



Long-Term Care Hospital Quality Reporting Program Measure Calculations and Reporting User's Manual Version 4.0

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Quality Measure, Assessment Instrument
Development, Maintenance and Quality
Reporting Program Support for the Long-
Term Care Hospital (LTCH), Inpatient
Rehabilitation Facility (IRF), Skilled Nursing
Facility (SNF) QRPs and Nursing Home
Compare (NHC)

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LONG-TERM CARE HOSPITAL QUALITY REPORTING PROGRAM MEASURE CALCULATIONS AND REPORTING USER'S MANUAL

VERSION 4.0

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Chapter 1

Long-Term Care Hospital Quality Reporting Program Measure Calculations and Reporting User's Manual Organization and Definitions

The purpose of this manual is to present the methods used to calculate quality measures that are included in the Centers for Medicare & Medicaid Services (CMS) Long-Term Care Hospital (LTCH) Quality Reporting Program (QRP). Quality measures are tools that help measure or quantify healthcare processes, outcomes, patient or resident perceptions and organizational structure/systems that are associated with the ability to provide high-quality services related to one or more quality goals.¹ This manual provides detailed information for each quality measure, including quality measure definitions, inclusion and exclusion criteria and measure calculation specifications. An overview of the LTCH QRP and additional information pertaining to public reporting is publicly available and can be accessed through the [LTCH QRP website](https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityMeasures/index.html).

¹ Centers for Medicare & Medicaid Services. (December 2021). Quality Measures. Accessed in January 2022. Available at: <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityMeasures/index.html>

Section 1.1: Organization

This manual is organized by seven chapters and one appendix. The remainder of this section provides information on the contents of each chapter and an overview of the appendix. **Chapter 1** presents the purpose of the manual, explaining how the manual is organized and defining key terms that are used throughout subsequent chapters. The remaining chapters are organized by quality measure and provide detailed information about measure specifications and reporting components. **Chapters 2 and 3** identify the Centers for Disease Control and Prevention's (CDC) National Healthcare Safety Network Measures (NHSN) quality measures and the claims-based measures, respectively. The quality measures that rely on LTCH Continuity Assessment Record and Evaluation (CARE) Data Set (LCDS) are presented in **Chapter 4** and record selection criteria are explained for each measure. **Chapter 5** describes two Internet Quality Improvement and Evaluation System (iQIES) data reports for the LCDS quality measures, consisting of the iQIES Review and Correct Report and the iQIES Quality Measure (QM) Reports. The iQIES Review and Correct Report is a single report that contains facility-level quarterly and cumulative rates and its associated patient-level data. The iQIES QM Reports are comprised of two report types, one containing facility-level measure information and a second that includes patient-level data for a selected reporting period. Following the discussion of quality measure specifications for each report, information is presented in table format to illustrate the report calculation month, reporting quarters and the months of data that are included in each monthly report. The chapter concludes with the transition from LCDS V4.00 to the LCDS V5.0 and introduction of the Transfer of Health Information (TOH) quality measures. Data collection for LCDS V5.0 begins on October 1, 2022 and will impact certain assessment-based (LCDS) quality measure specifications. **Chapter 6** presents the measure calculation methodology specific to the LCDS quality measures and **Chapter 7** provides the measure logic specifications for each of the LCDS quality measures, in table format. Lastly, **Appendix A** and the associated Risk-Adjustment Appendix File include the intercept and covariate coefficient values that are used to calculate the assessment-based (LCDS) risk-adjusted measures.

Section 1.2: LTCH Stay Definitions

LTCH Admission (Start of LTCH Stay): Defined as an Admission assessment (Item A0250 = [01]). The LTCH Admission assessment is required at the start of an LTCH stay when the patient is admitted to the LTCH.

LTCH Discharge (End of LTCH Stay): Defined as a Planned or Unplanned Discharge assessment (Item A0250 = [10, 11] or Expired Record (Item A0250 = [12])). The LTCH Discharge assessment is required at the end of an LTCH stay when the patient is discharged from the LTCH. The LTCH Expired Record is required when a patient expires in an LTCH.

LTCH Stay: An LTCH stay includes consecutive time in the LTCH starting with a patient's admission (Admission assessment (Item A0250 = [01])) through the patient's discharge (Discharge assessment or Expired Record (Item A0250 = [10, 11, 12])). To construct the LTCH stay for the quality measure sample, a matched pair of Admission and Discharge assessments (or Admission assessment and Expired Record) as shown below is required. Assessment selection is described in more detail in Section 4.1.

Target Date: The target dates differ based on assessment type and are defined as follows:

- Admission assessments (Item A0250 Reason for Assessment = [01]): the target date is equal to the Admission Date (Item A0220).
- Planned/Unplanned Discharge assessments (Item A0250 Reason for Assessment = [10, 11]): the target date is equal to the Discharge Date (Item A0270).
- Expired Records (Item A0250 Reason for Assessment = [12]): the target and discharge dates are equal to the date of death.

Target Period: The span of time that defines the quality measure reporting period for a given measure (e.g., a 12-month period (4 quarters)). The target period and methodology for selecting the LTCH stay-level sample for the LTCH QRP LCDS quality measures is described in Section 4.1.

Section 1.3: Measure-Specific Definitions

The methodology for selecting the stay samples for the following function measures includes identifying complete versus incomplete LTCH stays, described in detail below:

- Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function (NQF #2631)² (CMS ID: L009.03)
- Application of Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function (NQF #2631)³ (CMS ID: L010.03)
- Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility among Patients Requiring Ventilator Support (NQF #2632) (CMS ID: L011.05)

Incomplete LTCH Stay: Incomplete LTCH stays occur when a patient is discharged to another acute care setting (e.g., Short-Term General Hospital, Inpatient Psychiatric Facility, or a different Long-Term Care Hospital (Item A2105)), has an unplanned discharge (Item A0250), is discharged against medical advice (Item A1990), has a stay less than three days (Items A0220, A0270), or dies while in the facility (Item A0250). We refer readers to **Chapter 6** to review the measure specifications to determine what is considered an incomplete LTCH stay for each measure, as applicable.

Complete LTCH Stay: All LTCH stays not meeting the above criteria for incomplete stays will be considered complete LTCH stays.

² The Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function measure (L009.03) is no longer NQF endorsed as of 11/16/2021.

³ The Application of Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function measure (L010.03) is an application of measure L009.03 and is not NQF endorsed.

Table 1-1 below provides a list of the assessment-based measures included in the LTCH QRP and the corresponding reference name for each measure.

Table 1-1
LTCH Assessment-Based (LCDS) Quality Measure NQF Number, CMS ID, and Measure Reference Name Crosswalk

Quality Measure	NQF #	CMS ID	Measure Reference Name
Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury	N/A	L021.01	Pressure Ulcer/Injury
Application of Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay)	0674 ⁴	L012.01	Application of Falls
Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support	2632	L011.05	Change in Mobility
Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function	2631 ⁵	L009.03	Functional Assessment
Application of Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function	2631 ⁶	L010.03	Application of Functional Assessment
Drug Regimen Review Conducted with Follow-Up for Identified Issues – PAC LTCH QRP	N/A	L020.01	DRR

(continued)

⁴ This measure is NQF-endorsed for long-stay residents in nursing homes (<https://www.qualityforum.org/QPS/0674>). An application of this quality measure was finalized for reporting by LTCHs under the [FY 2014 IPPS/LTCH PPS final rule](#) (78 FR 50874 through 50877) and was finalized as an IMPACT Act measure in the [FY 2016 IPPS/LTCH PPS final rule](#) (80 FR 49736 through 49739). The use of the words “resident” and “long stay” in the title of this measure refer to the use of this measure in the SNF/NH setting. CMS’s use of these words does not imply that the LTCH patient is a “resident” or that a stay in an LTCH is a “long stay.”

⁵ The Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function measure (L009.03) is no longer NQF endorsed as of 11/16/2021.

⁶ This measure (L010.03) is an application of measure L009.03 and is not NQF endorsed.

Table 1-1 (continued)
Assessment-Based Quality Measure (LTCH CARE Data Set) NQF Number, CMS ID, and
Measure Reference Name Crosswalk

Quality Measure	NQF #	CMS ID	Measure Reference Name
Compliance with Spontaneous Breathing Trial (SBT) by Day 2 of the LTCH Stay	N/A	L022.02	Compliance with SBT
Ventilator Liberation Rate	N/A	L023.02	Ventilator Liberation
Transfer of Health Information to Provider – Post Acute Care (PAC)	N/A	L025.01	TOH-Provider
Transfer of Health Information to Patient – Post Acute Care (PAC)	N/A	L026.02	TOH-Patient

Chapter 2

National Healthcare Safety Network Measures

An overview of the NHSN measures and annual reports containing quality measure information can be accessed on the [CDC NHSN website](#). Additionally, quality measure information and quality reporting program details can be found in the [FY 2017 IPPS/LTCH PPS final rule](#). Below are the CDC NHSN quality measures included in the LTCH QRP as of October 1, 2022 and hyperlinks that provide detailed information about each measure on the CDC website, including measure descriptions and definitions, data collection methods, specifications (e.g. numerator, denominator, Standardized Infection Ratio (SIR) calculations), and reporting requirements:

- **National Healthcare Safety Network (NHSN) Catheter-Associated Urinary Tract Infection (CAUTI) Outcome Measure (NQF #0138) (CMS ID: L006.01)**
 - This measure calculates the total number of healthcare-associated CAUTI among patients in bedded inpatient care locations, from the total number of indwelling urinary catheter days for each location under surveillance for CAUTI during the associated data period. This measure is risk-adjusted.
 - [CDC NHSN: CAUTI](#)
- **National Healthcare Safety Network (NHSN) Central Line-Associated Bloodstream Infection (CLASBI) Outcome Measure (NQF #0139) (CMS ID: L007.01)**
 - This measure calculates the total number of observed healthcare-associated CLASBI among patients in bedded inpatient care locations, from the total number of central line days for each location under surveillance for CLASBI during the associated data period. This measure is risk-adjusted.
 - [CDC NHSN: CLASBI](#)
- **National Healthcare Safety Network (NHSN) Facility-Wide Inpatient Hospital-Onset *Clostridium difficile* Infection (CDI) Outcome Measure (NQF #1717) (CMS ID: L014.01)**
 - This measure calculates the total number of observed hospital-onset CDI Laboratory Identified (LabID) events among all inpatients in the facility, excluding well baby-nurseries and NICUs, from the total number of expected hospital-onset CDI LabID events, determined through the facility's number of inpatient days, bed size, affiliation with a medical school, microbiological test used to identify *C. difficile*, and community onset CDI admission prevalence rate.
 - [CDC NHSN: CDI](#)

- **National Healthcare Safety Network (NHSN) Influenza Vaccination Coverage Among Healthcare Personnel (NQF #0431) (CMS ID: L015.01)**
 - This measure identifies the percentage of healthcare personnel (HCP) who receive the influenza vaccination among the total number of healthcare personnel in the facility for at least one working day between October 1 and March 31 of the following year, regardless of clinical responsibility or patient contact.
 - [CDC NHSN: HCP Influenza Vaccine](#)
- **National Healthcare Safety Network (NHSN) COVID-19 Vaccination Coverage Among Healthcare Personnel (CMS ID: L024.01)**
 - This measure identifies the percentage of HCP eligible to work in the LTCH setting for at least one day during the reporting period who receive a complete COVID-19 vaccination course, regardless of clinical responsibility or patient contact.
 - [CDC NHSN: HCP COVID-19 Vaccine](#)

Chapter 3

Medicare Claims-Based Measures

CMS uses a range of data sources to calculate quality measures. The quality measures listed below were developed using Medicare claims data submitted for Medicare Fee-For-Service (FFS) patients. Each measure is calculated using unique specifications and methodologies. Information regarding measure specifications and reporting details is publicly available and can be accessed on the [LTCH Quality Reporting Measures Information website](#). Below are the Medicare claims-based measures included in the LTCH QRP as of October 1, 2022 and hyperlinks that provide information about each measure, including measure descriptions and definitions, specifications (e.g. numerator, denominator, exclusions, calculations), care setting, and risk-adjustment:

- **Potentially Preventable 30-Day Post-Discharge Readmission Measure for Long-Term Care Hospital Quality Reporting Program (CMS ID: L017.01)**
 - This measure estimates the risk-standardized rate of unplanned, potentially preventable readmissions for patients (Medicare FFS beneficiaries) who receive services in long-term care hospitals (LTCH).
 - [Medicare Claims-Based: Potentially Preventable Readmissions](#)
- **Discharge to Community-Post Acute Care (PAC) Long-Term Care Hospital Quality Reporting Program (NQF #3480) (CMS ID: L018.02)**
 - This measure reports an LTCH's risk-standardized rate of Medicare FFS patients who are discharged to the community following an LTCH stay, do not have an unplanned readmission to an acute care hospital or LTCH in the 31 days following discharge to community, and who remain alive during the 31 days following discharge to community. Community, for this measure, is defined as home or self-care, with or without home health services. An additional measure denominator exclusion was finalized in the FY 2020 IPPS/LTCH PPS final rule to exclude LTCH stays for baseline Nursing Facility (NF) residents. Baseline NF residents are defined as patients who had a long-term NF stay in the 180 days preceding their hospitalization and LTCH stay, with no intervening community discharge between the long-term NF stay and qualifying hospitalization for measure inclusion.
 - [Medicare Claims-Based: Discharge to Community-Post Acute Care](#)

- **Medicare Spending Per Beneficiary Post-Acute Care (PAC) Long-Term Care Hospital Quality Reporting Program (CMS ID: L019.01)**
 - This measure evaluates LTCH providers' resource use relative to the resource use of the national median LTCH provider. Specifically, the measure assesses the cost to Medicare for services performed by the LTCH provider during an MSPB-PAC LTCH episode. The measure is calculated as the ratio of the price-standardized, risk-adjusted MSPB-PAC amount for each LTCH divided by the episode-weighted median MSPB-PAC amount across all LTCH providers.
 - [Medicare Claims-Based: Medicare Spending Per Beneficiary](#)

