performance)
	Data Source(s)	Canadian Institute for Health Information Continuing Care Reporting System
Numerator	Calculation (define the numerator)	Mean Length of Stay
Denominator	Exclusion/Inclusion Criteria	
	Calculation (define the denominator)	All patients discharged from a CCRS-reporting bed in the reporting year
Geography & Timing	Exclusion/Inclusion Criteria	Include: <ul style="list-style-type: none"> • All discharges • Discharged alive • ≥18 years • Valid OHIP number
	Timing/frequency of release	Annual
	Levels of comparability	Provincial Legacy LHIN Facility RUG category
Additional Information	Trending (what year are data available)	FY2017/18 to FY 2021/22
	Limitations	The data should be interpreted with caution as patients may appear in more than one RUG category within the same reporting period for data from 2017/18 to 2020/21. Data from 2021/22 forward represents only the RUG category the patient was in prior to discharge.
	References	
	Comments/Interpretation	This indicator should be interpreted as the average length of stay for patients in in a CCRS reporting bed.
	Quintuple Aim Alignment	Value/Efficiency
	Improvement suggestions	None at this time

INDICATOR: Inpatient admissions resulting from an ED visits for a fall among community-dwelling seniors

Indicator Description	Indicator Name	Inpatient admissions resulting from an ED visits for a fall among community-dwelling seniors: annual rate per 100,000 people aged 65 years and older (age standardized)
	Indicator Description	This indicator measures the annual rate of inpatient admissions due to a fall among seniors living in the community, expressed as the age standardized rate per 100,000 people
	Relevance	A measure of the effectiveness of fall prevention efforts across the province and the potential seriousness of these
	Level of analysis	<ul style="list-style-type: none"> • Unique patient • Population based analysis (i.e. the location of the patient’s residence is used to report regional performance)
	Numerator	Calculation (define the numerator) Total number of visits to the ED in the fiscal year where fall is indicated as either main or other problem, where: <ul style="list-style-type: none"> • “Fall” = ICD-10 code WW00-WW19 And where the discharge destination from the ED is to an acute inpatient facility
	Data Source(s)	CIHI Discharge Abstract Database and National Ambulatory Care Reporting System (NACRS), Canadian Institute for Health Information
	Exclusion/Inclusion Criteria	Include <ul style="list-style-type: none"> • All patients >=65 years • Valid OHIP number Exclusions <ul style="list-style-type: none"> • Scheduled ED visits, where indicator = “Y” or ED visit indicator = “0” (as of 2011–2012). • Visits from non-participating ED facilities • Transfers from type: home for the aged, interim long-term care, nursing home and temporary long term care home. Also exclude transfers from hospital: other hospitals, rehab hospitals, acute hosp with psych, acute hosp without psych, community psych hospital, chronic care treatment hospital, gen rehab hosp, misc psych hosp, ontario psych hosp, spec rehab hosp • Delete Encrypted_HN=7863803113
Denominator	Calculation (define the denominator) Total number of people in the region who are 65 years and older based on the calendar year / 100,000	

Geography & Timing		Adjustment (age standardization) This measure is age-standardized to legacy LHIN specific fiscal year population for the crude rate and the Statistics Canada 2011 Canadian population for the expected rate for seniors 65+ calculated in 5 year age increments: 65-69, 70-74, 75-79, 80-85, 85-89, 90+
	Data Source(s)	Statistics Canada Distributed by: Ontario Ministry of Health (MOH): IntelliHealth Ontario
	Exclusion/Inclusion Criteria	≥ 65 years old No other exclusions
	Timing/frequency of release	Annual
	Levels of comparability	Province Legacy LHIN Subregion By age cohort, 5 year increments, regrouped
	Trending (what year are data available)	CY2017 to CY2021
Additional Information	Limitations	Documentation of falls in NACRS-ED has been noted as generally unreliable/inconsistent across reporting organizations Does not include falls in the community that are not referred to the ED but are treated in the community Population predictions were used and not actual census data
	References	Integrated Provincial Falls Prevention Framework and Toolkit, July 2011
	Comments/Interpretation	This indicator should be interpreted as the rate of fall related admissions from the ED among those 65 years and older per 100,000 people 65 years and older. A lower number is better
	Quintuple Aim Alignment	Population Health
	Improvement suggestions	Consider alternate data sources to capture falls that are treated in the community and outside of ED as well as the methodology for recording falls in the ED

