

Quality Standards

Palliative Care

Measurement Guide

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**Health Quality
Ontario**

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1 How to Use the Measurement Guide

This document is meant to serve as a measurement guide to support the adoption of the quality standard *Palliative Care*. Care for adults living with a progressive, life-limiting illness is a critical issue, and there are significant gaps and variations in the quality of care that people receive in Ontario. Recognizing this, Health Quality Ontario released this quality standard to identify opportunities that have a high potential for quality improvement.

This guide is intended for use by those looking to adopt the quality standard *Palliative Care*, including health care professionals working in regional or local roles.

This guide has dedicated sections for each of the two types of measurement within the quality standard:

- **Local measurement:** what you can do to assess the quality of care that you provide locally
- **Provincial measurement:** how we can measure the success of the quality standard on a provincial level

Important Resources for Quality Standard Adoption

Health Quality Ontario has created resources to assist with the adoption of quality standards:

- A [Getting Started Guide](#) that outlines a process for using quality standards as a resource to deliver high-quality care. It includes links to templates, tools, and stories and advice from health care professionals, patients, and caregivers. You can use this guide to learn about evidence-based approaches to implementing changes to practice
- A [Quality Improvement Guide](#) to give health care teams and organizations in Ontario easy access to well-established quality improvement tools. The guide provides examples of how to adapt and apply these tools to our Ontario health care environments
- An online community called [Quorum](#) that is dedicated to working together to improve the quality of health care across Ontario. Quorum can support your quality improvement efforts

2 Quality Indicators in Quality Standards

Quality standards inform providers and patients about what high-quality health care looks like for aspects of care that have been deemed a priority for quality improvement in the province. They are intended to guide quality improvement, monitoring, and evaluation.

Measurability is a key principle in developing and describing the quality statements; each statement is accompanied by one or more indicators. This section describes the measurement principles behind the quality indicators, the process for developing these indicators, and the technical definitions of the indicators.

An effective quality statement must be measurable. Measurement is necessary to demonstrate if a quality statement has been properly implemented, and if it is improving care for patients. This is a key part of the [Plan-Do-Study-Act](#) improvement cycle. If measurement shows there has been no improvement, you need to consider a change or try something different.

2.1 Measurement Principles

Health Quality Ontario uses the process, structure, and outcome indicator framework developed by [Donabedian](#) in 1966 to develop indicators for quality standards. The three indicator types play essential and interrelated roles in measuring the quality of health care and the impact of introducing and using quality standards.

The indicators provided are merely suggestions. It is not expected that every provider, team, or organization will be able to measure all of them (or even want to measure all of them), but they can identify which indicators best capture areas of improvement for their care and what is easiest to measure given existing local data sources.

2.2 Process Indicators

Process indicators assess the activities involved in providing care. They measure the percentage of specified individuals, episodes, or encounters for which an activity (process) is performed. In most cases, the numerator should specify a time frame in which the action is to be performed, established through evidence or expert consensus. When a quality statement applies to a subset of individuals rather than the total population, the denominator should reflect the population of the appropriate subgroup, rather than the entire Ontario population. If exclusions are required or stratifications are suggested, they are reflected in the indicator specifications.

Process indicators are central to assessing whether or not the quality statement has been followed; nearly all quality statements are associated with one or more process indicators. In most cases, the numerator and denominator for process indicators can be derived from the language of the quality statement itself; additional parameters (such as a time frame) may also appear in the definitions section. In some cases, a proxy indicator is provided that indirectly measures the process. Proxy indicators are used only when the actual indicator cannot be measured using currently available data.

While most quality statements focus on a single concept and are linked with a single process indicator, some statements include two or more closely related concepts. In these cases, multiple process indicators can be considered to capture all aspects of the quality statement.

For example, a quality statement might suggest the need for a comprehensive assessment with several components, and each of those components might have a process indicator.

Examples of process indicators include the percentage of patients with hip fracture who receive surgery within 48 hours, or the percentage of patients with schizophrenia who are offered clozapine after first- and second-line antipsychotics have been ineffective. Please refer to the published [quality standards](#) for more examples.

2.3 Structural Indicators

Structural indicators assess the characteristics and resources that influence and enable delivery of care. These can include equipment; systems of care; availability of resources; and teams, programs, policies, protocols, licences, or certifications. Structural indicators assess whether factors that are in place are known help in achieving the quality statement.