Chapter 4

Stay Selection for Assessment-Based (LCDS) Quality Measures

Section 4.1: Quality Measures Based on the Calendar Year

This section presents the **record selection** criteria for the assessment-based (LCDS) quality measure calculations whose **target period is either 12 months (four quarters) or 24 months (eight quarters)**. [Table 4-1](#) lists the measures and their respective target periods. Apply the respective quality measure calculations from **Chapter 6** to the eligible target period LTCH stays. Additionally, **Chapter 7** provides the instructions in table format, and the references to the table numbers are included below:

Quality measures with a 12-month target period:

- Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury (CMS ID: L021.01) [Table 7-1](#)
- Application of Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay) (NQF #0674) (CMS ID: L012.01) [Table 7-2](#)
- Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function (NQF #2631) (CMS ID: L009.03) [Table 7-4](#)
- Application of Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function (NQF #2631) (CMS ID: L010.03) [Table 7-5](#)
- Drug Regimen Review Conducted with Follow-Up for Identified Issues – PAC LTCH QRP (CMS ID: L020.01) [Table 7-6](#)
- Compliance with Spontaneous Breathing Trial (SBT) by Day 2 of the LTCH Stay (CMS ID: L022.02) [Table 7-7](#)
- Ventilator Liberation Rate (CMS ID: L023.02) [Table 7-8](#)
- Transfer of Health Information to Provider – Post Acute Care (PAC) (CMS ID: L025.01) [Table 7-9](#)
- Transfer of Health Information to Patient – Post Acute Care (PAC) (CMS ID: L026.02) [Table 7-10](#)

Quality measures with a 24-month target period:

- Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support (NQF #2632) (CMS ID: L011.05) [Table 7-3](#)

The eligible LTCH stays for these quality measures are selected as follows:

1. Eligible LTCH stays require a matched pair of Admission and Discharge assessments (or Admission assessment and Expired Record) that are selected as follows:
 - Sort the assessments according to the following:
 - Provider internal ID
 - Patient internal ID
 - Item A0220 Admission Date (descending)
 - Target date (descending). This will result in assessments appearing in reverse chronological order so that the most recent assessment appears first. This will also ensure that the Expired Record or Discharge assessment appears prior to the Admission assessment.
 - Item A0250 Reason for Assessment (RFA) (descending). If more than one Discharge assessment or Expired Record shares a target date, this will cause the Expired Record to appear first, followed by the Unplanned Discharge assessment, followed by the Planned Discharge assessment.
 - Assessment ID (descending)
 - For each unique combination of Provider Internal ID, Patient Internal ID, and Admission Date:
 - select the first Discharge assessment/Expired Record
 - select the first Admission assessment
 - Match the Admission assessments and Discharge assessments/Expired Records according to the following:
 - Provider Internal ID
 - Patient Internal ID
 - Admission Date
 - Any Admission assessments that are not matched to a Discharge assessment or any Discharge assessments or Expired Records not matched to an Admission assessment are excluded from the quality measure sample.
 - If the target date for the Discharge assessment/Expired Record is not the same as or later than the target date for the matched Admission assessment, the LTCH stay is excluded.
 - If any LTCH stays for the same Provider Internal ID and Patient Internal ID are overlapping by more than one day (i.e., the admission date of a subsequent assessment is earlier than the discharge date of the prior assessment), remove **both** LTCH stays.
 - The assessments included in an **LTCH stay sample** could span across quarter(s).

- For quality measure calculation purposes, both the Admission and Discharge assessments (or Expired Record) included in the ***LTCH stay sample*** are assigned to the target period of the Discharge Date (Item A0270).
2. Select all LTCH stays with a Discharge Date (Item A0270) within the data target period.
 - If a patient has multiple LTCH stays with a discharge date within the data target period, then include each eligible LTCH stay in the measure.

Table 4-1
Target Period for all Assessment-Based (LCDS) Quality Measures

Quality Measure	Target Period ⁷
Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury (CMS ID: L021.01)	January 1 through December 31
Application of Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay) (NQF 0674) (CMS ID: L012.01)	January 1 through December 31
Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support (NQF #2632) (CMS ID: L011.05)	January 1 through December 31 (24 months)
Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function (NQF #2631) (CMS ID: L009.03)	January 1 through December 31
Application of Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function (NQF #2631) (CMS ID: L010.03)	January 1 through December 31
Drug Regimen Review Conducted with Follow-Up for Identified Issues – PAC LTCH QRP (CMS ID: L020.01)	January 1 through December 31
Compliance with Spontaneous Breathing Trial (SBT) by Day 2 of the LTCH Stay (CMS ID: L022.02)	January 1 through December 31
Ventilator Liberation Rate (CMS ID: L023.02)	January 1 through December 31
Transfer of Health Information to Provider – Post Acute Care (PAC) (CMS ID: L025.01)	January 1 through December 31
Transfer of Health Information to Patient – Post Acute Care (PAC) (CMS ID: L026.02)	January 1 through December 31

⁷ The target period for the assessment-based quality measures is 12 months, with the exception of the *Change in Mobility* measure (NQF #2632) which is 24 months.

Chapter 5

Internet Quality Improvement and Evaluation System (iQIES) Data Selection for Assessment-Based (LCDS) Quality Measures

The purpose of this chapter is to present the data selection criteria for the **iQIES Review and Correct Reports** and the **iQIES Quality Measure (QM) Reports** for quality measures that are included in the LTCH QRP and are specific to those quality measures calculated using the LCDS. Information about the iQIES reports can be found on the [CMS iQIES Reports](#) website.

- **The iQIES Review and Correct Reports** contain facility-level and patient-level measure information and are updated on a quarterly basis with data refreshed weekly as data become available.
- These reports allow providers to obtain facility-level performance data and its associated patient-level data for the past 12 months (four full quarters) or 24 months (eight full quarters) for the Change in Mobility Among LTCH Patients Requiring Ventilator Support (NQF #2632) measure, **and are restricted to only the assessment-based measures**. The intent of this report is for providers to have access to reports prior to the quarterly data submission deadline to ensure accuracy of their data. This also allows providers to track cumulative quarterly data that includes data from quarters after the submission deadline (“frozen” data).
- **The iQIES QM Reports** are refreshed monthly and separated into two reports: one containing measure information at the facility-level and another at the patient-level, for a single reporting period. The intent of these reports is to enable tracking of quality measure data regardless of quarterly submission deadline (“freeze”) dates.
- The assessment-based (LCDS) measures are updated monthly, at the facility- and patient-level, as data become available. The performance data contain the current quarter (may be partial) and the past three quarters or the past seven quarters for the Change in Mobility Among LTCH Patients Requiring Ventilator Support (NQF #2632).
- The claims-based measures are updated annually and data are provided at the facility-level only.
- The CDC NHSN measures are provided at the facility-level only.

The iQIES Review and Correct Reports and the iQIES QM Reports can help identify data errors that affect performance scores. They also allow the providers to use the data for quality improvement purposes.

Section 5.1 contains the data selection criteria for the assessment-based (LCDS) quality measures for the iQIES Review and Correct Reports. Since the criteria and reporting periods for the iQIES QM Reports are consistent across the facility- and patient-level reports, **Section 5.2** of this chapter presents data selection information that can be applied to both the iQIES Patient-level QM Reports and the iQIES Facility-level QM Reports.

Section 5.3 of this chapter addresses the transition from LCDS V4.00 to the LCDS V5.0. Data collection for LCDS V5.0 begins on October 1, 2022 and will impact certain quality measure specifications.

Section 5.4 describes the Transfer of Health Information (TOH) measures which will be available to LTCH providers in their iQIES reports starting in 2023.

Section 5.1: iQIES Review and Correct Reports

Below are the specifications for the iQIES Review and Correct Reports for the quality measures presented in **Chapter 4, Section 4.1:**

1. Quarterly reports contain quarterly rates and a cumulative rate.
 - a. The quarterly rates will be displayed using up to one quarter of data.
 - b. The cumulative rates will be displayed using all data within one target period.
 - i. **For all measures, excluding the Change in Mobility measure:** the cumulative rate is derived by dividing the numerator of all eligible LTCH stays in the target period by the denominator of all eligible LTCH stays in the target period.
 - ii. **For the Change in Mobility measure:** the cumulative rate is derived by including all eligible LTCH stays for the target period, calculating the change scores for each LTCH stay, and then calculating the mean of the change scores. For instructions on calculating the change scores, please see **Chapter 6, Section 6.3** for the Change in Mobility measure.
 - c. Data submission deadline: data must be submitted by 11:59 p.m. ET on the 15th of August, November, February, or May after the end of each respective quarter. However, if the 15th of the month falls on a Friday, weekend, or federal holiday, the data submission deadline is delayed until 11:59 p.m. ET on the next business day.
 - i. For example, the data submission deadline for Quarter 1 (January 1 through March 31) data collection would normally be 11:59 p.m. ET, August 15, which is the 15th day of the month, 5 months after the end of the data collection period. However, in FY 2021, August 15th fell on a Sunday; therefore, the deadline for this data submission was extended to the next business day, which was August 16, 2021, at 11:59 p.m. ET.
 - d. The measure calculations for the quarterly rates and the cumulative rates are refreshed weekly.
2. Complete data (full target period) are available for previously existing quality measures. Only partial data will be available for new measures until a full target period of data has accumulated. Once a target period of data has accumulated, as each quarter advances, the subsequent quarter will be added and the earliest quarter will be removed.
3. Patient-level data will be displayed for each reporting quarter in the report.
4. The illustration of the reporting timeline for the iQIES Review and Correct Reports for the following quality measures is provided in [Table 5-3](#) for the quarterly rates and [Table 5-4](#) for the cumulative rates:
 - a. Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury (CMS ID: L021.01)
 - b. Application of Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay) (NQF #0674) (CMS ID: L012.01)
 - c. Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function (NQF #2631) (CMS ID: L009.03)

- d. Application of Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function (NQF #2631) (CMS ID: L010.03)
 - e. Drug Regimen Review Conducted with Follow-Up for Identified Issues – PAC LTCH QRP (CMS ID: L020.01)
 - f. Compliance with Spontaneous Breathing Trial (SBT) by Day 2 of the LTCH Stay (CMS ID: L022.02)
 - g. Ventilator Liberation Rate (CMS ID: L023.02)
 - h. Transfer of Health Information to Provider – Post Acute Care (PAC) (CMS ID: L025.01)
 - i. Transfer of Health Information to Patient – Post Acute Care (PAC) (CMS ID: L026.02)
5. The illustration of reporting timeline for the iQIES Review and Correct Reports for the following quality measure is provided in [Table 5-3](#) for the quarterly rates and [Table 5-5](#) for the cumulative rates:
 - a. Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support (NQF #2632) (CMS ID: L011.05)
 6. **Data calculation rule:** The calculations include LTCH stays with discharge dates through the end of the quarter.

[Table 5-1](#) defines the discharge dates included for each calendar year quarter. [Table 5-2](#) displays whether the quality measure was considered new or existing for iQIES reporting in the user-requested year. For new measures, data are accumulated until four quarters have been collected and then rolling quarters occur for subsequent years. For existing measures, data is displayed based on rolling quarters. The Change in Mobility measure has a separate table since it is the exception to this rule.

Table 5-1
Discharge Dates for Each Quarter Defined by Calendar Year

Calendar Year Quarter	Discharge Dates Included in the Report
Quarter 1	January 1 through March 31
Quarter 2	April 1 through June 30
Quarter 3	July 1 through September 30
Quarter 4	October 1 through December 31

Table 5-2
Measure Types by User-Requested Year for all Assessment-Based (LCDS) Quality Measures

Quality Measure	Measure Type by User-Requested Year			
	2018	2019	2020-2022	2023
Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury (CMS ID: L021.01)	—	New	Existing	Existing
Application of Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay) (NQF 0674) (CMS ID: L012.01)	Existing	Existing	Existing	Existing
Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support (NQF #2632) (CMS ID: L011.05)	Existing	Existing	Existing	Existing
Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function (NQF #2631) (CMS ID: L009.03)	Existing	Existing	Existing	Existing
Application of Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function (NQF #2631) (CMS ID: L010.03)	Existing	Existing	Existing	Existing
Drug Regimen Review Conducted with Follow-Up for Identified Issues – PAC LTCH QRP (CMS ID: L020.01)	—	New	Existing	Existing
Compliance with Spontaneous Breathing Trial (SBT) by Day 2 of the LTCH Stay (CMS ID: L022.02)	—	New	Existing	Existing
Ventilator Liberation Rate (CMS ID: L023.02)	—	New	Existing	Existing
Transfer of Health Information to Provider – Post Acute Care (PAC) (CMS ID: L025.01)	—	—	—	New
Transfer of Health Information to Patient – Post Acute Care (PAC) (CMS ID: L026.02)	—	—	—	New

[Table 5-3](#) below shows examples of quarterly rates included in the iQIES Review and Correct Reports for existing and for new measures:

- For an existing measure, if the requested calendar year quarter end date is Quarter 1, 2023 (end date of March 31st), the four quarters of data provided in this request

include Q2 2022 (April – June), Q3 2022 (July – September), Q4 2022 (October – December), and Q1 2023 (January – March).

- For a new measure, if the requested calendar year quarter end date is Quarter 1, 2023 (end date of March 31st), the only quarter of data provided in this request is Q1 2023 (January – March).

Table 5-3
iQIES Review and Correct Reports: Quarterly Rates Included in Each Requested Quarter End Date⁸

Requested Calendar Year Quarter End Date ⁹	Measure Type	Quarter(s) Included from Previous Year ¹⁰	Quarter(s) Included from User-Requested Year
Quarter 1, YYYY	New	—	Quarter 1
	Existing	Quarter 2 Quarter 3 Quarter 4	Quarter 1
Quarter 2, YYYY	New	—	Quarter 1 Quarter 2
	Existing	Quarter 3 Quarter 4	Quarter 1 Quarter 2
Quarter 3, YYYY	New	—	Quarter 1 Quarter 2 Quarter 3
	Existing	Quarter 4	Quarter 1 Quarter 2 Quarter 3
Quarter 4, YYYY	New	—	Quarter 1 Quarter 2 Quarter 3 Quarter 4
	Existing	—	Quarter 1 Quarter 2 Quarter 3 Quarter 4

⁸ See [Table 5-1](#) for discharge dates included for each quarter and [Table 5-2](#) to determine the measure type for each quality measure.