INDICATOR: ED visits for falls for community-dwelling seniors

Indicator Description	Indicator Name	ED visits for falls for community-dwelling seniors: annual rate per 100,000 people aged 65 years and older (age standardized)
	Indicator Description	This indicator measures the annual rate of visits for falls among seniors living in the community, expressed as the age standardized rate per 100,000 people
	Relevance	A measure of the effectiveness of fall prevention efforts across the province
	Level of analysis	<ul style="list-style-type: none"> • Unique patient • Population based analysis (i.e. the location of the patient's residence is used to report regional performance)
	Numerator	Calculation (define the numerator) Total number of visits to the ED in the fiscal year where fall is indicated as either main or other problem, where: <ul style="list-style-type: none"> • "Fall" = ICD-10 code WW00-WW19
	Data Source(s)	CIHI Discharge Abstract Database and National Ambulatory Care Reporting System (NACRS), Canadian Institute for Health Information
	Exclusion/Inclusion Criteria	Include <ul style="list-style-type: none"> • All patients >=65 years • Valid OHIP number Exclusions <ul style="list-style-type: none"> • Scheduled ED visits, where indicator = "Y" or ED visit indicator = "0" (as of 2011–2012). • Visits from non-participating ED facilities • Transfers from type: home for the aged, interim long term care, nursing home and temporary long term care home. Also exclude transfers from hospital: other hospitals, rehab hospitals, acute hosp with psych, acute hosp without psych, community psych hospital, chronic care treatment hospital, gen rehab hosp, misc psych hosp, ontario psych hosp, spec rehab hosp • Delete Encrypted_HN=7863803113
Denominator	Calculation (define the denominator) Total number of people in the region who are 65 years and older based on the calendar year / 100,000 Adjustment (age standardization) This measure is age-standardized to legacy LHIN specific fiscal year population for the crude rate and the Statistics Canada 2011 Canadian population for the expected rate	

Geography & Timing		for seniors 65+ calculated in 5 year age increments: 65-69, 70-74, 75-79, 80-85, 85-89, 90+
	Data Source(s)	Statistics Canada Distributed by: Ontario Ministry of Health (MOH): IntelliHealth Ontario
	Exclusion/Inclusion Criteria	≥ 65 years old No other exclusions
	Timing/frequency of release	Annual
	Levels of comparability	Province Legacy LHIN Subregion By age cohort, 5-year increments, regrouped
	Trending (what year are data available)	CY2017 to CY2021
Additional Information	Limitations	Documentation of falls in NACRS-ED has been noted as generally unreliable/inconsistent across reporting organizations Does not include falls in the community that are not referred to the ED but are treated in the community Population predictions were used and not actual census data
	References	Integrated Provincial Falls Prevention Framework and Toolkit, July 2011
	Comments/Interpretation	This indicator should be interpreted as the rate of total number of visits made to the ED for fall among those 65 years and older per 100,000 people 65 years and older. A lower number is better
	Quintuple Aim Alignment	Population Health
	Improvement suggestions	Consider alternate data sources to capture falls that are treated in the community and outside of ED as well as the methodology for recording falls in the ED