Some quality statements have structural indicators associated with them. Structural indicators are binary or categorical and do not require the definition of a numerator and denominator. However, in some cases it could be useful to specify a denominator defining an organizational unit, such as a hospital, a primary care practice, or a local region. In many cases data for structural indicators are not readily available using existing administrative data, so local data collection might be required. This local data collection might require regional or provincial-level data-collection systems to be developed.

Structural indicators should be defined for a quality statement or for the quality standard as a whole when there is strong evidence that a particular resource, capacity, or characteristic is important for enabling the effective delivery of a process of care. It should be theoretically feasible for these structural elements to be implemented across Ontario, even if adoption is aspirational in some cases. In rare instances, a quality statement may have two or more associated structural indicators, if the quality standard advisory committee decides that multiple factors are crucial to the delivery of the quality statement.

Examples of structural indicators include the availability of a stroke unit, the existence of discharge planning protocols, or access to a specialized behavioural support team. Please refer to the published [quality standards](#) for more examples.

2.4 Outcome Indicators

Outcome indicators assess the end results of the care provided. They are crucial and are arguably the most meaningful measures to collect, but many health outcomes—such as mortality or unplanned hospital readmissions—are often the product of a variety of related factors and cannot be reliably attributed to a single process of care. For this reason, although relatively few quality statements are directly linked to an outcome indicator, a set of overall measures—including key outcome indicators—is defined for the quality standard as a whole, reflecting the combined effect of all of the quality statements in the standard. Similar to process indicators, outcome indicators should be specified using a defined denominator and a numerator that, in most cases, should include a clear time frame.

Examples of outcome indicators include mortality rates, improvement (or decline) in function, and patients' experience of care. Please refer to the published [quality standards](#) for more examples.

3 Local Measurement

As part of the quality standard *Palliative Care*, *specific* measures were identified for each of the statements to support measurement for quality improvement.

As an early step in your project, we suggest that your team complete an *initial assessment* of the relevant measures in the standard and come up with a draft measurement plan.

Here are some concrete next steps:

1. Review the list of identified measures (in the quality standard), and determine which measures you will use as part of your adoption planning, given your knowledge of current gaps in care
2. Determine the availability of data related to the measures you have chosen
3. Identify a way to collect local data related to your chosen measures
4. Develop a draft measurement plan

The earlier you complete the above steps, the more successful your quality improvement project is likely to be.

3.1 Local Data Collection

Local data collection refers to data collection at the health provider or team level for indicators that cannot be assessed using provincial administrative databases (such as databases held by the Institute for Clinical Evaluative Sciences or the Canadian Institute for Health Information). Examples include data from electronic medical records, clinical patient records, regional data collection systems, and locally administered patient surveys. Indicators that require local data collection may signal an opportunity for local measurement, data advocacy, or improvement.

Local data collection has many strengths: it is timely, can be tailored to quality improvement initiatives, and is modifiable on the basis of currently available data. However, caution is required when comparing indicators using local data collection between providers to ensure consistency in definitions, consistency in calculation, and validity across patient groups.

3.2 Measurement Principles for Local Data Collection

Three types of data can be used to construct measures in quality improvement: continuous, classification, and count data.

3.2.1 Continuous Data

Continuous data can take any numerical value in a range of possible values. These values can refer to a dimension, a physical attribute, or a calculated number. Examples include patient weight, number of calendar days, and temperature.

3.2.2 Classification Data

Classification (or categorical) data are recorded in two or more categories or classes. Examples include sex, race or ethnicity, and number of patients with depression versus number of patients without depression. In some cases, you might choose to convert continuous data into categories. For example, you could classify patient weight as underweight, normal weight, overweight, or obese.

Classification data are often presented as percentages. To calculate a percentage from classification data, you need a numerator and a denominator (a percentage is calculated by dividing the numerator by the denominator and multiplying by 100). The numerator includes the number of observations meeting the criteria (e.g., number of patients with depression), and the denominator includes the total number of observations measured (e.g., total number of patients in clinic). Note that the observations in the numerator must also be included in the denominator (source population).

Examples of measures that use classification data include percentage of patients with a family physician and percentage of patients who receive therapy.