⁹ YYYY = User-Requested Year

¹⁰ Calendar year prior to the User-Requested Year

Table 5-4
iQIES Review and Correct Reports: Data Included in the Cumulative Rate for Each Requested Quarter End Date¹¹

Requested Calendar Year Quarter End Date ¹²	Measure Type	Data Included from Previous Year ¹³	Data Included from User-Requested Year
Quarter 1, YYYY	New	—	Quarter 1
	Existing	Quarter 2 through Quarter 4	Quarter 1
Quarter 2, YYYY	New	—	Quarter 1 through Quarter 2
	Existing	Quarter 3 through Quarter 4	Quarter 1 through Quarter 2
Quarter 3, YYYY	New	—	Quarter 1 through Quarter 3
	Existing	Quarter 4	Quarter 1 through Quarter 3
Quarter 4, YYYY	New	—	Quarter 1 through Quarter 4
	Existing	—	Quarter 1 through Quarter 4

¹¹ See [Table 5-1](#) for discharge dates included for each quarter and [Table 5-2](#) to determine the measure type for each quality measure.

¹² YYYY = User-Requested Year

¹³ Calendar year prior to the User-Requested Year

Table 5-5
iQIES Review and Correct Reports: Change in Mobility Data Included in the Cumulative Rate (24-months) for Each Requested Quarter End Date¹⁴

Requested Calendar Year Quarter End Date¹⁵	Data Included in the Cumulative Rate
Quarter 1, 2021	Quarter 2, 2019 through Quarter 1, 2021
Quarter 2, 2021	Quarter 3, 2019 through Quarter 2, 2021
Quarter 3, 2021	Quarter 4, 2019 through Quarter 3, 2021
Quarter 4, 2021	Quarter 1, 2020 through Quarter 4, 2021
Quarter 1, 2022	Quarter 2, 2020 through Quarter 1, 2022
Quarter 2, 2022	Quarter 3, 2020 through Quarter 2, 2022
Quarter 3, 2022	Quarter 4, 2020 through Quarter 3, 2022
Quarter 4, 2022	Quarter 1, 2021 through Quarter 4, 2022
Quarter 1, 2023	Quarter 2, 2021 through Quarter 1, 2023
Quarter 2, 2023	Quarter 3, 2021 through Quarter 2, 2023
Quarter 3, 2023	Quarter 4, 2021 through Quarter 3, 2023
Quarter 4, 2023	Quarter 1, 2022 through Quarter 4, 2023

¹⁴ See [Table 5-1](#) for discharge dates included for each quarter and [Table 5-2](#) to determine the measure type for each quality measure.

¹⁵ YYYY = User-Requested Year

Section 5.2: iQIES Quality Measure (QM) Reports

Below are the specifications for the iQIES QM Reports for measures presented in **Chapter 4, Section 4.1**:

1. Measures are calculated consistent with the methods in the previous section, **Chapter 5, Section 5.1, “iQIES Review and Correct Reports.”**
 - a. Only the cumulative rates will be displayed using all data in the target period.
2. The illustration of reporting timeline for the monthly iQIES QM Reports is provided in [Table 5-6](#) for the following measures:
 - a. Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury (CMS ID: L021.01)
 - b. Application of Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay) (NQF #0674) (CMS ID: L012.01)
 - c. Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function (NQF #2631) (CMS ID: L009.03)
 - d. Application of Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function (NQF #2631) (CMS ID: L010.03)
 - e. Drug Regimen Review Conducted with Follow-Up for Identified Issues – PAC LTCH QRP (CMS ID: L020.01)
 - f. Compliance with Spontaneous Breathing Trial (SBT) by Day 2 of the LTCH Stay (CMS ID: L022.02)
 - g. Ventilator Liberation Rate (CMS ID: L023.02)
 - h. Transfer of Health Information to Provider – Post Acute Care (PAC) (CMS ID: L025.01)
 - i. Transfer of Health Information to Patient – Post Acute Care (PAC) (CMS ID: L026.02)
3. The illustration of reporting timeline for the monthly iQIES QM Reports is provided in [Table 5-7](#) for the following measure:
 - a. Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support (NQF #2632) (CMS ID: L011.05)
4. **Data calculation rule:** The calculations include LTCH stays with discharge dates through the end of the month.

Table 5-6
iQIES QM Reports: Data Included in the Cumulative Rate for Each Requested Report End Date

Requested Report End Date ¹⁶	iQIES QM Report Calculation Month	Data Included from Previous Year ¹⁷	Data Included from User-Requested Year
03/31/YYYY (Quarter 1, YYYY)	February	April through December	January
	March	April through December	January through February
	April	April through December	January through March
06/30/YYYY (Quarter 2, YYYY)	May	July through December	January through April
	June	July through December	January through May
	July	July through December	January through June
09/30/YYYY (Quarter 3, YYYY)	August	October through December	January through July
	September	October through December	January through August
	October	October through December	January through September
12/31/YYYY (Quarter 4, YYYY)	November	—	January through October
	December	—	January through November
	January	—	January through December

¹⁶ YYYY = User-Requested Year

¹⁷ Calendar year prior to the User-Requested Year

Table 5-7
iQIES QM Reports: Change in Mobility Data Included in the Cumulative Rate (24 months)
for Each Requested Report End Date

Requested Report End Date ¹⁸	iQIES QM Report Calculation Month	Data Included in the Requested Report End Date
03/31/2023 (Quarter 1, 2023)	February 2023	April 1, 2021 through January 31, 2023
	March 2023	April 1, 2021 through February 28, 2023
	April 2023	April 1, 2021 through March 31, 2023
06/30/2023 (Quarter 2, 2023)	May 2023	July 1, 2021 through April 30, 2023
	June 2023	July 1, 2021 through May 31, 2023
	July 2023	July 1, 2021 through June 30, 2023
09/30/2023 (Quarter 3, 2023)	August 2023	October 1, 2021 through July 31, 2023
	September 2023	October 1, 2021 through August 31, 2023
	October 2023	October 1, 2021 through September 30, 2023
12/31/2023 (Quarter 4, 2023)	November 2023	January 1, 2022 through October 31, 2023
	December 2023	January 1, 2022 through November 30, 2023
	January 2024	January 1, 2022 through December 31, 2023

¹⁸ YYYY = User-Requested Year

Section 5.3: Measure Calculations During the Transition from LCDS V4.00 to LCDS V5.0

Because the LCDS has separate admission and discharge assessments, matching is required to create LTCH stays used for measure calculations. This presents a unique issue during the time of implementation when the old assessment is completed on admission and the new assessment is completed on discharge.

For LTCH stays that span October 1, 2022, that is with an admission prior to October 1, 2022 and discharges on or after October 1, 2022, the measure calculations will use the V3.1 QM User's Manual measure specifications¹⁹ for items related to the Admission assessment and will use the V4.0 QM User's Manual measure specifications for items related to the Discharge assessment. Two examples below illustrate this instruction:

- a. Patient admitted to LTCH on September 1, 2022 and discharged on October 15, 2022
 - Admission assessment would be LCDS V4.00
 - Discharge assessment would be LCDS V5.0
 - Specifications would be based on QM specifications in both the QM User's Manual V3.1 for references to the admission assessment and QM User's Manual V4.0 for references to the discharge assessment.
 - Rationale: The patient was admitted on September 1, 2020 using LCDS V4.00, which is associated with the QM User's Manual V3.1 instructions, and discharged using LCDS V5.0, which is associated with the QM User's Manual V4.0 instructions.
- b. Patient admitted to LTCH on October 1, 2022 and discharged on October 15, 2022
 - Admission assessment would be LCDS V5.0
 - Discharge assessment would be LCDS V5.0
 - Specifications would be based on QM specifications in the QM User's Manual V4.0 for references to the admission and discharge assessments.
 - Rationale: Both the admission and discharge assessments use LCDS V5.0 and the specifications refer to QM User's Manual V4.0.

For the iQIES reports, measure calculations are based on the discharge date. These examples would be included in Quarter 4, 2022 since the discharge dates are between October 1 and December 31, 2022.

¹⁹ The LTCH Measure Calculations and Reporting User's Manual V3.1.2 Addendum should be used with the LTCH V3.1 QM User's Manual for admissions/discharges between October 1, 2020 and September 30, 2022. The V3.1.2 Addendum can be found at the following link: <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/LTCH-Quality-Reporting/LTCH-Quality-Reporting-Measures-Information>

Section 5.4: Measures to Begin Data Collection on 10/01/2022: Transfer of Health Information (TOH)

The Transfer of Health Information (TOH) to the Provider (CMS ID #L025.01) and Transfer of Health Information to the Patient (CMS ID #L026.02) measures assess for and report on the timely transfer of health information, specifically transfer of a reconciled medication list, when a patient is discharged from their current post-acute care setting to an applicable subsequent provider or a private home/apartment, board/care, assisted living, group home, transitional living, or home under care of an organized home health service organization or hospice. The measures, developed under the IMPACT act and finalized for adoption by LTCHs under the [FY 2020 IPPS/LTCH PPS Final Rule](#) (84 FR 42044), have been developed for the LTCH, Inpatient Rehabilitation Facility (IRF), Skilled Nursing Facility (SNF), and Home Health Agency (HHA) settings, and will be available to LTCH providers in their iQIES reports starting in 2023. An update to the denominator for the TOH to the Patient measure was finalized in the [FY 2022 IPPS/LTCH PPS Final Rule](#) (86 FR 45446 – 45447) to exclude patients discharged home under the care of an organized home health agency or hospice (Item A2105 = 09, 12). Complete information regarding the background and development of the measures can be found on the [LTCH QRP Measures Information website](#).

The TOH to Provider measure is calculated using a standardized assessment element (Item A2121) that asks whether, at the time of discharge, the patient's current reconciled medication list was provided to the subsequent provider and a second standardized assessment element (Item A2122) that addresses the route of transmission to ensure internal measure consistency. Similarly, the TOH to Patient measure uses a standardized assessment element (Item A2123) that addresses whether the medication list was provided to the patient, family, and/or caregiver at discharge, with a second standardized assessment element (Item A2124) that addresses the route of transmission. Record selection is described in detail in Chapter 4 and measure calculations are specified in Chapter 6. Tables [7-9](#) and [7-10](#) provide the measure specifications in table format.

Chapter 6

Measure Calculations for Assessment-Based (LCDS) Quality Measures

This chapter presents technical details regarding calculating the assessment-based quality measures that are included in the LTCH QRP. In this chapter, each section is specific to an assessment-based (LCDS) quality measure. Within each section, the iQIES Review and Correct Report measure calculations are presented first, followed by the iQIES QM Report measure calculations. If the measure is risk-adjusted for the QM Reports, then additional details regarding the risk-adjusted calculations are provided; otherwise, the Review and Correct Report calculations can be used to calculate the QM Report measure calculation. **Prior to the measure specifications steps in Chapter 6, please refer to Chapter 1, Section 1.2 on instructions to define the LTCH stay for the QM sample and Chapter 4 for the record selection criteria.**

Section 6.1: Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury (CMS ID: L021.01)

iQIES Review and Correct Report Measure Calculations for Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury (CMS ID: L021.01)

For the Review and Correct Reports, only the facility-level observed score is computed; the facility's risk-adjusted score is not reported. Using the definitions in [Table 7-1](#), the following steps are used to calculate the quality measure.

1. Identify excluded LTCH stays (Steps 1.1 through 1.2).

1.1 LTCH stay is excluded if data on new or worsened Stage 2, 3, 4, and unstageable pressure ulcers, including deep tissue injuries, are missing [-] on the planned or unplanned discharge assessment; i.e., (M0300B1 = [-] or M0300B2 = [-]) and (M0300C1 = [-] or M0300C2 = [-]) and (M0300D1 = [-] or M0300D2 = [-]) and (M0300E1 = [-] or M0300E2 = [-]) and (M0300F1 = [-] or M0300F2 = [-]) and (M0300G1 = [-] or M0300G2 = [-]).

1.2 LTCH stay is excluded if the patient died during the LTCH stay; i.e., A0250 = [12].

2. Determine the denominator count. Determine the total number of LTCH stays with both an Admission (A0250 = [01]) and Discharge (A0250 = [10, 11]) LCDS assessment with the discharge date in the measure target period, which do not meet the exclusion criteria.

3. Determine the numerator count. Determine the total number of LTCH stays for which the Discharge assessment (A0250 = [10, 11]) indicates the presence of one or more new or worsened pressure ulcers (Stage 2–4, or unstageable pressure ulcers compared to admission):

- Stage 2 (M0300B1) – (M0300B2) > 0, OR
- Stage 3 (M0300C1) – (M0300C2) > 0, OR
- Stage 4 (M0300D1) – (M0300D2) > 0, OR
- Unstageable – Non-removable dressing/device (M0300E1) – (M0300E2) > 0, OR
- Unstageable – Slough and/or eschar (M0300F1) – (M0300F2) > 0, OR
- Unstageable – Deep tissue injury (M0300G1) – (M0300G2) > 0

4. Calculate the facility-level observed score. Divide the facility's numerator count (Step 3) by its denominator count (Step 2) to obtain the facility-level observed score.

5. Calculate the rounded percent value.

5.1 Multiply the facility-level observed score by 100 to obtain a percent value.

5.2 If the digit in the second decimal place is 5 or greater, add 1 to the first decimal place, otherwise leave the first decimal place unchanged.

5.3 Drop all of the digits following the first decimal place.

iQIES QM Report Measure Calculations for Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury (CMS ID: L021.01)

This measure is risk-adjusted for the iQIES QM Reports and therefore an observed (i.e., not risk-adjusted) and a risk-adjusted value are reported. Using the definitions in [Table 7-1](#) the following steps are used to calculate the measure.

1. Calculate the facility-level observed score (Steps 1.1 through 1.2 below).

- 1.1 To calculate the facility-level observed score, complete Steps 1 – 4 from **Chapter 6, Section 6.1**, “iQIES Review and Correct Report Measure Calculations” for Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury.
- 1.2 Do not round to the nearest first decimal place. All rounding will be done at the end of the measure calculation.