INDICATOR: Acute ALC Designations for rehab within 2 days

Indicator Description	Indicator Name	ALC designation rate within 2 days for acute care patients discharged to inpatient rehabilitative care
	Indicator Description	ALC designation rate within 2 days for acute care patients discharged to an inpatient rehabilitative care bed, expressed as a percentage.
Numerator	Relevance	A measure of effective referrals for appropriate resource use
	Level of analysis	<ul style="list-style-type: none"> • Single admission/unique patient • Facility based analysis (i.e. the location of the facility is used to report regional performance)
	Calculation (define the numerator)	<p>Rate of ALC designations per 100 discharges: numerator/denominator x 100</p> <p>Number of acute care discharges who were designated as ALC with discharge to an NRS or CCRS reporting bed or CVC within 2 days of admission to that acute care bed</p>
	Data Source(s)	Access to Care, Wait Time Information System
	Exclusion/Inclusion Criteria	<p>Include:</p> <ul style="list-style-type: none"> • All inpatient acute patients ≥18 years with a discharge destination indicated as either high intensity rehab (NRS-reporting bed), low intensity rehab (CCRS-reporting bed), or activation/restoration beds (CVC-reporting bed). • Discharged from acute care during the fiscal year • Valid HCN number (not null or 0 and must be 10 digits - all numeric) • ALC designation date within 2 days of admission <p>Exclude:</p> <ul style="list-style-type: none"> • Missing discharge destination determination
	Denominator	<p>Calculation (define the denominator)</p> <p>Number of acute care discharges Note: allocated to year patient was discharged</p>
	Data Source(s)	Access to Care, Wait Time Information System
	Exclusion/Inclusion Criteria	<p>Include:</p> <ul style="list-style-type: none"> • All patients ≥18 years designated ALC with a discharge destination indicated as a either a rehab bed (NRS-reporting bed), CCRS-reporting bed, or Convalescent Care bed • Discharged from acute care during the fiscal year • Valid HCN number (not null or 0 and must be 10 digits - all numeric) <p>Exclude:</p> <ul style="list-style-type: none"> • Missing discharge destination determination

Geography & Timing	Timing/frequency of release	Annual
	Levels of comparability	Province Legacy LHIN Facility Discharge Destination detail
Additional Information	Trending (what year are data available)	FY2017/18 to FY2021/22
	Limitations	<ul style="list-style-type: none"> • A waitlist entry/update and determination of a discharge destination do not indicate acceptance to that destination or approval by the receiving organization. • The reported data is reflective of the intended rehab discharge destination from acute care and may be modified by the rehab program upon admission.
	References	Alternative Level of Care (ALC) Reference Manual, version 2, January 2017
	Comments/ Interpretation	This indicator is a measure of the number of patients who are designated as ALC for rehab within 48 hours of their admission date to acute care as a proportion of all patients designated ALC. A lower number is better.
	Quintuple Aim Alignment	Value/Efficiency
	Improvement suggestions	None at this time

INDICATOR: Proportion of patients admitted to inpatient rehabilitative care within each RCG

Indicator Description	Indicator Name	Proportion of patients admitted to inpatient rehabilitative care within each RCG
	Indicator Description	Proportion of patients admitted to a NRS reporting bed within each RCG expressed as a percentage
	Relevance	Provides context to other indicators
	Level of analysis	<ul style="list-style-type: none"> • Single admission/unique patient • Facility based analysis (i.e. the location of the facility is used to report regional performance)
Numerator	Data Source(s)	Canadian Institute for Health Information National Rehabilitation Reporting System
	Calculation (define the numerator)	Number of admissions into each of the RCG groupings (RCG-1 to RCG-17) $\text{Numerator/denominator} \times 100\%$
	Exclusion/Inclusion Criteria	N/A
Denominator	Calculation (define the denominator)	All admissions to an NRS reporting bed
	Exclusion/Inclusion Criteria	<ul style="list-style-type: none"> • ≥ 18 years • Admitted into inpatient rehabilitative care during the fiscal year • Valid OHIP number
Geography & Timing	Timing/frequency of release	Annual
	Levels of comparability	Province Legacy LHIN Facility
	Trending (what year are data available)	FY2017/18 to FY2021/22
Additional Information	Limitations	None
	References	None
	Comments/ Interpretation	None
	Quintuple Aim Alignment	Population Health
	Improvement suggestions	None at this time

INDICATOR: Proportion of patients admitted to complex continuing care within each Resource Utilization Group (RUG)