3.2.3 Count Data

Count data often focus on attributes that are unusual or undesirable. Examples include number of falls in a long-term care home and number of medication errors.

Count data are often presented as a rate, such as the number of events per 100 patient-days or per 1,000 doses. The numerator of a rate counts the number of events/nonconformities, and the denominator counts the number of opportunities for an event. It is possible for the event to occur more than once per opportunity (e.g., a long-term care resident could fall more than once).

Rate of 30-day hospital readmission =

$$\frac{\text{No. of hospital readmissions within 30 days of discharge [numerator]}}{\text{No. of discharges from hospital [denominator]}}$$

3.2.4 Benefits of Continuous Data

It is common practice in health care to measure toward a target instead of reporting continuous measures in their original form. An example would be measuring the number of patients who saw their primary care physician within 7 days of hospital discharge instead of measuring the number of days between hospital discharge and an appointment with a primary care physician. Targets should be evidence-based or based on a high degree of consensus across clinicians.

When a choice exists, continuous data sometimes are more useful than count or classification data for learning about the impact of changes tested. Measures based on continuous data are more responsive and can capture smaller changes than measures based on count or classification data; therefore, it is easier and faster to see improvement with measures based on continuous data. This is especially true when the average value for the continuous measure is far from the target. Continuous data are also more sensitive to change. For example, while you might not increase the number of people who are seen within 7 days, you might reduce how long people wait.

3.3 Benchmarks and Targets

Benchmarks are markers of excellence to which organizations can aspire. Benchmarks should be evidence-based or based on a high degree of consensus across clinicians. At this time, Health Quality Ontario does not develop benchmarks for the indicators. Users of these standards have variable practices, resources, and patient populations, so one benchmark might not be practical for the entire province.

Targets are goals for care that are often developed in the context of the local care environment. Providers, teams, and organizations are encouraged to develop their own targets appropriate to their patient populations and their quality improvement work. Organizations that include a quality standard indicator in their quality improvement plans are asked to use a target that reflects improvement. Time frame targets, like the number of people seen within 7 days, are typically provided with process indicators intended to guide quality improvement.

In many cases, achieving 100% on an indicator will not be possible. This is why it is important to track these indicators over time, to compare results against those of colleagues, to track progress, and to aim for the successful implementation of the standard.

For guidance on setting benchmarks and targets at a local level, refer to:

- [Approaches to Setting Targets for Quality Improvement Plans](#)
- [Long-Term Care Benchmarking Resource Guide](#)

4 Provincial Measurement

In its quality standards, Health Quality Ontario strives to incorporate measurement that is standardized, reliable, and comparable across providers to assess the impact of the standards provincially. Where possible, indicators should be measurable using province-wide data sources. However, in many instances data are unavailable for indicator measurement. In these cases, the source is described as local data collection.

For more information on the data sources referenced in this standard, please see the **appendix**.

4.1 Accessing Provincially Measurable Data

Provincial platforms are available to create custom analyses to help you calculate results for identified measures of success. Examples of these platforms include IntelliHealth, eReports, and Query.

4.1.1 [IntelliHealth—Ministry of Health and Long Term Care](#)

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

4.1.2 [eReports—Canadian Institute for Health Information](#)

Quick Reports offer at-a-glance comparisons for the organizations you choose. The tool also provides some ways to manipulate the pre-formatted look and feel of the reports. Flexible or Organization Reports offer you many choices to compare your organization’s data with those of other organizations. With these customizable reports, you can view data by different attributes and for multiple organizations.

Both report types allow trending over time and provide a comparison of organizations with regions, provinces or territories, or the entire database.

4.1.3 [Query—Public Health Ontario](#)

“Query is a dynamic tool that allows public health professionals to instantly explore, manipulate, and analyze health data using pre-defined reports and variables.” Query tools are available for reportable infectious disease data (ID Query) and health care-associated infection data (HAI Query).

5 How Success Can Be Measured for This Quality Standard

This measurement guide accompanies Health Quality Ontario's quality standard *Palliative Care*. Early in the development of each quality standard, a few performance indicators are chosen to measure the success of the entire standard. These indicators guide the development of the quality standard so that every statement within the standard aids in achieving the standard's overall goals.