2. Calculate the national average observed score²⁰ (Steps 2.1 through 2.3).

- 2.1 After excluding LTCH stays based on the criteria listed in [Table 7-1](#), the remaining LTCH stays become the denominator for the national average observed score.
- 2.2 Identify LTCH stays in the denominator of the national average observed score that have pressure ulcers that are new or worsened based on the criteria in [Table 7-1](#). These records comprise the numerator of the national average observed score.
- 2.3 Divide the numerator (2.2) by the denominator (2.1) to calculate the national average observed score.

Note: Because there is limited public accessibility to national assessment data, this document provides a national average observed score based on the reporting period of the regression intercept and coefficients. The national average observed score can be seen in the Risk-Adjustment Appendix File on the [LTCH QRP Measures Information website](#). Please note that, depending on the reporting period and time of calculation, the national average observed score used in the iQIES QM Report, Provider Preview Report, and on public display on the Care Compare Website may vary from the national average observed score provided by these documents.

3. Calculate the facility-level expected score for each LTCH stay (Steps 3.1 through 3.3).

- 3.1 Determine presence or absence of the pressure ulcer covariates for each LTCH stay.
- 3.2 Using the covariate definitions in [Table 7-1](#), assign covariate values (COV), either ‘0’ for covariate condition not present or ‘1’ for covariate condition present, for each LTCH stay for each of the four covariates as reported on the Admission assessment.

Calculate the expected score for each LTCH stay using the following formula:

$$[1] \text{ LTCH stay level expected score} = \frac{1}{[1 + e^{-x}]}$$

Where:

- e is the base of natural logarithms

²⁰ The national average observed score is calculated using the LTCH stay as the unit of analysis.

- X is a linear combination of the constant and the logistic regression coefficients times the covariate scores (from Formula [2], below)

$$[2] X = \beta_0 + \beta_1 (COV_1) + \beta_2 (COV_2) + \beta_3 (COV_3) + \beta_4 (COV_4)$$

$$[3] \text{Probability}(Y = 1) = \text{Logit}(X)$$

- Where:
 - Y identifies if the LTCH stay is part of the numerator count (i.e., triggering the quality measure: 1 = yes, 0 = no).
 - β_0 is the logistic regression constant or intercept.
 - β_1 is the logistic regression coefficient for the first covariate “functional limitation” and COV_1 is the LTCH stay-level covariate value.
 - β_2 is the logistic regression coefficient for the second covariate “bowel incontinence,” and COV_2 is the LTCH stay-level covariate value.
 - β_3 is the logistic regression coefficient for the third covariate “diabetes or peripheral vascular disease/peripheral artery disease (PVD/PAD)” and COV_3 is the LTCH stay-level covariate value.
 - β_4 is the logistic regression coefficient for the fourth covariate “low body mass index (BMI)” and COV_4 is the LTCH stay-level covariate value.

See **Appendix A**, [Table A-2](#) and the associated Risk-Adjustment Appendix File for the regression constant and coefficients.²¹ The regression constant and coefficients are values obtained through statistical logistic regression analysis. Please note that the iQIES QM and Provider Preview Reports use fixed regression constants and coefficients based on the target period stated in [Table A-2](#) and the Risk-Adjustment Appendix File.

4. Calculate the mean facility-level expected score (Step 4.1).

- 4.1 Once LTCH stay-level expected scores have been calculated, calculate the mean facility-level expected quality measure score as the mean of the facility’s LTCH stay-level expected scores.

5. Calculate the facility-level risk-adjusted score (Steps 5.1 through 5.3).

- 5.1 Calculate the facility-level risk-adjusted score based on the:
 - Facility-level observed quality measure score (Steps 1.1 through 1.2)
 - Mean facility-level expected quality measure score (Step 4.1)
 - National average observed quality measure score (Steps 2.1 through 2.3)
 - The calculation of the risk-adjusted score uses the following equation:

²¹ The regression constant (intercept) and coefficient values have been rounded to four decimal places. When applying these values to the equation to calculate facility-level QM scores, these intercept and coefficient values should be used; do not round to fewer than four decimal places. This is to ensure consistency and accuracy of measure calculations.

$$[4] Adj = \frac{1}{1 + e^{-y}}$$

Where:

- *e* is the base of natural logarithms
- *Adj* is the facility-level risk-adjusted quality measure score
- *y* is the product of the following formula:

$$[5] y = \ln\left(\frac{Obs}{1 - Obs}\right) - \ln\left(\frac{Exp}{1 - Exp}\right) + \ln\left(\frac{Nat}{1 - Nat}\right)$$

Where:

- *Obs* is the facility-level observed quality measure score
 - *Exp* is the mean facility-level expected quality measure score
 - *Nat* is the national average observed quality measure score
 - *Ln* indicates a natural logarithm
- 5.2 Multiply the risk-adjusted score (*Adj*) by 100 and round the percent value to one decimal place.
- 5.2.1 If the digit in the second decimal place is 5 or greater, add 1 to the first decimal place, otherwise leave the first decimal place unchanged.
- 5.2.2 Drop all of the digits following the first decimal place.
- 5.3 Facility-level recoding instructions.
- 5.3.1 If the facility-level observed score (Step 1) equals 0, then the facility-level observed percent and the facility-level risk-adjusted percent values are set to 0.0.
- 5.3.2 If the facility-level observed score (Step 1) equals 1, then the facility-level observed percent and the facility-level risk-adjusted percent values are set to 100.0.

National Average Calculation for Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury (CMS ID: L021.01)

To calculate the LTCH stay-level (i.e. prevalence) national average, refer to Step 2 under the iQIES QM Report Measure Calculations for this measure.

Section 6.2: Application of Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay) (NQF #0674) (CMS ID: L012.01)

iQIES Review and Correct Report Measure Calculations for Application of Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay) (NQF #0674) (CMS ID: L012.01)

Since this measure is not risk-adjusted or stratified, only the facility-level observed score is computed and the following steps can be applied to both the iQIES Review and Correct Report measure calculation and the iQIES QM report measure calculation. Using the measure specifications from [Table 7-2](#), the following steps are used to calculate the measure.

- 1. Identify excluded LTCH stays (Step 1.1):** LTCH stay is excluded if the number of falls with major injury was not coded (J1900C (Falls with Major Injury) = [-]) for the planned/unplanned, Discharge assessments or Expired Records.
- 2. Determine the denominator count.** Determine the total number of LTCH stays with a planned or unplanned Discharge assessment or Expired Record; i.e., A0250 = [10, 11 or 12] in the measure target period, which do not meet the exclusion criteria.
- 3. Determine the numerator count.** Determine the total number of LTCH stays with a planned or unplanned Discharge assessment or Expired Record during the selected time window that recorded one or more falls that resulted in major injury (J1900C = [1] or [2]).
- 4. Calculate the facility-level observed score.** Divide the facility's numerator count (Step 3) by its denominator count (Step 2) to obtain the facility-level observed score and then multiply by 100 to obtain a percent value.
- 5. Round the percent value to one decimal place.**
 - 5.1 If the digit in the second decimal place is 5 or greater, add 1 to the first decimal place, otherwise leave the first decimal place unchanged.
 - 5.2 Drop all of the digits following the first decimal place.

iQIES QM Report Measure Calculations for Application of Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay) (NQF #0674) (CMS ID: L012.01)

As previously stated, this measure is not risk-adjusted or stratified. The steps to calculate the iQIES Review and Correct Report can be applied to calculate the iQIES QM Report. Follow the steps provided above for the iQIES QM Report measure calculations for the Application of Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay) (NQF #0674) (CMS ID: L012.01).

National Average Calculation for Application of Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay) (NQF #0674) (CMS ID: L012.01)

Use the following steps to calculate the LTCH stay-level (i.e. prevalence) national average:

1. Determine the total number of LTCH stays in the nation after applying the exclusion criteria. This is the denominator for the national average.

2. Identify LTCH stays in the denominator of the national average that are included in the numerator for this measure. This is the numerator for the national average.
3. Divide the numerator (Step 2) by the denominator (Step 1) then multiply by 100 and round the percent value to one decimal place to obtain the national average.
 - a. If the digit in the second decimal place is 5 or greater, add 1 to the first decimal place, otherwise leave the first decimal place unchanged.
 - b. Drop all of the digits following the first decimal place.

Section 6.3: Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility among Patients Requiring Ventilator Support (NQF #2632) (CMS ID: L011.05)

iQIES Review and Correct Report Measure Calculations for Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility among Patients Requiring Ventilator Support (NQF #2632) (CMS ID: L011.05)

For the Review and Correct Reports, only the facility-level observed score is computed; the facility's risk-adjusted score is not reported. Using the definitions in [Table 7-3](#), the following steps are used to calculate the measure.

1. Calculate the admission mobility score (Steps 1.1 through 1.2) using the admission mobility items and valid codes, identified below:

The eight admission mobility items used for admission mobility score calculations are:

- GG0170A1. Roll left and right
- GG0170B1. Sit to lying
- GG0170C1. Lying to sitting on side of bed
- GG0170D1. Sit to stand
- GG0170E1. Chair/bed-to-chair transfer
- GG0170F1. Toilet transfer
- GG0170J1. Walk 50 feet with two turns
- GG0170K1. Walk 150 feet

Valid codes and code definitions for the coding of the admission mobility items are:

- 06 – Independent
- 05 – Setup or clean-up assistance
- 04 – Supervision or touching assistance
- 03 – Partial/moderate assistance
- 02 – Substantial/maximal assistance
- 01 – Dependent
- 07 – Patient refused
- 09 – Not applicable
- 10 – Not attempted due to environmental limitations
- 88 – Not attempted due to medical condition or safety concerns
- ^ – Skip pattern (only valid for items GG0170J1 through GG0170K1)
- – – Not assessed/no information (dash)

1.1 To obtain the admission mobility score, use the following procedure:

- If code is between 01 and 06, then use code as the score.
- If code is 07, 09, 10, or 88, then recode to 01 and use this code as the score.
- If the mobility item is skipped (^), dashed (-), or missing, then recode to 01 and use this code as the score.

1.2 Sum the scores of the eight admission mobility items to create an admission mobility score for each LTCH stay. The admission mobility score can range from 8 – 48,

with a higher score indicating greater functional ability. A score of 48 represents a score of 6 (independence) for all 8 mobility items.

2. Calculate the discharge mobility score (Steps 2.1 through 2.2) using the discharge mobility items and valid codes, identified below:

The eight discharge mobility items used for discharge mobility score calculations are:

- GG0170A3. Roll left and right
- GG0170B3. Sit to lying
- GG0170C3. Lying to sitting on side of bed
- GG0170D3. Sit to stand
- GG0170E3. Chair/bed-to-chair transfer
- GG0170F3. Toilet transfer
- GG0170J3. Walk 50 feet with two turns
- GG0170K3. Walk 150 feet

Valid codes and code definitions for the coding of the discharge mobility items are:

- 06 – Independent
- 05 – Setup or clean-up assistance
- 04 – Supervision or touching assistance
- 03 – Partial/moderate assistance
- 02 – Substantial/maximal assistance
- 01 – Dependent
- 07 – Patient refused
- 09 – Not applicable
- 10 – Not attempted due to environmental limitations
- 88 – Not attempted due to medical condition or safety concerns
- ^ – Skip pattern (only valid for items GG0170J3 through GG0170K3)
- - – Not assessed/no information

2.1 To obtain the score, use the following procedure:

- If code is between 01 and 06, then use code as the score.
- If code is 07, 09, 10, or 88, then recode to 01 and use this code as the score.
- If the mobility item is skipped (^), dashed (-), or missing, then recode to 01 and use this code as the score.

2.2 Sum the scores of the eight discharge mobility items to create a discharge mobility score for each LTCH stay. The discharge mobility score can range from 8 – 48, with a higher score indicating greater functional ability. A score of 48 represents a score of 6 (independence) for all 8 mobility items.

3. Identify excluded LTCH stays. LTCH stays from Step 1 are excluded if any of the following are true (Step 3.1 through 3.7).

3.1 Incomplete LTCH stays:

- 3.1.1** Patient was discharged (A2105) to a Short-Term General Hospital (A2105 = [04]), Inpatient Psychiatric Facility (A2105 = [07]), or Critical Access Hospital (CAH) (A2105 = [11]).

- 3.1.2 Patient transferred to another LTCH facility (A2105 = [05]).
- 3.1.3 Patient discharged against medical advice (A1990 = [1]).
- 3.1.4 Patient had an unplanned discharge or expired (A0250 = [11, 12]). Note: discharges against medical advice are considered an unplanned discharge.
- 3.1.5 Length of stay is less than 3 days: Discharge Date (A0270) – Admission Date (A0220) < 3 days.
- 3.2 Patient is younger than 18 years: Truncate (Admission Date (A0220) – Birth Date (A0900)). Use exact values in calculating age; do not round to nearest whole number.
- 3.3 Patient is discharged to hospice (A2105 = [09, 10]).
- 3.4 Patient is in a coma, persistent vegetative state, has complete tetraplegia, or locked-in syndrome.
 - 3.4.1 Items used to identify these LTCH stays (on admission assessment):
 - Comatose (B0100 = [1])
 - Complete Tetraplegia (I5101 = [1])
 - Locked-In State (I5460 = [1])
 - Severe Anoxic Brain Damage, Cerebral Edema, or Compression of Brain (I5470 = [1])
- 3.5 Patient has a progressive neurological condition, including amyotrophic lateral sclerosis, multiple sclerosis, Parkinson's disease, or Huntington's chorea.
 - 3.5.1 Items used to identify these LTCH stays (on admission assessment):
 - Multiple Sclerosis (I5200 = [1])
 - Huntington's Disease (I5250 = [1])
 - Parkinson's Disease (I5300 = [1])
 - Amyotrophic Lateral Sclerosis (I5450 = [1])
- 3.6 Patient is coded as independent on all mobility items on admission.
 - 3.6.1 Items used to identify these LTCH stays :
 - Roll left and right (GG0170A1 = [06])
 - Sit to lying (GG0170B1 = [06])
 - Lying to sitting on side of bed (GG0170C1 = [06])
 - Sit to stand (GG0170D1 = [06])
 - Chair/bed-to-chair transfer (GG0170E1 = [06])
 - Toilet transfer (GG0170F1 = [06])
 - Walk 50 feet with two turns (GG0170J1 = [06])
 - Walk 150 feet (GG0170K1 = [06])
- 4. Identify and count the included LTCH stays (target population).** Calculate the total number of LTCH stays with the discharge date in the measure target period and require ventilator support at the time of LTCH admission. LTCH stays not requiring ventilator

support are excluded from this measure. Identify LTCH stays requiring invasive ventilator support at the time of LTCH admission using the following items:

For LTCH stays with admission date from 07/01/2018 through 09/30/2022:

- Invasive Mechanical Ventilation Support: weaning (O0150A = [1]) or
- Invasive Mechanical Ventilation Support: non-weaning (O0150A = [2])

For LTCH stays with admission date on or after 10/01/2022:

- Invasive Mechanical Ventilation Support: (O0150A = [1])

- 5. Calculate the observed change in mobility score for each LTCH stay.** For each LTCH stay included, calculate the difference between the discharge mobility score (Step 2) and admission mobility score (Step 1) to create a change in mobility score for each LTCH stay.
- 6. Calculate the facility-level average observed change in mobility score.** Calculate an average observed change in mobility score for each LTCH as the mean of the observed change in mobility scores for all LTCH stays in the facility that are not excluded.
- 7. Round the value to one decimal place.**
 - 7.1 If the digit in the second decimal place is 5 or greater, add 1 to the first decimal place, otherwise leave the first decimal place unchanged.
 - 7.2 Drop all of the digits following the first decimal place.

iQIES QM Report Measure Calculations for Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility among Patients Requiring Ventilator Support (NQF #2632) (CMS ID: L011.05)

This measure is risk-adjusted for the iQIES QM Reports. Using the definitions in [Table 7-3](#), the following steps are used to calculate the measure.