Indicator Description	Indicator Name	Proportion of patients admitted to complex continuing care within each RUG
	Indicator Description	Proportion of patients admitted to a CCRS reporting bed within each RUG expressed as a percentage
Numerator	Relevance	Provides context to other indicators
	Level of analysis	<ul style="list-style-type: none"> Facility based analysis (i.e. the location of the facility is used to report regional performance)
	Data Source(s)	Canadian Institute for Health Information National Rehabilitation Reporting System
	Calculation (define the numerator)	Number of admissions into each of the RCG groupings (RCG-1 to RCG-17) $\text{Numerator/denominator} \times 100\%$
	Exclusion/Inclusion Criteria	N/A
Denominator	Calculation (define the denominator)	All admissions to a CCRS reporting bed
	Exclusion/Inclusion Criteria	<ul style="list-style-type: none"> ≥18 years Admitted into inpatient rehabilitative care during the fiscal year Valid OHIP number
Geography & Timing	Timing/frequency of release	Annual
	Levels of comparability	Province Legacy LHIN Facility
	Trending (what year are data available)	FY2017/18 to FY2021/22
Additional Information	Limitations	The data should be interpreted with caution as patients may appear in more than one RUG category within the same reporting period for data from 2017/18 to 2020/21. Data from 2021/22 forward represents only the RUG category the patient was in prior to discharge.
	References	None
	Comments/ Interpretation	None
	Quintuple Aim Alignment	Population Health
	Improvement suggestions	None at this time

APPENDIX

APPENDIX A—GLOSSARY OF TERMS

Alternative Level of Care (ALC)	When a patient is occupying a bed in a hospital and does not require the intensity of resources/services provided in this care setting (Acute, Complex Continuing Care [CCC], Mental Health or Rehabilitation), the patient must be designated ALC at that time by the physician or her/his delegate. The ALC wait period starts at the time of designation and ends at the time of discharge/transfer to a discharge destination (or when the patient’s needs or condition changes and the designation of ALC no longer applies). ⁱⁱ
Acute Care	<p>Acute care beds are categorized as follows:</p> <p>Non-surgical: A designated bed providing care to patients who are receiving acute medical care but who are not waiting for or have not had surgical procedures.</p> <p>Surgical: A designated bed providing care to patients who are waiting for or have already undergone surgical procedures.</p> <p>Intensive / Critical Care: A designated bed providing care to patients with acute or potentially life -threatening conditions requiring advanced medical care and support.ⁱⁱⁱ</p>
ALC Discharge Destination	The location determined by the physician or delegate in collaboration with an interprofessional team (when available), as to where a patient is to be discharged or transferred. ALC Discharge Destination is composed of two elements: Discharge Destination Type & Discharge Destination Detail. ^{iv}
ALC Discharge Destination Detail	Program specific detail associated with the facility type or service required by the patient at the point of discharge or transfer. ^v
ALC Discharge Destination Determination Date	The date when the decision is made by the physician or delegate in collaboration with an interprofessional team (when available), as to where a patient is to be discharged or transferred. ^{vi}
ALC Designation Date	The date when a physician or delegate determines that a patient is occupying a bed in a hospital and does not require the intensity of resources/services provided in this care setting. ^{vii}
ALC Volumes	ALC volumes refer to the number of ALC cases (i.e. patients designated ALC) that meet a select criterion. They may be presented/reported as a number or a percentage/proportion of cases. ^{viii}