This measurement guide includes information on the definitions and technical details of the indicators listed below:

- Percentage of people who receive care in their last 12 months, 3 months, and 1 month of life:
 - Home care services (any home care and palliative-specific home care)
 - Health care provider home visits (currently only physician home visits are measurable)
 - Hospice care (locally measurable)
- Percentage of people who had 1 or more unplanned emergency department visits in their last 12 months, 3 months, and 1 month of life
- Percentage of deaths that occurred in:
 - Hospitals
 - In-patient care
 - Emergency department
 - Complex continuing care
 - Palliative care beds (locally measurable)
 - Long-term care homes
 - The community (may include home, hospice residence, retirement home, or assisted-living home)
- Percentage of people who receive palliative care (or their caregivers) who rated overall care received in their last 12 months, 3 months, and 1 month of life as excellent
 - Example of a question from the CaregiverVoice Survey: "Overall, and taking all services in all settings into account, how would you rate his/her care in the last 3 months of life?" (Response options: "Excellent, Very good, Fair, Good, Don't know")
 - Note: as of 2017, 25 hospice residences in Ontario have adopted the CaregiverVoice Survey, and about 11 of 14 local health integration networks have adopted this survey for patients as end-of-life home care clients

This guide includes data sources for indicators that can be consistently measured across providers, across the sectors of health care, and across the province.

Indicators are categorized as:

- Provincially measurable (the indicator is well defined and validated) *or*
 - Locally measurable (the indicator is not well defined, and data sources do not currently exist to measure it consistently across providers and at the system level)

For more information on statement-specific indicators, please refer to the quality standard.

5.1 Quality Standard Scope

This quality standard addresses care for adults with a progressive, life-limiting illness, and for their family and caregivers. It focuses on palliative care in all health settings, for all health disciplines, and in all health sectors. It includes information about general palliative care that applies to all health conditions. Palliative care can benefit individuals and their caregivers as early as at the time of diagnosis of a progressive, life-limiting illness through the end of life and bereavement.

This quality standard includes 13 quality statements. They address areas identified by Health Quality Ontario's Palliative Care Quality Standard Advisory Committee as having high potential for improving the quality of care in Ontario for people with a progressive, life-limiting illness.

Condition-specific palliative care may be addressed in other quality standards. Although this quality standard includes information that could apply to infants, children, and youth, a separate quality standard is being considered for these populations.

5.2 Cohort Identification

The cohort for the quality standard *Palliative Care* is people with a progressive, life-limiting illness, and their family and caregivers. However, because of a lack of data sources and existing methodology to identify this population, the indicators selected to measure overall success are calculated among people who died in a selected reporting period (e.g., a fiscal year). Some indicators are measured in bereaved caregivers (see details in technical templates).

The indicators that accompany statements to guide the measurement of quality improvement are focused mostly in people identified with palliative care needs or those who receive palliative care services. The cohort of "people identified with palliative care needs" is currently not measurable at the provincial level; local data collection may be required.

5.3 How Success Can Be Measured Provincially

The Palliative Care Quality Standard Advisory Committee identified a small number of overarching goals **for this quality standard**. These have been mapped to indicators that may be used to assess quality of care provincially. The following indicators are currently measurable in Ontario's health care system:

- Percentage of people who receive care in their last 12 months, 3 months, and 1 month of life:
 - Home care services (any home care and palliative-specific home care)
 - Health care provider home visits (currently only physician home visits are measurable)
 - Hospice care (locally measurable)
- Percentage of people who had one or more unplanned emergency department visits in their last 12 months, 3 months, and 1 month of life
- Percentage of deaths that occurred in:
 - Hospitals
 - In-patient care
 - Emergency department
 - Complex continuing care
 - Palliative care beds (locally measurable)
 - Long-term care homes
 - The community (may include home, hospice residence, retirement home, or assisted-living home)
- Percentage of people who receive palliative care (or their caregivers) who rated overall care received in their last 12 months, 3 months, and 1 month of life as excellent
 - Example of a question from the CaregiverVoice Survey: "Overall, and taking all services in all settings into account, how would you rate his/her care in the last 3 months of life?" (Response options: "Excellent, Very good, Fair, Good, Don't know")
 - Note: as of 2017, 25 hospice residences in Ontario have adopted the CaregiverVoice Survey, and about 11 of 14 local health integration networks have adopted this survey for patients as end-of-life home care clients

Methodologic details are described in the tables below.