1. Calculate the facility-level average observed change in mobility score (Steps 1.1 through 1.2).
 - 1.1 To calculate the facility-level average observed change in mobility score, complete Steps 1 – 6 from **Chapter 6, Section 6.3**, “iQIES Review and Correct Report Measure Calculations for NQF #2632.”
 - 1.2 Do not round to the nearest first decimal place. All rounding will be done at the end of the measure calculation
- 2. Calculate the national average change in mobility score²²** as the mean of the observed change in mobility scores for all LTCH stays calculated from Steps 1 – 5 from **Chapter 6, Section 6.3**. This will be used in Step 4 to calculate the risk-adjusted average change in mobility score.

Note: Because there is limited public accessibility to national assessment data, this document provides a national average observed score based on the reporting period of the regression intercept and coefficients. The national average observed score can be seen in the Risk-Adjustment Appendix File [on the LTCH QRP Measures Information website](#). Please note

²² The national average observed score is calculated using the LTCH stay as the unit of analysis.

that, depending on the reporting period and time of calculation, the national average observed score used in the iQIES QM Report, Provider Preview Report, and on public display on the Compare Website may vary from the national average observed score provided by these documents.

3. Calculate the facility-level expected change in mobility score (Steps 3.1 through 3.2).

3.1 For each LTCH stay, use the intercept and regression coefficients to calculate the expected change in mobility score using the formula below

$$[1] \text{ Expected change in mobility score} = \beta_0 + \beta_1(COV_1) + \dots + \beta_n(COV_n)$$

Where:

- **Expected change in mobility score** identifies the expected change in mobility score in ventilated patients for each LTCH as the mean of the expected change in mobility scores for all LTCH stays included in the measure
- β_0 is the regression constant or intercept
- β_1 through β_n are the regression coefficients for the covariates (see Risk-Adjustment Appendix File).

See **Appendix A, Table A-3** and the associated Risk-Adjustment Appendix File for the regression constant and coefficients as well as detailed LCDS coding for each risk adjuster.²³ The regression constant and regression coefficients are values obtained through regression analysis. Please note that the iQIES QM and Provider Preview Reports use fixed regression constants and coefficients based on the target period stated in **Table A-3** and the Risk-Adjustment Appendix File.

3.2 Calculate an average expected change in mobility score for each LTCH as the mean of the expected change in mobility scores for all LTCH stays in the facility.

4. Calculate the risk-adjusted average change in mobility score (Steps 4.1 through 4.2)

4.1 **Calculate the difference** between the facility-level average observed change in score (Step 1) and the facility-level average expected change in score (Step 3) to create an observed minus expected difference.

- A value that is 0 indicates the observed score and expected score are equal.
- A value that is greater than 0 indicates that the observed change in score is higher (better) than the expected score.
- A value that is less than 0 indicates that the observed change in score is lower (worse) than the expected score.

²³ The regression constant (intercept) and coefficient values have been rounded to four decimal places. When applying these values to the equation to calculate facility-level QM scores, these intercept and coefficient values should be used; do not round to fewer than four decimal places. This is to ensure consistency and accuracy of measure calculations.

4.2 **Add** each LTCH's difference score to the national average change in mobility score (Step 2). This is the risk-adjusted average mobility score.

5. Round the value to one decimal place.

5.1 If the digit in the second decimal place is 5 or greater, add 1 to the first decimal place, otherwise leave the first decimal place unchanged.

5.2 Drop all of the digits following the first decimal place.

**National Average Calculation for Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility among Patients Requiring Ventilator Support (NQF #2632)
(CMS ID: L011.05)**

To calculate the LTCH stay-level (i.e. prevalence) national average, refer to Step 2 under the iQIES QM Report Measure Calculations for this measure.

Section 6.4: Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function (NQF #2631²⁴) (CMS ID: L009.03)

iQIES Review and Correct Report Measure Calculations for Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function (NQF #2631) (CMS ID: L009.03)

Since this measure is not risk-adjusted or stratified, only the facility-level observed score is computed and the following steps can be applied to both the iQIES Review and Correct Report measure calculation and the iQIES QM Report measure calculation. Using the definitions from [Table 7-4](#), the following steps are used to calculate the measure.

1. Identify LTCH stays as being complete or incomplete LTCH stays (Steps 1.1 and 1.2).

1.1 Incomplete LTCH stays are identified based on:

1.1.1 Reason for Assessment (A0250)

11 = Unplanned discharge (Note: discharges against medical advice are considered an unplanned discharge)

12 = Expired

OR

1.1.2 Discharged Against Medical Advice (A1990)

1 = Yes

OR

1.1.3 Discharge Location (A2105)

04 = Short-Term General Hospital (acute hospital, IPPS)

05 = Long-Term Care Hospital (LTCH)

07 = Inpatient Psychiatric Facility (psychiatric hospital or unit)

11 = Critical Access Hospital (CAH)

OR

1.1.4 Length of stay is less than 3 days: Discharge Date (A0270) – Admission Date (A0220) < 3 days.

1.2 LTCH stays not meeting the criteria for incomplete LTCH stays will be considered complete LTCH stays.

2. Both types of LTCH stays are included in the denominator, but the specifications vary by complete or incomplete LTCH stays for the numerator.

2.1 Complete LTCH stays. For patients with complete LTCH stays, each functional assessment item listed below must have a valid numeric score indicating the patient's status [01 – 06], or a valid code indicating the activity was not attempted (i.e. GG0130A1

²⁴ The Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function measure is no longer NQF endorsed as of 11/16/2021.

= [07, 09, 10, 88]. All three of the following criteria are required for inclusion in the numerator:

- 2.1.1 A valid numeric score indicating the patient's functional status [01 – 06], a valid code indicating the activity was not attempted (e.g. GG0130A1 = [07, 09, 10, 88]) for each of the functional assessment items, or a “^” indicating items affected by the skip pattern on the Admission assessment. All admission functional assessment items (refer to 2.3) must be completed; and
- 2.1.2 A valid numeric score [01 – 06] or a valid code indicating the activity was not attempted (e.g. GG0130A2 = [07, 09, 10, 88]) for a discharge goal indicating the patient's expected level of independence, for at least one self-care or mobility item on the Admission assessment (refer to 2.5); and
- 2.1.3 A valid numeric score indicating the patient's functional status [01 – 06], a valid code indicating the activity was not attempted (e.g. GG0130A3 = [07, 09, 10, 88]) for each of the functional assessment items, or a “^” indicating items affected by the skip pattern on the Discharge assessment. All discharge functional assessment items (refer to 2.6) must be completed.

2.2 Incomplete LTCH stays. For patients with incomplete LTCH stays, collection of discharge functional status data might not be feasible. Each functional assessment item listed below must have a valid numeric score indicating the patient's status [01 – 06], or a valid code indicating the activity was not attempted (e.g. GG0130A1 = [07, 09, 10, 88]). The following two criteria are required for inclusion in the numerator:

- 2.2.1 A valid numeric score indicating the patient's functional status [01 – 06], a valid code indicating the activity was not attempted (i.e. GG0130A1 = [07, 09, 10, 88]) for each of the functional assessment items, or a “^” indicating items affected by the skip pattern on the Admission assessment. All admission functional assessment items (refer to 2.3) must be completed; and
- 2.2.2 A valid numeric score [01 – 06] or a valid code indicating the activity was not attempted (e.g. GG0130A2 = [07, 09, 10, 88]) for a discharge goal indicating the patient's expected level of independence, for at least one self-care or mobility item on the Admission assessment (refer to 2.4).

2.3 Admission Functional Performance items included in this measure:

The self-care (GG0130) items are:

- GG0130A1. Eating
- GG0130B1. Oral hygiene
- GG0130C1. Toileting hygiene
- GG0130D1. Wash upper body

The mobility (GG0170) items are:

- GG0170A1. Roll left and right
- GG0170B1. Sit to lying
- GG0170C1. Lying to sitting on side of bed
- GG0170D1. Sit to stand

- GG0170E1. Chair/bed-to-chair transfer
- GG0170F1. Toilet transfer
- GG0170I1. Walk 10 feet

For patients who are walking, as indicated by GG0170I1 = 01, 02, 03, 04, 05, or 06, include items:

- GG0170J1. Walk 50 feet with two turns
- GG0170K1. Walk 150 feet

For patients who are not walking as indicated by GG0170I1 = 07, 09, 10, or 88, GG0170J1 and GG0170K1 are skipped.

For patients who use a wheelchair as indicated by GG0170Q1 = 1, include items:

- GG0170R1. Wheel 50 feet with two turns
- GG0170RR1. Indicate the type of wheelchair/scooter used
- GG0170S1. Wheel 150 feet
- GG0170SS1. Indicate the type of wheelchair/scooter used

For patients who do not use a wheelchair as indicated by GG0170Q1 = 0, GG0170R1, GG0170RR1, GG0170S1, and GG0170SS1 are skipped.

The following valid scores/codes for the self-care (GG0130) and mobility (GG0170) admission performance items are accepted for this quality measure:

- 06 – Independent
- 05 – Setup or clean-up assistance
- 04 – Supervision or touching assistance
- 03 – Partial/moderate assistance
- 02 – Substantial/maximal assistance
- 01 – Dependent
- 07 – Patient refused
- 09 – Not applicable
- 10 – Not attempted due to environmental limitations
- 88 – Not attempted due to medical condition or safety concerns
- ^ – Skip pattern

Valid codes that indicate the type of wheelchair used (GG0170RR1):

- 1 – Manual
- 2 – Motorized
- ^ – Skip pattern

2.4 Other admission assessment items included in this measure:

The Hearing, Speech, and Vision (Section B) items are:

For patients who are comatose as indicated by B0100 = 1, BB0700, BB0800, and C1310 are skipped.

- BB0700. Expression of Ideas and Wants
- BB0800. Understanding Verbal Content

Valid codes for Expression of Ideas and Wants (BB0700) are:

- 4 – Expresses without difficulty
- 3 – Expresses with some difficulty
- 2 – Frequently exhibits difficulty with expressing needs and ideas
- 1 – Rarely/Never expresses or is very difficult to understand
- ^ – Skip pattern

Valid codes for Understanding Verbal Content (BB0800) are:

- 4 – Understands
- 3 – Usually understands
- 2 – Sometimes understands
- 1 – Rarely/Never understands
- ^ – Skip pattern

The Signs and Symptoms of Delirium (Section C) items are:

- C1310A. Acute Onset Mental Status Change
- C1310B. Inattention
- C1310C. Disorganized Thinking
- C1310D. Altered Level of Consciousness

Valid codes for Signs and Symptoms of Delirium item C1310A are:

- 0 – No
- 1 – Yes
- ^ – Skip pattern

Valid codes for Signs and Symptoms of Delirium items C1310B-D are:

- 0 – Behavior not present
- 1 – Behavior continuously present, does not fluctuate
- 2 – Behavior present, fluctuates (comes and goes, changes in severity)
- ^ – Skip pattern

The Bladder and Bowel (Section H) item is:

- H0350. Bladder Continence

Valid codes for Bladder Continence (H0350) are:

- 0 – Always continent
- 1 – Stress incontinence only
- 2 – Incontinent less than daily
- 3 – Incontinent daily
- 4 – Always incontinent
- 5 – No urine output
- 9 – Not applicable

2.5 Discharge Goal items reported on the Admission assessment included in this measure (a minimum of one goal must be reported):

The self-care (GG0130) items are:

- GG0130A2. Eating
- GG0130B2. Oral hygiene
- GG0130C2. Toileting hygiene
- GG0130D2. Wash upper body

The mobility (GG0170) items are:

- GG0170A2. Roll left and right
- GG0170B2. Sit to lying
- GG0170C2. Lying to sitting on side of bed
- GG0170D2. Sit to stand
- GG0170E2. Chair/bed-to-chair transfer
- GG0170F2. Toilet transfer
- GG0170I2. Walk 10 feet
- GG0170J2. Walk 50 feet with two turns
- GG0170K2. Walk 150 feet
- GG0170R2. Wheel 50 feet with two turns
- GG0170S2. Wheel 150 feet

The following valid scores/codes for the self-care (GG0130) and mobility (GG0170) discharge goal items are accepted for this quality measure:

- 06 – Independent
- 05 – Setup or clean-up assistance
- 04 – Supervision or touching assistance
- 03 – Partial/moderate assistance
- 02 – Substantial/maximal assistance
- 01 – Dependent
- 07 – Patient refused
- 09 – Not applicable
- 10 – Not attempted due to environmental limitations
- 88 – Not attempted due to medical condition or safety concerns

2.6 Discharge Functional Performance items included in this measure:

- The self-care (GG0130) items are:
- GG0130A3. Eating
- GG0130B3. Oral hygiene
- GG0130C3. Toileting hygiene
- GG0130D3. Wash upper body

The mobility (GG0170) items are:

- GG0170A3. Roll left and right
- GG0170B3. Sit to lying
- GG0170C3. Lying to sitting on side of bed
- GG0170D3. Sit to stand

- GG0170E3. Chair/bed-to-chair transfer
- GG0170F3. Toilet transfer
- GG0170I3. Walk 10 feet

For patients who are walking, as indicated by GG0170I3 = 01, 02, 03, 04, 05, or 06, include items:

- GG0170J3. Walk 50 feet with two turns
- GG0170K3. Walk 150 feet

For patients who are not walking as indicated by GG0170I3 = 07, 09, 10, or 88, GG0170J3 and GG0170K3 are skipped.