ALC Rate	The proportion of inpatient days in Acute and Post-Acute care settings that are spent designated ALC in a specific period of time. ^{ix}
Open ALC Cases	Patients who have been designated/re-designated ALC and are still open (i.e., still waiting) as of a specified date (e.g., end of a reporting period). ^x
Closed ALC Cases	<p>Patients who have been <u>discharged</u> or <u>discontinued</u> within a specified period of time (inclusive of start and end dates) (<i>definition adapted from the ALC Volume definition of closed cases</i>)</p> <p>Discharged: Patients who have been designated/re-designated ALC and were discharged to an ALC Discharge Destination within a specified period of time (e.g., within reporting month).</p> <p>Discontinued: Patients who have been designated/re-designated ALC and have had their ALC designation discontinued within a specified period of time (e.g., within reporting month). ALC cases may be discontinued due to one of the following reasons: change in destination invalidates ALC designation, change in medical status, data entry error, death, discharge against medical advice, transfer to acute care, unplanned repatriation. Note: only ALC cases discontinued due to change in medical status may be re-designated ALC.^{xi}</p>
Bedded levels of Rehabilitative Care	Bedded levels of rehabilitative care refer to hospital-based designated inpatient rehab beds and complex continuing care beds as well as convalescent care/restorative care beds within LTCH (Rehabilitative Care Alliance, Definitions Framework for Bedded Levels of Rehabilitative Care) ^{xii}
The Canadian Institute for Health Information (CIHI)	The Canadian Institute for Health Information (CIHI) is an independent, not-for-profit organization that provides essential information on Canada's health systems and the health of Canadians.
Continuing Care	Hospital-based continuing care serves individuals who may not be ready for discharge from hospital but who no longer need acute care services. Also known as extended care, chronic care or complex continuing care, it provides ongoing professional services to a diverse population with complex health needs. Facilities may be free-standing or co-located with acute and/or rehabilitation services within one hospital. ^{xiii}
Continuing Care Reporting System (CCRS)	The Continuing Care Reporting System (CCRS), launched in 2003–2004, contains demographic, clinical, functional and resource utilization information on individuals receiving continuing care services in hospitals or long-term care homes in Canada. ^{xiv}

Client Health & Related Information System (CHRIS)	<p>CHRIS (Client Health and Related Information System) supports the delivery of care at home and in the community for 670,000 patients in Ontario. Patients get the right care at the right time and place because of features in CHRIS.</p> <ul style="list-style-type: none"> • The home and community care patient health record and secure Document Management System • Clinical assessment and decision-support • Includes integration of the interRAI Home Care assessment instrument • Care planning and coordination • Includes Coordinated Care Plans and the standardized Care Coordination Dashboard • Direct-to-provider ordering and oversight of home care services • Direct-to-vendor ordering and delivery of medical supplies and equipment • Patient referrals and placements across the continuum of care • Caseload and workforce management^{xv}
Complex Continuing Care (CCC)	<p>A designated bed providing specialized care to patients who are medically complex, require hospital stays, regular onsite physician care and assessment, and active management over extended periods of time.</p> <p>CCC – Low Intensity rehab (LTLTD) Specialized inpatient rehabilitation suitable for individuals in need of a slower-paced program over a longer period of time than is offered in other programs. The acronym is used to describe the data provided for the indicators from the WTIS.</p> <p>CCC – Non-Low Intensity (NonLTLTD) This category would include all patients in complex continuing care beds who are not in an LTLTD bed.^{xvi}</p>
Convalescent Care Bed (CVC)	<p>Provision of care to support the gradual recovery of health and strength after illness or surgery. Convalescent Care programs provide 24-hour care to people who require specific medical and therapeutic services in supportive environments for defined periods of time.^{xvii}</p>
Discharge Date	<p>The date when the decision is made by the physician or delegate in collaboration with an interprofessional team (when available), as to where a patient is to be discharged or transferred.^{xviii}</p>
Discharge Destination	<p>The location determined by the physician or delegate in collaboration with an interprofessional team (when available), as to where a patient is to be</p>

discharged or transferred. In the WTIS, the ALC Discharge Destination data element is composed of two elements:

1. ALC Discharge Destination Type: The facility type or service required by the patient at the point of discharge or transfer.
2. ALC Discharge Destination Detail: Program specific detail associated with the facility type or service required by the patient at the point of discharge or transfer.^{xix}
- 3.

FIM™

The functional assessment instrument included in the Uniform Data Set for Medical Rehabilitation (UDSMR). It is composed of 18 items (13 motor items and 5 cognitive items) that are rated on a 7-level scale representing gradations from independent (7) to dependent (1) function. The FIM™ instrument is a measure of disability and looks at the caregiver burden associated with the level of disability.