Table 1: Percentage of people who receive care in their last 30 days of life: home care services (any home care and palliative-specific home care); health care provider home visits (currently only physician home visits are measurable); hospice care

GENERAL DESCRIPTION	Indicator description	<p>This indicator measures the percentage of people who lived in the community during their last 30 days of life and who received at least one:</p> <ul style="list-style-type: none"> • Home care (any home care and palliative-specific home care) • Physician home visits • Hospice care^a <p>Directionality: A higher percentage is better</p>
	Measurability	Measurable at the provincial level
	Dimensions of quality	Patient-centred
DEFINITION & SOURCE INFORMATION	Calculation: General	<p>Denominator Number of people who died and were in the community in the last 30 days of their life</p> <p><i>Exclusions</i> People who spent their last month in hospital, long-term care/complex continuing care, or an inpatient rehabilitation facility</p> <p>Numerator Number of people in the denominator who in their last 30 days of life received:</p> <p>1. Any home care (had any of the codes listed below)</p> <p><i>Inclusions</i> Home Care Database: services variable SERVICE = [1–13, 16–18] SERVICE = Type of service provided (home care service)</p> <ul style="list-style-type: none"> 1 = Nursing—Visit 2 = Nursing—Shift (Hour) 3 = Respiratory Services 4 = Nutrition/Dietetic 5 = Physiotherapy 6 = Occupational Therapy 7 = Speech Language Therapy 8 = Social Work 9 = Psychology 10 = Case Management 11 = Personal Services (Hour) 12 = Homemaking Services (Hour) 13 = Combined Personal Services and Homemaking Services (Hour) 14 = Placement Services 15 = Respite 16 = Mental Health and Addiction Nursing Visit 17 = Nurse Practitioner Palliative Visit 18 = Rapid Response Nursing Visit 99 = Other

		<p>2. Palliative home care (any of the codes below) HCD:</p> <ul style="list-style-type: none"> • SRC_admission = 95: Service recipient code (i.e., classification) of end of life on admission • Service_RPC = 95: Service care goal of end of life; patient provided service under end of life designation • Residence_type = 2000: Staying in hospice or palliative care unit while receiving service • SRC_discharge = 95: Service recipient code of end of life on discharge <p>3. Physician home visit (any of the codes below)</p> <ul style="list-style-type: none"> • G511: Telephone services to patient receiving palliative care at home (max 2/week) • B966: Travel premium for palliative care (billed with B998/B996) • B998: Home visit for palliative care between 07:00 and 24:00 (Sat, Sun, and holidays) • B997: Home visit for palliative care between 24:00 and 07:00 • A901: General practitioner/family physician house call • B990: Special visit to patient's home (weekday/daytime) • B992: Special visit to patient's home (weekday/daytime), with sacrifice to office hours • B994: Special visit to patient's home, non-elective, evenings • B996: Special visit to patient's home, night time, first patient of the night <p>Method Numerator divided by the denominator × 100</p> <p>Data sources Continuing Care Reporting System, Discharge Abstract Database, Home Care Database, National Ambulatory Care Reporting System, National Rehabilitation Reporting System, Ontario Health Insurance Plan Claims History Database, Registered Persons Database</p>
ADDITIONAL INFORMATION	Limitations	<ul style="list-style-type: none"> • The data do not show the details and quality of home care, health care needs, preferences, or appropriateness of care • The data show the number of people who had at least one home care service, which may not be sufficient • There is no evidence of the appropriate amount or mix of home care services to which the data could be compared • The data do not show whether people had any other home support or a caregiver • People receiving hospice care cannot be identified • Home visits by non-physician providers are not captured
	Comments	<ul style="list-style-type: none"> • This indicator aligns with provincial measurement initiatives • This indicator can be reported for different time frames (e.g., a person's last 12 months, 3 months)

^aPeople receiving hospice care can't be identified.