For patients who use a wheelchair as indicated by GG0170Q3=1, include items:

- GG0170R3: Wheel 50 feet with two turns
- GG0170RR3: Indicate the type of wheelchair/scooter used
- GG0170S3. Wheel 150 feet
- GG0170SS3. Indicate the type of wheelchair/scooter used

For patients who do not use a wheelchair as indicated by GG0170Q3=0, GG0170R3, GG0170RR3, GG0170S3, and GG0170SS3 are skipped.

The following valid scores/codes for the self-care (GG0130) and mobility (GG0170) discharge performance items are accepted for this quality measure:

- 06 – Independent
- 05 – Setup or clean-up assistance
- 04 – Supervision or touching assistance
- 03 – Partial/moderate assistance
- 02 – Substantial/maximal assistance
- 01 – Dependent
- 07 – Patient refused
- 09 – Not applicable
- 10 – Not attempted due to environmental limitations
- 88 – Not attempted due to medical condition or safety concerns
- ^ – Skip pattern

Valid codes for indicate the type of wheelchair/scooter used (GG0170RR3):

- 1 – Manual
- 2 – Motorized
- ^ – Skip pattern

2.7 Other discharge assessment items included in this measure:

The Hearing, Speech, and Vision (Section B) items are:

For patient who are comatose as indicated by B0100 = 1, BB0700, BB0800, and C1310 are skipped.

- BB0700. Expression of Ideas and Wants
- BB0800. Understanding Verbal Content

Valid codes for Expression of Ideas and Wants (BB0700) are:

- 4 – Expresses without difficulty
- 3 – Expresses with some difficulty
- 2 – Frequently exhibits difficulty with expressing needs and ideas
- 1 – Rarely/Never expresses or is very difficult to understand
- ^ – Skip pattern

Valid codes for Understanding Verbal Content (BB0800) are:

- 4 – Understands
- 3 – Usually understands
- 2 – Sometimes understands
- 1 – Rarely/Never understands
- ^ – Skip pattern

The Signs and Symptoms of Delirium (Section C) are:

- C1310A. Acute Onset Mental Status Change
- C1310B. Inattention
- C1310C. Disorganized Thinking
- C1310D. Altered Level of Consciousness

Valid codes for Signs and Symptoms of Delirium item C1310A are:

- 0 – No
- 1 – Yes
- ^ – Skip pattern

Valid codes for Signs and Symptoms of Delirium items C1310B-D are:

- 0 – Behavior not present
- 1 – Behavior continuously present, does not fluctuate
- 2 – Behavior present, fluctuates (comes and goes, changes in severity)
- ^ – Skip pattern

The Bladder and Bowel (Section H) item is:

- H0350. Bladder Continence

Valid codes for Bladder Continence (H0350) are:

- 0 – Always continent
- 1 – Stress incontinence only
- 2 – Incontinent less than daily
- 3 – Incontinent daily
- 4 – Always incontinent
- 5 – No urine output
- 9 – No applicable

3. Determine the denominator count. Count the total number of LTCH stays with a discharge date in the measure target period.

4. **Determine the numerator count.** The numerator for this quality measure is the number of LTCH stays with complete functional assessment data and at least one self-care or mobility goal from all complete (Step 2.1) and incomplete (Step 2.2) LTCH stays.
5. **Calculate the facility-level observed score.** Divide the facility's numerator count (Step 4) by its denominator count (Step 3) to obtain the facility-level observed score and then multiply by 100 to obtain a percent value.
6. **Round the percent value to one decimal place.**
 - 6.1 If the digit in the second decimal place is 5 or greater, add 1 to the first decimal place, otherwise leave the first decimal place unchanged.
 - 6.2 Drop all the digits following the first decimal place.

iQIES QM Report Measure Calculations for Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function (NQF #2631) (CMS ID: L009.03)

As previously stated, this measure is not risk-adjusted or stratified. The steps to calculate the iQIES Review and Correct Report can be applied to calculate the iQIES QM Report. Follow the steps provided above for the iQIES QM Report measure calculation for the Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function (NQF #2631) (CMS ID: L009.03).

National Average Calculation for Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function (NQF #2631) (CMS ID: L009.03)

Use the following steps to calculate the LTCH stay-level (i.e. prevalence) national average:

1. Determine the total number of LTCH stays in the nation meeting the denominator criteria. This is the denominator for the national average.
2. Identify LTCH stays in the denominator of the national average that are included in the numerator for this measure. This is the numerator for the national average.
3. Divide the numerator (Step 2) by the denominator (Step 1) then multiply by 100 and round the percent value to one decimal place to obtain the national average.
 - a. If the digit in the second decimal place is 5 or greater, add 1 to the first decimal place, otherwise leave the first decimal place unchanged.
 - b. Drop all of the digits following the first decimal place.

Section 6.5: Application of Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function (NQF #2631²⁵) (CMS ID: L010.03)

iQIES Review and Correct Report Measure Calculations for Application of Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function (NQF #2631) (CMS ID: L010.03)

Since this measure is not risk-adjusted or stratified, only the facility-level observed score is computed and the following steps can be applied to both the iQIES Review and Correct Report and the iQIES QM report measure calculation. Using the definitions from [Table 7-5](#), the following steps are used to calculate the measure.

1. Identify LTCH stays as being complete or incomplete LTCH stays (Steps 1.1 and 1.2).

1.1 Incomplete LTCH stays are identified based on:

1.1.1 Reason for Assessment (A0250)

11 = Unplanned discharge (Note: Discharges against medical advice are considered an unplanned discharge.)
12 = Expired

OR

1.1.2 Discharged Against Medical Advice (A1990) 1 = Yes

OR

1.1.3 Discharge Location (A2105) 04 = Short-term general hospital (acute hospital, IPPS) 05 = Long-Term Care Hospital (LTCH) 07 = Inpatient Psychiatric Facility (psychiatric hospital or unit) 11 = Critical Access Hospital (CAH)

OR

1.1.4 Length of stay is less than 3 days: [A0270. Discharge Date] minus [A0220. Admission Date] < 3 days.

1.2 LTCH stays not meeting the criteria for incomplete LTCH stays will be considered complete LTCH stays.

2. Both types of LTCH stays are included in the denominator, but the specifications vary by complete or incomplete LTCH stays for the numerator.

2.1 Complete LTCH stays. For patients with complete LTCH stays, each functional assessment item listed below must have a valid numeric score indicating the patient's status [01 – 06], or a valid code indicating the activity was not attempted (i.e. GG0130A1

²⁵ This measure (L010.03) is an application of measure L009.03 and is not NQF endorsed.

= [07, 09, 10, 88]). All three of the following criteria are required for inclusion in the numerator:

- 2.1.1 A valid numeric score indicating the patient's functional status [01 – 06], a valid code indicating the activity was not attempted (e.g. GG0130A1 = [07, 09, 10, 88]) for each of the functional assessment items, or a “^” indicating items affected by the skip pattern on the Admission assessment. All admission functional assessment items (refer to 2.3 below) must be completed; and
- 2.1.2 A valid numeric score [01 – 06] or a valid code indicating the activity was not attempted (e.g. GG0130A2 = [07, 09, 10, 88]) for a discharge goal indicating the patient's expected level of independence, for at least one self-care or mobility item on the Admission assessment (refer to 2.4 below); and
- 2.1.3 A valid numeric score indicating the patient's functional status [01 – 06], a valid code indicating the activity was not attempted (e.g. GG0130A3 = [07, 09, 10, 88]) for each of the functional assessment items, or a “^” indicating items affected by the skip pattern on the Discharge assessment. All discharge functional assessment items (refer to 2.5 below) must be completed.

2.2 Incomplete LTCH stays. For patients with incomplete LTCH stays, collection of discharge functional status data might not be feasible. For the Admission assessment, each functional assessment item listed below must have a valid numeric score indicating the patient's status [01 – 06], or a valid code indicating the activity was not attempted (e.g. GG0130A1 = [07, 09, 10, 88]). The following two criteria are required for inclusion in the numerator:

- 2.2.1 A valid numeric score indicating the patient's functional status [01 – 06], a valid code indicating the activity was not attempted (e.g. GG0130A1 = [07, 09, 10, 88]) for each of the functional assessment items, or a “^” indicating items affected by the skip pattern on the Admission assessment. Complete admission functional assessment data (2.3 below); and
- 2.2.2 A valid numeric score [01 – 06] or a valid code indicating the activity was not attempted (e.g. GG0130A2 = [07, 09, 10, 88]) for a discharge goal indicating the patient's expected level of independence, for at least one self-care or mobility item on the admission assessment (refer to 2.4 below).

2.3 Admission Functional Performance items included in this measure:

The self-care (GG0130) items are:

- GG0130A1. Eating
- GG0130B1. Oral hygiene
- GG0130C1. Toileting hygiene

The mobility (GG0170) items are:

- GG0170B1. Sit to lying
- GG0170C1. Lying to sitting on side of bed
- GG0170D1. Sit to stand
- GG0170E1. Chair/bed-to-chair transfer
- GG0170F1. Toilet transfer

- GG0170I1. Walk 10 feet

For patients who are walking, as indicated by GG0170I1 = 01, 02, 03, 04, 05, or 06, include items:

- GG0170J1. Walk 50 feet with two turns
- GG0170K1. Walk 150 feet

For patients who are not walking as indicated by GG0170I1= 07, 09, 10, or 88, GG0170J1 and GG0170K1 are skipped.

For patients who use a wheelchair as indicated by GG0170Q1=1, include items:

- GG0170R1. Wheel 50 feet with two turns
- GG0170RR1. Indicate the type of wheelchair/scooter used
- GG0170S1. Wheel 150 feet
- GG0170SS1. Indicate the type of wheelchair/scooter used

For patients who do not use a wheelchair as indicated by GG0170Q1=0, GG0170R1, GG0170RR1, GG0170S1, and GG0170SS1 are skipped.

The following valid scores/codes for the self-care (GG0130) and mobility (GG0170) admission performance items are accepted for this quality measure:

- 06 – Independent
- 05 – Setup or clean-up assistance
- 04 – Supervision or touching assistance
- 03 – Partial/moderate assistance
- 02 – Substantial/maximal assistance
- 01 – Dependent
- 07 – Patient refused
- 09 – Not applicable
- 10 – Not attempted due to environmental limitations
- 88 – Not attempted due to medical condition or safety concerns
- ^ – Skip pattern

Valid codes for the type of wheelchair/scooter used (GG0170RR1 and GG0170SS1):

- 1 – Manual
- 2 – Motorized
- ^ – Skip pattern

2.4 Discharge Goal items reported on the admission assessment included in this measure (a minimum of one goal must be reported) are:

The self-care (GG0130) items are:

- GG0130A2. Eating
- GG0130B2. Oral hygiene
- GG0130C2. Toileting hygiene

The mobility (GG0170) items are:

- GG0170A2. Roll left and right
- GG0170B2. Sit to lying
- GG0170C2. Lying to sitting on side of bed
- GG0170D2. Sit to stand
- GG0170E2. Chair/bed-to-chair transfer
- GG0170F2. Toilet transfer
- GG0170G2. Car transfer
- GG0170I2. Walk 10 feet
- GG0170J2. Walk 50 feet with two turns
- GG0170K2. Walk 150 feet
- GG0170L2. Walking 10 feet on uneven surfaces
- GG0170M2. 1 step (curb)
- GG0170N2. 4 steps
- GG0170O2. 12 steps
- GG0170P2. Picking up object
- GG0170R2. Wheel 50 feet with two turns
- GG0170S2. Wheel 150 feet

The following valid scores/codes for the self-care (GG0130) and mobility (GG0170) discharge goal items are accepted for this quality measure:

- 06 – Independent
- 05 – Setup or clean-up assistance
- 04 – Supervision or touching assistance
- 03 – Partial/moderate assistance
- 02 – Substantial/maximal assistance
- 01 – Dependent
- 07 – Patient refused
- 09 – Not applicable
- 10 – Not attempted due to environmental limitations
- 88 – Not attempted due to medical condition or safety concerns

2.5 Discharge Functional Performance items included in this measure:

The self-care (GG0130) items are:

- GG0130A3. Eating
- GG0130B3. Oral hygiene
- GG0130C3. Toileting hygiene

The mobility (GG0170) items are:

- GG0170B3. Sit to lying
- GG0170C3. Lying to sitting on side of bed
- GG0170D3. Sit to stand
- GG0170E3. Chair/bed-to-chair transfer
- GG0170F3. Toilet transfer

- GG0170I3. Walk 10 feet

For patients who are walking, as indicated by GG0170I3 = 01, 02, 03, 04, 05, or 06, include items:

- GG0170J3. Walk 50 feet with two turns
- GG0170K3. Walk 150 feet

For patients who are not walking as indicated by GG0170I3= 07, 09, 10, or 88, GG0170J3 and GG0170K3 are skipped.