Admission FIM™ instrument Assessment — The baseline functional assessment that is done using the FIM™ instrument at the time of admission to the rehabilitation program. The FIM™ instrument should be administered within 72 hours of admission.

Discharge FIM™ instrument Assessment — The assessment of the client's functional ability using the FIM™ instrument at discharge. The FIM™ instrument should be administered within 72 hours before discharge from the rehabilitation program.^{xx}

Ontario Health: Health Shared Services

Health Shared Services (HSS) is an agency of the Government of Ontario that supports Ontario's 14 legacy Local Health Integration Networks (LHINs) in meeting the health care needs of their local communities.

Through the continuous development and delivery of province-wide digital health platforms, quality improvement initiatives, and other business and IT supports, HSSO uses leading-edge technology and best practices to enable health system integration and better patient care.^{xxi}

IntelliHealth Ontario

IntelliHealth is a knowledge repository that contains clinical and administrative data collected from various sectors of the Ontario healthcare system. IntelliHealth enables users to create queries and run reports through easy web-based access to high quality, well organized, integrated data.^{xxii}

Long Term Care (LTC) Bed

A designated bed providing care to meet both the medical and nonmedical needs of people with chronic illnesses or disabilities who require care that is not available in the community^{xxiii}

LOS efficiency	The change in Total Function Score (see Total Function Score) per day of client participation in the rehabilitation program. Calculated as change in Total Function Score from admission to discharge divided by length of stay (see Length of Stay). ^{xxiv}
National Ambulatory Care Reporting System (NACRS)	<p>The National Ambulatory Care Reporting System (NACRS) contains data for all hospital-based and community-based ambulatory care:</p> <ul style="list-style-type: none"> • Day surgery • Outpatient and community-based clinics • Emergency departments
National Rehabilitation Reporting System (NRS)	A primarily voluntary national health information system for adult inpatient rehabilitation services. The province of Ontario has mandated its use for all designated rehabilitation beds in that province. The NRS contains client data collected from participating adult inpatient rehabilitation facilities and programs across Canada. The NRS data elements contain information related to socio-demographic information, administrative data, health characteristics, activities and participation and therapeutic interventions. These elements are used to estimate a variety of indicators including wait times and client outcomes. ^{xxv}
Cardiac	Specialized inpatient rehabilitation program for patients with cardiac issues designed to maximize their overall function through interprofessional clinical expertise. <i>(NRS-Reporting beds, WTIS)</i> ^{xxvi}
Geriatric	Specialized inpatient rehabilitation program for geriatric patients (age as defined by the specific program) designed to maximize their overall function through interprofessional clinical expertise. <i>(NRS-Reporting beds, WTIS)</i> ^{xxvii}
Low Intensity (LTLD)	Specialized inpatient rehabilitation suitable for individuals in need of slower-paced programs over longer periods of time than are offered in other programs. LTLD is often used interchangeably with “low intensity rehab” as this terminology is used for the data from the WTIS. ^{xxviii}
MSK	Specialized inpatient rehabilitation program for patients with musculoskeletal issues, designed to maximize their overall function through interprofessional clinical expertise. This may include, but is not limited to, arthritis, osteoporosis, and bone cancer. <i>(NRS-Reporting beds, WTIS)</i> ^{xxix}
Neuro	Specialized inpatient rehabilitation program for patients with neurologically related impairments, designed to maximize their overall function through interprofessional clinical expertise. This may include, but is not limited to, acquired brain injury (ABI), stroke, spinal cord injury and generalized