Table 2: Percentage of people who had one or more unplanned emergency department visits in their last 30 days of life

GENERAL DESCRIPTION	Indicator description	This indicator measures the percentage of people, among those who died, who had one or more unplanned emergency department visits in their last 30 days of life
	Measurability	Measurable at the provincial level
	Dimensions of quality	Efficient
DEFINITION & SOURCE INFORMATION	Calculation: General	<p>Denominator Number of people in Ontario who died in each year of interest</p> <p><i>Exclusions:</i> People who spent their last month in hospital, complex continuing care, or an inpatient rehabilitation facility</p> <p>Numerator Number of people who had at least one unplanned emergency department visit in their last 30 days of life</p> <p><i>Inclusions</i> People who had an unplanned emergency department visit in NACRS Unscheduled/unplanned emergency department visits are identified by: NACRS variables VISITTYPE = [1,2,4] or SCHEDULEDVISIT = N</p> <p><i>Exclusions</i> Planned emergency department visits</p> <p>Method Numerator divided by the denominator × 100</p> <p>Data sources Continuing Care Reporting System, Discharge Abstract Database, National Ambulatory Care Reporting System, Ontario Health Insurance Plan Claims History Database, Registered Persons Database</p>
ADDITIONAL INFORMATION	Limitations	<ul style="list-style-type: none"> • This indicator does not provide information about clinical details, health care needs, preferences, or appropriateness of the unplanned emergency visits • This information is difficult to interpret, because there are no benchmarks or targets for the acceptable rate of emergency department visits in this patient population
	Comments	<ul style="list-style-type: none"> • This indicator aligns with provincial measurement initiatives • This indicator can be reported for different time frames (e.g., a person's last 12 months, 3 months)

Abbreviations: NACRS, National Ambulatory Care Reporting System.

Table 3: Percentage of people who died in hospital, long-term care homes, and the community

GENERAL DESCRIPTION	Indicator description	<p>This indicator measures the proportion of deaths in:</p> <ul style="list-style-type: none"> • Hospital (inpatient, emergency department, complex continuing care, and inpatient rehabilitation facilities) • Long-term care • Community (may include home, residential hospices, retirement homes, and assisted living homes)
	Measurability	Measurable at the provincial level
	Dimensions of quality	Efficient
DEFINITION & SOURCE INFORMATION	Calculation: General	<p>Denominator Number of people in Ontario who died in each year of interest</p> <p>Numerator Number of people who died in each of the following settings:</p> <ul style="list-style-type: none"> • Hospital (in-patient care, emergency department, complex continuing care, or inpatient rehabilitation facility) • Long-term care homes • The community (home, hospice residence, retirement home, or assisted-living home) <p><i>Inclusions</i> Hospital deaths are identified by the following codes:</p> <ul style="list-style-type: none"> • In-patient: DAD SDS dischdisp = 07 • Emergency department: NACRS visit disposition = 10 or 11 • Complex continuing care: CCRS discharge_to_facility_type = 11 • Inpatient Rehabilitation facility: NRS dreason=8 LTC • Long-term care homes: CCRS-LTC discharge_to_facility_type = 11 • Community: all other deaths not included in any of the above categories <p>Method Numerator divided by the denominator × 100</p> <p>Data sources Continuing Care Reporting System, Discharge Abstract Database, Home Care Database, National Ambulatory Care Reporting System, National Rehabilitation Reporting System, Ontario Health Insurance Plan Claims History Database, Registered Persons Database</p>

ADDITIONAL INFORMATION	Limitations	<ul style="list-style-type: none"> • The data show the location of the death, but not where care was received before death (e.g., death may have occurred in the emergency department, but overall care may have been provided in a long-term care home) • No information on the preferred place of death is provided • Death in palliative care beds are included in overall hospital deaths, but cannot be identified
	Comments	<ul style="list-style-type: none"> • If there were multiple death records with different death dates in each of the above administrative databases, the last (i.e., the most recent) death record for each unique health card number was selected. If one health card number appeared in multiple care settings, the following hierarchy based on care intensity was used to assign death setting: acute care, emergency department, complex continuing care, rehabilitation facilities, long-term care homes. There should be only one record per health card number

Abbreviations: CCRS, Continuing Care Reporting System; DAD, Discharge Abstract Database; LTC, long-term care; NACRS, National Ambulatory Care Reporting System; NRS, National Rehabilitation Reporting System.