For patients who use a wheelchair as indicated by GG0170Q3=1, include items:

- GG0170R3. Wheel 50 feet with two turns
- GG0170RR3. Indicate the type of wheelchair/scooter used
- GG0170S3. Wheel 150 feet
- GG0170SS3. Indicate the type of wheelchair/scooter used

For patients who do not use a wheelchair as indicated by GG0170Q3=0, GG0170R3, GG0170RR3, GG0170S3, and GG0170SS3 are skipped.

The following valid scores/codes for the self-care (GG0130) or mobility (GG0170) discharge performance items are accepted for this quality measure:

- 06 – Independent
- 05 – Setup or clean-up assistance
- 04 – Supervision or touching assistance
- 03 – Partial/moderate assistance
- 02 – Substantial/maximal assistance
- 01 – Dependent
- 07 – Patient refused
- 09 – Not applicable
- 10 – Not attempted due to environmental limitations
- 88 – Not attempted due to medical condition or safety concerns
- ^ – Skip pattern

Valid codes for the type of wheelchair/scooter used (GG0170RR3 and GG0170SS3):

- 1 – Manual
- 2 – Motorized
- ^ – Skip pattern

- 3. Determine the denominator count.** Count the total number of LTCH stays with a discharge date in the measure target period.
- 4. Determine the numerator count.** The numerator for this quality measure is the number of LTCH stays with complete functional assessment data and at least one self-care or mobility goal. The counts from Step 2.1 (complete LTCH stays) and from Step 2.2 (incomplete LTCH stays) are summed. This sum is the numerator count.
- 5. Calculate the facility-level observed score.** Divide the facility's numerator count (Step 4) by its denominator count (Step 3) to obtain the facility-level observed score and then multiply by 100 to obtain a percent value.

6. Round the percent value to one decimal place.

6.1 If the digit in the second decimal place is 5 or greater, add 1 to the first decimal place, otherwise leave the first decimal place unchanged.

6.2 Drop all the digits following the first decimal place.

iQIES QM Report Measure Calculations for Application of Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function (NQF #2631) (CMS ID: L010.03)

As previously stated, this measure is not risk-adjusted or stratified. The steps to calculate the iQIES Review and Correct Report can be applied to calculate the iQIES QM Report. Follow the steps provided above for the iQIES QM Report measure calculation for the Application of Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function (NQF #2631) (CMS ID: L010.03).

National Average Calculation for Application of Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function (NQF #2631) (CMS ID: L010.03)

Use the following steps to calculate the LTCH stay-level (i.e. prevalence) national average:

1. Determine the total number of LTCH stays in the nation meeting the denominator criteria. This is the denominator for the national average.
2. Identify LTCH stays in the denominator of the national average that are included in the numerator for this measure. This is the numerator for the national average.
3. Divide the numerator (Step 2) by the denominator (Step 1) then multiply by 100 and round the percent value to one decimal place to obtain the national average.
 - a. If the digit in the second decimal place is 5 or greater, add 1 to the first decimal place, otherwise leave the first decimal place unchanged.
 - b. Drop all of the digits following the first decimal place.

Section 6.6: Drug Regimen Review Conducted with Follow-Up for Identified Issues – PAC LTCH QRP (CMS ID: L020.01)

iQIES Review and Correct Report Measure Calculations for Drug Regimen Review Conducted with Follow-Up for Identified Issues – PAC LTCH QRP (CMS ID: L020.01)

Since this measure is not risk-adjusted or stratified, only the facility-level observed score is computed and the following steps can be applied to both the iQIES Review and Correct Report measure calculation and the iQIES QM Report measure calculation. Using the definitions from [Table 7-6](#), the following steps are used to calculate the measure.

- 1. Determine the denominator count.** Select any LTCH stays with a planned or unplanned Discharge assessment or Expired Record (A0250 = [10, 11, 12]) during the reporting period.
- 2. Determine the numerator count.**

Include the total number of LTCH stays in the numerator count if both of the following criteria (2.1 and 2.2) are met:

- 2.1 The facility conducted a drug regimen review on admission which resulted in one of the three following scenarios:

- 2.1.1 No potential and actual clinically significant medication issues were found during the review (N2001 = [0]); or
- 2.1.2 Potential and actual clinically significant medication issues were found during the review (N2001 = [1]) AND a physician (or physician-designee) was contacted and prescribed/recommended actions were completed by midnight of the next calendar day (N2003 = [1]); or
- 2.1.3 The patient was not taking any medications (N2001 = [9])

- 2.2 Appropriate follow-up occurred each time a potential or actual clinically significant medication issue was identified during the LTCH stay (N2005 = [1]); or no potential or actual clinically significant medications issues were identified since the admission or patient was not taking any medications (N2005 = [9]).

- 3. Calculate the facility-level observed score.** Divide the facility's numerator count (Step 2) by its denominator count (Step 1) to obtain the facility-level observed score; and then multiply by 100 to obtain a percent value.
- 4. Round the percent value to one decimal place.**
 - 4.1 If the digit in the second decimal place is 5 or greater, add 1 to the first decimal place, otherwise leave the first decimal place unchanged.
 - 4.2 Drop all the digits following the first decimal place.

iQIES QM Report Measure Calculations for Drug Regimen Review Conducted with Follow-Up for Identified Issues – PAC LTCH QRP (CMS ID: L020.01)

As previously stated, this measure is not risk-adjusted or stratified. The steps to calculate the iQIES Review and Correct Report can be applied to calculate the iQIES QM Report. Follow the steps provided above for the iQIES QM Report measure calculation for the Drug Regimen Review Conducted with Follow-Up for Identified Issues – PAC LTCH QRP (CMS ID: L020.01).

National Average Calculation for Drug Regimen Review Conducted with Follow-Up for Identified Issues – PAC LTCH QRP (CMS ID: L020.01)

Use the following steps to calculate the LTCH stay-level (i.e. prevalence) national average:

1. Determine the total number of LTCH stays in the nation meeting the denominator criteria. This is the denominator for the national average.
2. Identify LTCH stays in the denominator of the national average that are included in the numerator for this measure. This is the numerator for the national average.
3. Divide the numerator (Step 2) by the denominator (Step 1) then multiply by 100 and round the percent value to one decimal place to obtain the national average.
 - a. If the digit in the second decimal place is 5 or greater, add 1 to the first decimal place, otherwise leave the first decimal place unchanged.
 - b. Drop all of the digits following the first decimal place.

Section 6.7: Compliance with Spontaneous Breathing Trial (SBT) by Day 2 of the LTCH Stay (CMS ID: L022.02)

iQIES Review and Correct Report Measure Calculations for Compliance with Spontaneous Breathing Trial (SBT) by Day 2 of the LTCH Stay (CMS ID: L022.02)

Since this measure is not risk-adjusted or stratified, only the facility-level observed score is computed and the following steps can be applied to both the iQIES Review and Correct Report measure calculation and the iQIES QM Report measure calculation. Using the definitions from [Table 7-7](#), the following steps are used to calculate the measure.

1. Identify excluded LTCH stays (Steps 1.1 through 1.3).

For LTCH stays with admission date from 07/01/2018 through 09/30/2022:

- 1.1 LTCH stay is excluded if it is missing data to calculate the measure (O0150A = [-]).
- 1.2 LTCH stay is excluded if the patient is not on invasive mechanical ventilation support upon admission to the LTCH (O0150A = [0]).
- 1.3 LTCH stay is excluded if the patient is admitted to the LTCH during the reporting period, is on invasive mechanical ventilation support upon admission to the LTCH, and weaning attempts are not expected or anticipated at admission (O0150A = [2]).

For LTCH stays with admission date on or after 10/01/2022:

- 1.1 LTCH stay is excluded if it is missing data to calculate the measure (O0150A = [-] or O0150A2 = [-]).
- 1.2 LTCH stay is excluded if the patient is not on invasive mechanical ventilation support upon admission to the LTCH (O0150A = [0]).
- 1.3 LTCH stay is excluded if the patient is admitted to the LTCH during the reporting period, is on invasive mechanical ventilation support upon admission to the LTCH, and weaning attempts are not expected or anticipated at admission (O0150A=[1] AND O0150A2 = [0]).

This measure consists of two components which will be computed and reported separately:

- Component 1: Percentage of Patients Assessed for Readiness for SBT by Day 2 of the LTCH Stay
- Component 2: Percentage of Patients Ready for SBT Who Received SBT by Day 2 of the LTCH Stay

Component 1, Percentage of Patients Assessed for Readiness for SBT by Day 2 of LTCH Stay

2. Determine the denominator count for Component 1.

For LTCH stays with admission date from 07/01/2018 through 09/30/2022:

Of patients who were on invasive mechanical ventilation support upon admission to the LTCH, determine the total number of LTCH stays for which weaning attempts were expected or anticipated at admission (O0150A = [1]).

For LTCH stays with admission date on or after 10/01/2022:

Of patients who were on invasive mechanical ventilation support upon admission to the LTCH, determine the total number of LTCH stays for which weaning attempts were expected or anticipated at admission (O0150A = [1] AND O0150A2 = [1]).

3. Determine the numerator count for Component 1. Determine the total number of LTCH stays for which the Admission assessment indicates assessment for readiness for SBT by day 2 of the LTCH stay and which were also deemed medically ready for an SBT by day 2 of the LTCH stay or deemed medically unready, with documentation of reason(s).

- O0150B = [1], and
- O0150C = [1] or O0150D = [1]

4. Calculate the facility-level observed score for Component 1. Divide the facility's Component 1 numerator count (Step 3) by its Component 1 denominator count (Step 2).

5. Calculate the rounded percent value (Steps 5.1 through 5.3).

5.1 Multiply the facility-level observed score for Component 1 by 100 to obtain a percent value.

5.2 If the digit in the second decimal place is 5 or greater, add 1 to the first decimal place, otherwise leave the first decimal place unchanged.

5.3 Drop all of the digits following the first decimal place.

Component 2, Percentage of Patients Ready for SBT Who Received SBT by Day 2 of the LTCH Stay

6. Determine the denominator count for Component 2. Determine the total number of LTCH stays for which the Admission assessment indicates completed assessment for readiness for SBT by day 2 of the LTCH stay and which were also deemed medically ready for a SBT by day 2 of the LTCH stay. This is a subset of the Component 1 numerator calculated in Step 3 above.

- O0150B = [1], and
- O0150C = [1]

7. Determine the numerator count for Component 2. Determine the total number of LTCH stays for which the LTCH Admission assessment indicates SBT was performed by day 2 of the LTCH stay, (O0150E = [1]).

8. Calculate the facility-level observed score for Component 2. Divide the facility's Component 2 numerator count (Step 7) by its Component 2 denominator count (Step 6).

9. Calculate the rounded percent value (Steps 9.1 through 9.3).

- 9.1 Multiply the facility-level observed score for Component 2 by 100 to obtain a percent value.
- 9.2 If the digit in the second decimal place is 5 or greater, add 1 to the first decimal place, otherwise leave the first decimal place unchanged.
- 9.3 Drop all of the digits following the first decimal place.

iQIES QM Report Measure Calculations for Compliance with Spontaneous Breathing Trial (SBT) by Day 2 of the LTCH Stay (CMS ID: L022.02)

As previously stated, this measure is not risk-adjusted or stratified. The steps to calculate the iQIES Review and Correct Report can be applied to calculate the iQIES QM Report. Follow the steps provided above for the iQIES QM Report measure calculation for the Compliance with Spontaneous Breathing Trial (SBT) by Day 2 of the LTCH Stay (CMS ID: L022.02).

National Average Calculation for Compliance with Spontaneous Breathing Trial (SBT) by Day 2 of the LTCH Stay (CMS ID: L022.02)

Use the following steps to calculate the LTCH stay-level (i.e. prevalence) national average:

1. Determine the total number of LTCH stays in the nation after applying the exclusion criteria. This is the denominator for the national average.
2. Identify LTCH stays in the denominator of the national average that are included in the numerator for this measure. This is the numerator for the national average.
3. Divide the numerator (Step 2) by the denominator (Step 1) then multiply by 100 and round the percent value to one decimal place to obtain the national average.
 - a. If the digit in the second decimal place is 5 or greater, add 1 to the first decimal place, otherwise leave the first decimal place unchanged.
 - b. Drop all of the digits following the first decimal place.

Section 6.8: Ventilator Liberation Rate (CMS ID: L023.02)

iQIES Review and Correct Report Measure Calculations for Ventilator Liberation Rate (CMS ID: L023.02)

For the Review and Correct Reports, only the facility-level observed score is computed. Using the definitions in [Table 7-8](#), the following steps are used to calculate the measure.

1. Identify excluded LTCH stays (Steps 1.1 through 1.3).

For LTCH stays with admission date from 07/01/2018 through 09/30/2022:

- 1.1 LTCH stay is excluded if it is missing data to calculate the measure (O0150A = [-]).
- 1.2 LTCH stay is excluded if patient is not on invasive mechanical ventilation support upon admission to the LTCH (O0150A = [0]).
- 1.3 LTCH stay is excluded if the patient is admitted to the LTCH during the reporting period, is on invasive mechanical ventilation support upon admission to the LTCH, and weaning attempts are not expected or anticipated at admission (O0150A = [2]).

For LTCH stays with admission date on or after 10/01/2022:

- 1.1 LTCH stay is excluded if it is missing data to calculate the measure (O0150A = [-] or O0150A2 = [-]).
- 1.2 LTCH stay is excluded if the patient is not on invasive mechanical ventilation support upon admission to the LTCH (O0150A = [0]).
- 1.3 LTCH stay is excluded if the patient is admitted to the LTCH during the reporting period, is on invasive mechanical ventilation support upon admission to the LTCH, and weaning attempts are not expected or anticipated at admission (O0150A=[1] AND O0150A2 = [0]).

2. Determine the facility-level denominator count.

For LTCH stays with admission date from 07/01/2018 through 09/30/2022:

Determine the total number of LTCH stays for which the LTCH Admission assessment indicates that weaning attempts are expected or anticipated (O0150A = [1]).

For LTCH stay records with admission date on or after 10/01/2022:

Determine the total number of LTCH stays for which the LTCH admission assessment indicates that weaning attempts are expected or anticipated (O0150A = [1] AND O0150A2 = [1]).