	neurological rehabilitation (e.g., degenerative neurological conditions such as Parkinson’s and Multiple Sclerosis). <i>(NRS-Reporting beds, WTIS)</i> ^{xxx}
Other Rehabilitation	Non-specialized inpatient rehabilitation program for patients not captured in the above categories, designed to maximize their overall function through interprofessional clinical expertise. <i>(NRS-Reporting beds, WTIS)</i> ^{xxxi}
Patient Days	The number of days that a client is present in an inpatient rehabilitation bed or organization in a given time period. Calculated for both open and closed episodes of care. ^{xxxii}
Rehabilitation Client Group (RCG)	Within the NRS, a client is categorized into 1 of 17 health condition groups known as Rehabilitation Client Groups (RCGs). The RCG selected for a particular client is based on the condition that best describes the primary reason for his or her admission to the inpatient rehabilitation unit or organization, such as a stroke or limb amputation. ^{xxxiii}
Rehabilitation Group (RG)	A type of categorization representing the highest level of diagnostic classification for clinically similar patients and used in the RPG case mix grouping methodology for the NRS. The RPG methodology was developed by Ontario’s Joint Policy and Planning Committee using data from the NRS and other sources for Ontario facilities. Assignment to any of the 21 RGs is based on the Rehabilitation Client Group (RCG) code selected for each NRS record. Each patient is assigned to an RG, based on their RCG, which is combined with other variables to assign each patient to an RPG. ^{xxxiv}
Rehabilitation Patient Group (RPG)	A sub-classification of Rehabilitation Groups (RGs) in inpatient rehabilitation case mix grouping methodology developed by Ontario’s Joint Policy and Planning Committee using NRS data for Ontario facilities. Patients are assigned to 1 of the 83 specific RPGs based on a combination of RG, Admission Motor Function Score and/or Admission Cognitive Function Score (derived from data collected using the FIM™ instrument) and/or age. Each RPG is associated with a typical cost weight, which is intended to be updated annually. ^{xxxv}
RUG-III Categories ^{xxxvi}	<p>Special Rehabilitation</p> <p>All special rehabilitation will have 150 or more minutes of therapy AND 1 or more therapies on 5 or more days OR 45 or more minutes of therapy AND 1 or more therapies on 3 or more days AND 2 or more nursing rehab techniques on 6 or 7 of last 7 days. Amount of therapy time ranges from 45 minutes or more (low) to 720 minutes or more (ultra-high)</p> <ul style="list-style-type: none"> Special Rehabilitation – Ultra High Special Rehabilitation – Very High Special Rehabilitation – High Special Rehabilitation – Medium

Special Rehabilitation – Low

Extensive Services - High ADL Impairment score (7 to 18) AND tracheostomy care OR ventilator/respirator OR antibiotic-resistant infection OR Clostridium difficile infection

Special Care - Tracheostomy care OR ventilator/respirator OR antibiotic-resistant infection OR Clostridium difficile infection OR High ADL Impairment score (7 to 18) AND any Special Care items

Clinically Complex - Tracheostomy care OR ventilator/respirator OR antibiotic-resistant infection OR Clostridium difficile infection OR Any Special Care items OR Any Clinically Complex items

Behaviour Problems - RUG_III_ADL score of 4 to 10 AND troubling behaviours

Impaired Cognition - RUG_III_ADL score of 4 to 10 AND high Cognitive Performance Scale (CPS) score of 3 to 6

Reduced Physical Functions - All assessments qualify

Total Function Score

The sum of the scores for all 18 elements on the FIM™ instrument, ranging from 18 to 126. A higher Total Function Score suggests a higher level of independent functioning in activities of daily living and communication.^{xxxvii}

WTIS (Wait Time Information System)¹

The WTIS is a web-based application that collects surgery, diagnostic imaging (CT/MRI), ALC, and Cardiac Care Network wait time data to inform our understanding of the patient journey. The system provides clinicians and other healthcare professionals with the tools they need to effectively assess patient waits in a standardized manner.

Access to Care (ATC), within CCO, is the service delivery agent for the Wait Time and ER/ALC Information Strategies on behalf of the Ministry of Health and Long-Term Care^{xxxviii}

REFERENCES

[i] Rachlis, B. and Hall, R., ED visits, repeat ED visits, and hospital admissions related to falls among seniors in Ontario . Applied Health Research Questions (AHRQ) #2020 0950 056 000. Toronto: Institute for Clinical Evaluative Sciences. 2019.