Table 4: Percentage of caregivers* who rated overall care of the patient they cared for in their last 3 months of life as excellent

GENERAL DESCRIPTION	Indicator description	This indicator measures the percentage of caregivers who rated the overall care of the patient that they cared for in their last 3 months of life as excellent Directionality: a higher percentage is better
	Measurability	Measurable at the provincial level
	Dimensions of quality	Patient-centred
DEFINITION & SOURCE INFORMATION	Calculation: General	<p>Denominator All CaregiverVoice Survey respondents who responded to the survey question below.</p> <p><i>Exclusions</i> “Don’t know” responses</p> <p>Numerator Survey respondents who answered “excellent” to the following question: Overall, and taking all services in all settings into account, how would you rate his/her care in the last 3 months of life?</p> <ul style="list-style-type: none"> • Excellent • Very good • Good • Fair • Poor • Don’t know <p>Method Numerator divided by the denominator × 100</p> <p>Data source CaregiverVoice Survey</p>
ADDITIONAL INFORMATION	Limitations	<ul style="list-style-type: none"> • The CaregiverVoice Survey reflects the perceptions of only caregivers of people who died in hospices and who received end-of-life home care in 11 of the 14 local health integration networks in Ontario • The panel recommended collecting data from patients and caregivers, but this indicator relies on data from bereaved caregivers; no data from the people who received palliative care are available
	Comment	<ul style="list-style-type: none"> • Note: as of 2017, 25 hospice residences in Ontario have adopted the CaregiverVoice Survey, and about 11 of 14 local health integration networks have adopted this survey for patients as end-of-life home care clients

*The panel recommended that the indicator measure perception among those receiving palliative care and their caregivers, but the CaregiverVoice Survey reflects the perceptions of caregivers only.

6 Resources and Questions

6.1 Resources

Several resources are available for more information:

- The **quality standard** provides information on the background, definitions of terminology, numerators and denominators for all statement-specific indicators
- The **Getting Started Guide** includes quality improvement tools and resources for health care professionals, including an action plan template
- The **infobrief** provides data on why a particular quality standard has been created and the data behind it
- The **data tables** provide data that can be used to examine variations in indicator results across the province

6.2 Questions?

Please contact qualitystandards@hgontario.ca. We would be happy to provide advice on measuring quality standard indicators, or put you in touch with other providers who have implemented the standards and might have faced similar questions.

Health Quality Ontario offers an online community dedicated to improving the quality of health care across Ontario together called [Quorum](#). Quorum can support your quality improvement work by allowing you to:

- Find and connect with others working to improve health care quality
- Identify opportunities to collaborate
- Stay informed with the latest quality improvement news
- Give and receive support from the community
- Share what works and what doesn't
- See details of completed quality improvement projects
- Learn about training opportunities
- Join a community of practice

7 Appendix: Data Sources Referenced in This Quality Standard

Within this quality standard, there are several data sources used for provincial measurement. The data source(s) for each indicator are listed within the individual indicator specifications. More details on the specific data sources that Health Quality Ontario used to produce the indicators are noted below.

Continuing Care Reporting System—Canadian Institute for Health Information

The Canadian Institute for Health Information developed the Continuing Care Reporting System to enhance the collection of standardized information on facility-based long-term care and complex continuing care, for national comparative reporting. This reporting system contains demographic, administrative, clinical, and resource use information on individuals receiving continuing care services in hospitals or in long-term care homes in Canada. Participating organizations also provide information on facility characteristics to support comparative reporting.

The clinical data are collected using an internationally accepted standard, the Resident Assessment Instrument Minimum Data Set Version 2.0 (RAI-MDS 2.0). Each resident in a long-term care home is assessed at admission and then every 3 months, or whenever they experience a significant change in health status. The assessment includes patient-level measures of function, mental and physical health, social support, and service use. It was modified by the institute with permission, for Canadian use. All long-term care homes in Ontario have submitted data to the institute on a quarterly basis since 2009.

Discharge Abstract Database—Canadian Institute for Health Information

The Discharge Abstract Database by the Canadian Institute for Health Information contains information abstracted from hospital records that capture administrative, clinical, and patient demographic data on all hospital in-patient separations, including discharges, deaths, sign-outs, and transfers. The institute receives Ontario data directly from participating facilities, from their respective regional health authorities, or from the Ministry of Health and Long-Term Care. The database includes patient-level data for acute care facilities in Ontario. Data are collected, maintained, and validated by the institute.