ⁱ Kiefe et al, *International J in Health Care* 1998;10(5):443-447

ⁱⁱ Cancer Care Ontario (2017). Alternate Level of Care (ALC) Reference Manual, Version 2, January 2017. Available from:https://archive.cancercare.on.ca/ext/databook/db1819/documents/Appendix/ALC_Reference_Manual_v2.pdf

ⁱⁱⁱ Cancer Care Ontario (2015). Wait Time Data Elements and System Labels, Version 6, April 10, 2015. Available from:https://www.accesstocare.on.ca/ext/databook/db1718/documents/Appendix/ALC_Wait_Time_Data_Elements_and_System_Labels_v6.pdf

^{iv} Cancer Care Ontario (2017)

^v Cancer Care Ontario (2015)

^{vi} Cancer Care Ontario (2015)

^{vii} Cancer Care Ontario (2015)

^{viii} Cancer Care Ontario (2017)

^{ix} Cancer Care Ontario (2017)

^x Cancer Care Ontario (2017)

^{xi} Cancer Care Ontario (2017)

^{xii} Rehabilitative Care Alliance (2014). Definitions Framework for Bedded Levels of Rehabilitative Care. Available from:http://rehabcarealliance.ca/uploads/File/Toolbox/Definitions/Definitions_Framework_for_Bedded_Levels_of_Rehabilitative_Care_FINAL_Dec_2014_.pdf

^{xiii} Canadian Institute for Health Information (CIHI) at: www.cihi.ca

^{xiv} *Canadian Institute for Health Information (CIHI) at: www.cihi.ca*

^{xv} Health Shared Services Ontario (HSSO). Available at: <http://hssontario.ca/News/Pages/Meet-CHRIS.aspx>

^{xvi} Cancer Care Ontario (2015)

^{xvii} Cancer Care Ontario (2015)

^{xviii} Cancer Care Ontario (2017)

^{xix} Cancer Care Ontario (2017)

^{xx} Canadian Institute for Health Information (CIHI). Available at: www.cihi.ca

^{xxi} Health Shared Services Ontario (HSSO). Available at: <http://hssontario.ca/News/Pages/Meet-CHRIS.aspx>

^{xxii} Canadian Institute for Health Information (CIHI). Available at: www.cihi.ca

^{xxiii} Cancer Care Ontario (2015)

^{xxiv} Canadian Institute for Health Information (2017). NRS eReports Report Interpretation Guidelines, March 2017. Available from: <https://www.cihi.ca/en/nrs-ereports-manual-2017-en-web.pdf>

^{xxv} Canadian Institute for Health Information (2017). NRS eReports Report Interpretation Guidelines, March 2017. Available from: <https://www.cihi.ca/en/nrs-ereports-manual-2017-en-web.pdf>

^{xxvi} Cancer Care Ontario (2015)

^{xxvii} Cancer Care Ontario (2015)

^{xxviii} Cancer Care Ontario (2015)

^{xxix} Cancer Care Ontario (2015)

^{xxx} Cancer Care Ontario (2015)

^{xxx}i Cancer Care Ontario (2015)

^{xxx}ii Canadian Institute for Health Information (2017). NRS eReports Report Interpretation Guidelines, March 2017.
Available from: <https://www.cihi.ca/en/nrs-ereports-manual-2017-en-web.pdf>

^{xxx}iii Canadian Institute for Health Information (2017)

^{xxx}iv Canadian Institute for Health Information (2017)

^{xxx}v Canadian Institute for Health Information (2017)

^{xxx}vi Canadian Institute for Health Information (2018). Rug-III Plus Decision support guide.

Available from: https://www.cihi.ca/sites/default/files/document/ruq-iiplus-decision-support-guide-draft-1.3-en_0.pdf

^{xxx}vii Canadian Institute for Health Information (2017)

^{xxx}viii Cancer Care Ontario (2017)



© 2023, Rehabilitative Care Alliance.

Permission granted to use without editing and with appropriate attribution.

For permission to adapt, please contact the RCA.

Rehabilitative Care Alliance

550 University Avenue, RM 3-102-11
Toronto, Ont.
M5G 2A2

E: info@rehabcarealliance.ca
P: 416-597-3057