The main data elements of this database are patient identifiers (e.g., name, health care number), patient demographics (e.g., age, sex, geographic location), clinical information (e.g., diagnoses, procedures), and administrative information.

Home Care Database—Ministry of Health and Long-Term Care

The Home Care Database is a clinical, patient-centred database that captures all home care services provided or coordinated by Ontario's community care access centres, including government-funded home and community services. The Home Care Database is managed by Health Shared Services Ontario. It includes patient, intake, assessment, and admission/discharge information. This information is used to determine the eligibility of patients and the care coordination, care planning, and services that align with their care needs. Clinical data are collected using standardized interRAI tools, including the Resident Assessment Instrument for Home Care (RAI-HC).

National Ambulatory Care Reporting System—Canadian Institute for Health Information

The National Ambulatory Care Reporting System by the Canadian Institute for Health Information contains data for all hospital- and community-based emergency and ambulatory care, including day surgeries, outpatient clinics, and emergency departments. Data are collected, maintained, and validated by the institute. The institute receives Ontario data directly from participating facilities, from their respective regional health authorities, or from the Ministry of Health and Long-Term Care. Data are collected, maintained, and validated by the institute.

Data elements of this reporting system include patient identifiers (e.g., name, health care number), patient demographics (e.g., age, sex, geographic location), clinical information (e.g., diagnoses, procedures), and administrative information.

National Rehabilitation Reporting System—Canadian Institute for Health Information

The National Rehabilitation Reporting System was developed by the Canadian Institute for Health Information in 2001 to support data collection by hospitals for inpatient rehabilitation clients who are mainly age 18 and older. The rehabilitation services are usually provided in specialized rehabilitation hospitals and in general hospitals within rehabilitation units, programs, or groups of rehabilitation beds. The database captures clients with a range of health conditions, including strokes, orthopedic conditions, and amputations.

Ontario Health Insurance Plan—Ministry of Health and Long-Term Care

The Ontario Health Insurance Plan (OHIP) claims database covers all reimbursement claims to the ministry made by fee-for-service physicians, community-based laboratories, and radiology facilities. The OHIP database at the Institute for Clinical Evaluative Sciences contains encrypted patient and physician identifiers, codes for services provided, dates of service, associated diagnoses, and fees paid. Services missing from OHIP data include some laboratory services, services received in provincial psychiatric hospitals, services provided by health service organizations and other alternative providers, diagnostic procedures performed on an in-patient basis, and laboratory services performed at hospitals (both in-patient and same day). Also excluded is remuneration to physicians through alternative funding plans; this could distort analyses because of their concentration in certain specialties or geographic areas.

Ontario Mental Health Reporting System—Canadian Institute for Health Information

The Ontario Mental Health Reporting System collects information about people admitted to designated adult mental health beds in Ontario. It includes information on admissions and discharges, as well as clinical information. Clinical data are collected using the Resident Assessment Instrument for Mental Health (RAI-MH), a standardized assessment instrument for in-patient mental health care. It includes information about mental and physical health, social support, and service use. Data are collected on clients from participating hospitals at admission, at discharge, and every 3 months for patients with extended stays. Data are available from October 1, 2005, onward. The number of active sites has varied between 65 and 74 since the start of the reporting system in 2005/2006. In its early years, 90% to 98% of active sites submitted at least some data every quarter. This rate has increased to 100% for all four quarters of 2014/2015. As of May 15, 2017, 84 participating facilities had submitted data at least once.

Registered Persons Data Base—Ministry of Health and Long-Term Care

The Registered Persons Database is a historical listing of the unique health numbers issued to each person eligible for Ontario health services. This listing includes corresponding demographic information, such as date of birth, sex, address, and date of death (where applicable). The Institute for Clinical Evaluative Sciences creates an enriched postal code

dataset that uses postal code and other administrative data to generate the best-known postal code on July 1 of each year for eligible individuals.

Health Quality Ontario

130 Bloor Street West, 10th Floor
Toronto, Ontario
M5S 1N5

Tel: 416-323-6868

Toll Free: 1-866-623-6868

Fax: 416-323-9261

Email: QualityStandards@hqontario.ca

Website: www.hqontario.ca

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