3. **Determine the facility-level numerator count.** Determine the total number of LTCH stays for which the LTCH planned or unplanned Discharge assessment indicates the patient is alive and fully liberated (weaned), (O0200A = [1]).
4. **Calculate the facility-level observed score.** Divide the facility's numerator count (Step 3) by its denominator count (Step 2) to obtain the facility-level observed score.
5. **Calculate the rounded percent value** (Steps 5.1 through 5.3).

- 5.1 Multiply the facility-level observed score by 100 to obtain a percent value.
- 5.2 If the digit in the second decimal place is 5 or greater, add 1 to the first decimal place, otherwise leave the first decimal place unchanged.
- 5.3 Drop all of the digits following the first decimal place.

iQIES QM Report Measure Calculations for Ventilator Liberation Rate (CMS ID: L023.02)

This measure is risk-adjusted for the iQIES QM Reports and therefore an observed (i.e., not risk-adjusted) and a risk-adjusted value are reported. Using the definitions in [Table 7-8](#), the following steps are used to calculate the measure.

1. Calculate the facility-level observed score (Steps 1.1 through 1.2).

- 1.1 To calculate the facility-level observed score, complete Steps 1 – 4 from **Chapter 6, Section 6.8**, “iQIES Review and Correct Report Measure Calculations” for this measure.
- 1.2 Do not multiply by 100 or round to the nearest first decimal place. All rounding will be done at the end of the measure calculation.

2. Calculate the national average observed score²⁶ as the mean ventilator liberation rate for all LTCH stays calculated using Steps 1 – 3 from Chapter 6, Section 6.8. This will be used in Step 6 to calculate the facility-level risk-adjusted ventilator liberation rate.

Note: Because there is limited public accessibility to national assessment data, this document provides a national average observed score based on the reporting period of the regression intercept and coefficients. The national average observed score can be seen in the Risk-Adjustment Appendix File on the [LTCH QRP Measures website](#). Please note that, depending on the reporting period and time of calculation, the national average observed score used in the iQIES QM Report, Provider Preview Report, and on public display on the Compare Website may vary from the national average observed score provided by these documents.

3. Calculate the facility-level predicted ventilator liberation rate (Steps 3.1 through 3.4).

- 3.1 Determine the presence or absence of the measure covariates for each LTCH stay.
- 3.2 Using the covariate definitions in [Table 7-8](#), assign covariate values (COV), either ‘0’ for covariate condition not present or ‘1’ for covariate condition present, for each LTCH stay for each of the covariates as reported on the admission assessment.
- 3.3 Calculate the predicted score for each LTCH stay using the following formula:

$$[1] \text{ Predicted score} = \frac{1}{[1+e^{-X}]}$$

Where:

- **Predicted score** identifies the predicted probability of ventilator liberation for each LTCH stay

²⁶ The national average observed score is calculated using the LTCH stay as the unit of analysis.

- e is the base of natural logarithms
- X is calculated as follows:

$$[2] X = \alpha + \beta_1(COV_1) + \dots + \beta_n(COV_n)$$

$$[3] \alpha = \gamma + \mu$$

Where:

- **Predicted score** identifies the predicted probability of ventilator liberation for each LTCH stay
- α is the LTCH-specific regression constant or intercept
- β_1 through β_n are the regression coefficients for the covariates (see Risk-Adjustment Appendix File).
- γ is the adjusted average ventilator liberation rate across all LTCHs (see Risk-Adjustment Appendix File)
- μ is the LTCH-specific random effect (unique increment to the intercept associated with the LTCH; see Risk-Adjustment Appendix File)

See **Appendix A, Table A-4** and the associated Risk-Adjustment Appendix File for the regression constant and coefficients as well as detailed LCDS coding for each covariate. The regression constant, regression coefficients, and LTCH-specific intercepts are values obtained through hierarchical logistic regression analysis. Please note that the iQIES QM and Provider Preview Reports use fixed regression constants and coefficients based on the target period stated in **Table A-4**, and the associated Risk-Adjustment Appendix File.

3.4 Calculate the predicted ventilator liberation rate (pred_j) for each LTCH as the mean of the predicted score for all LTCH stays in the facility.

4. Calculate the facility-level expected ventilator liberation rate (Steps 4.1 through 4.4).

- 4.1 Determine the presence or absence of the measure covariates for each LTCH stay.
- 4.2 Using the covariate definitions in **Table 7-8**, assign covariate values (COV), either '0' for covariate condition not present or '1' for covariate condition present, for each LTCH stay for each of the covariates as reported on the admission assessment.
- 4.3 Calculate the expected score for each LTCH stay using the following formula:

$$[4] \text{ Expected score} = \frac{1}{[1 + e^{-Y}]}$$

Where:

- **Expected score** identifies the expected liberation probability of ventilator liberation for each LTCH stay
- e is the base of natural logarithms

- Y is calculated as follows:

$$[5] Y = \beta_0 + \beta_1(COV_1) + \dots + \beta_n(COV_n)$$

Where:

- β_0 is the logistic regression constant or intercept
- β_1 through β_n are the regression coefficients for the covariates (see Risk-Adjustment Appendix File).

See **Appendix A**, [Table A-5](#) and the associated Risk-Adjustment Appendix File for the regression constant and coefficients as well as detailed LCDS coding for each risk adjuster.²⁷ The regression constant and regression coefficients are values obtained through logistic regression analysis. Please note that the iQIES QM and Provider Preview Reports use fixed regression constants and coefficients based on the target period stated in [Table A-5](#) and the associated Risk-Adjustment Appendix File.

4.4 Calculate the expected ventilator liberation rate (exp_j) for each LTCH as the mean of the expected score for all LTCH stays in the facility.

5. **Calculate the facility-level standardized risk ratio.** Calculate the facility-level standardized risk ratio (SRR_j) using the following equation:

$$SRR_j = \frac{pred_j}{exp_j}$$

Where:

- $pred_j$ = the predicted ventilator liberation rate for each LTCH, as calculated in Step 3
 - exp_j = the expected ventilator liberation rate for each LTCH, as calculated in Step 4.
6. **Calculate the LTCH risk-adjusted ventilator liberation rate.** Calculate the LTCH risk-adjusted ventilator liberation rate by multiplying the facility-level standardized risk ratio (Step 5) by the national average observed score (Step 2).
 7. Calculate the rounded percent value (Steps 7.1 through 7.3).
 - 7.1 Multiply the LTCH risk-adjusted ventilator liberation rate by 100 to obtain a percent value.
 - 7.2 If the digit in the second decimal place is 5 or greater, add 1 to the first decimal place, otherwise leave the first decimal place unchanged.
 - 7.3 Drop all of the digits following the first decimal place.

National Average Calculation for Ventilator Liberation Rate (CMS ID: L023.02)

To calculate the LTCH stay-level (i.e. prevalence) national average, refer to Step 2 under the iQIES QM Report Measure Calculations for this measure.

²⁷ The regression constant (intercept) and coefficient values have been rounded to four decimal places. When applying these values to the equation to calculate facility-level QM scores, these intercept and coefficient values should be used; do not round to fewer than four decimal places. This is to ensure consistency and accuracy of measure calculations.

Section 6.9: Transfer of Health Information to Provider – Post Acute Care (PAC) (CMS ID: L025.01)

iQIES Review and Correct Report Measure Calculations for Transfer of Health Information to Provider – Post Acute Care (PAC) (CMS ID: L025.01)

Since this measure is not risk-adjusted or stratified, only the facility-level observed score is computed and the following steps can be applied to both the iQIES Review and Correct Report measure calculation and the iQIES QM Report measure calculation. Using the definitions from [Table 7-9](#), the following steps are used to calculate the measure.

- 1. Determine the denominator count.** Select all LTCH stays regardless of payer within the reporting period with a planned/unplanned discharge to a subsequent provider as determined by discharge location (Item A2105= [02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12]).
- 2. Determine the numerator count.** Include the total number of LTCH stays in the numerator count if a reconciled medication list was transferred (A2121 = [1]).
- 3. Calculate the facility-level observed score.** Divide the facility's numerator count (step 2) by its denominator count (step 1) to obtain the facility-level observed score and then multiply by 100 to obtain a percent value.
- 4. Round the percent value to one decimal place.**
 - a. If the digit in the second decimal place is 5 or greater, add 1 to the first decimal place, otherwise leave the first decimal place unchanged.
 - b. Drop all the digits following the first decimal place.

iQIES QM Report Measure Calculations for Transfer of Health Information to Provider – Post Acute Care (PAC) (CMS ID: L025.01)

As previously stated, this measure is not risk-adjusted or stratified. The steps to calculate the iQIES Review and Correct Report can be applied to calculate the iQIES QM Report. Follow the steps provided above for the iQIES QM Report measure calculation for the Transfer of Health Information to Provider (CMS ID: L025.01).

National Average Calculation for Transfer of Health Information to Provider – Post Acute Care (PAC) (CMS ID: L025.01)

Use the following steps to calculate the LTCH stay-level (i.e. prevalence) national average:

1. Determine the total number of LTCH stays in the nation meeting the denominator criteria. This is the denominator for the national average.
2. Identify LTCH stays in the denominator of the national average that are included in the numerator for this measure. This is the numerator for the national average.
3. Divide the numerator (Step 2) by the denominator (Step 1) then multiply by 100 and round the percent value to one decimal place to obtain the national average.
 - a. If the digit in the second decimal place is 5 or greater, add 1 to the first decimal place, otherwise leave the first decimal place unchanged.
 - b. Drop all of the digits following the first decimal place.

Section 6.10: Transfer of Health Information to Patient - Post Acute Care (PAC) (CMS ID: L026.02)

iQIES Review and Correct Report Measure Calculations for Transfer of Health Information to Patient – Post Acute Care (PAC) (CMS ID: L026.02)

Since this measure is not risk-adjusted or stratified, only the facility-level observed score is computed and the following steps can be applied to both the iQIES Review and Correct Report measure calculation and the iQIES QM Report measure calculation. Using the definitions from [Table 7-10](#), the following steps are used to calculate the measure.

- 1. Determine the denominator count.** Select all LTCH stays regardless of payer within the reporting period with a planned/unplanned discharge to Home/Community (private home/apartment, board and care home, assisted living, group home, transitional living, or other residential arrangements) as determined by discharge location (Item A2105= [01, 99]).
- 2. Determine the numerator count.** Include the total number of LTCH stays in the numerator count if a reconciled medication list was provided to the patient, family, and/or caregiver. (A2123 = [1]).
- 3. Calculate the facility-level observed score.** Divide the facility's numerator count (step 2) by its denominator count (step 1) to obtain the facility-level observed score and then multiply by 100 to obtain a percent value.
- 4. Round the percent value to one decimal place.**
 - If the digit in the second decimal place is 5 or greater, add 1 to the first decimal place, otherwise leave the first decimal place unchanged.
 - Drop all the digits following the first decimal place.

iQIES QM Report Measure Calculations for Transfer of Health Information to Patient – Post Acute Care (PAC) (CMS ID: L026.02)

As previously stated, this measure is not risk-adjusted or stratified. The steps to calculate the iQIES Review and Correct Report can be applied to calculate the iQIES QM Report. Follow the steps provided above for the iQIES QM Report measure calculation for the Transfer of Health Information to Patient (CMS ID: L026.02).

National Average Calculation for Transfer of Health Information to Patient – Post Acute Care (PAC) (CMS ID: L026.02)

Use the following steps to calculate the LTCH stay-level (i.e. prevalence) national average:

- Determine the total number of LTCH stays in the nation meeting the denominator criteria. This is the denominator for the national average.
- Identify LTCH stays in the denominator of the national average that are included in the numerator for this measure. This is the numerator for the national average.
- Divide the numerator (Step 2) by the denominator (Step 1) then multiply by 100 and round the percent value to one decimal place to obtain the national average.
 - If the digit in the second decimal place is 5 or greater, add 1 to the first decimal place, otherwise leave the first decimal place unchanged.
 - Drop all of the digits following the first decimal place.

Chapter 7

Measure Logic Specifications for Assessment-Based Quality Measures (LTCH CARE Data Set)

Table 7-1
Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury
(CMS ID: L021.01)²⁸

Measure Description
This measure reports the percentage of LTCH stays with Stage 2-4 pressure ulcers, or unstageable pressure ulcers due to slough/eschar, non-removable dressing/device, or deep tissue injury, that are new or worsened since admission. The measure is calculated by review of a patient's discharge assessment for reports of Stage 2-4 pressure ulcers, or unstageable pressure ulcers due to slough/eschar, non-removable dressing/device, or deep tissue injury, that were not present or were at a lesser stage at the time of admission.
Measure Specifications ²⁹
<p>Numerator</p> <p>The numerator is the total number of stays for which the Discharge assessment (A0250 = [10, 11]) indicates one or more new or worsened Stage 2-4 pressure ulcers, or unstageable pressure ulcers compared to admission:</p> <ol style="list-style-type: none"> 1. Stage 2 (M0300B1) - (M0300B2) > 0, OR 2. Stage 3 (M0300C1) - (M0300C2) > 0, OR 3. Stage 4 (M0300D1) - (M0300D2) > 0, OR 4. Unstageable – Non-removable dressing/device (M0300E1) - (M0300E2) > 0, OR 5. Unstageable – Slough and/or eschar (M0300F1) - (M0300F2) > 0, OR 6. Unstageable – Deep tissue injury (M0300G1) - (M0300G2) > 0 <p>Denominator</p> <p>The denominator is the total number of LTCH stays with both an Admission (A0250 = [01]) and planned or unplanned Discharge (A0250 = [10, 11]) LTCH CARE Data Set assessment with the discharge date in the measure target period, except those that meet the exclusion criteria.</p>

(continued)

²⁸ This measure was finalized for reporting by LTCHs under the [FY 2017 IPPS/LTCH PPS final rule](#) (81 FR 25215).

²⁹ Effective on October 1, 2022, the LTCH CARE Data Set Version 5.0 is used to collect and submit assessment data for the LTCH QRP. A copy of the LTCH CARE Data Set Version 5.0 is available for download on the [CMS LCDS and LTCH QRP Manual website](#).

Table 7-1 (continued)
Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury
(CMS ID: L021.01)

Measure Specifications ³⁰
<p>Exclusions</p> <p>LTCH stay is excluded if:</p> <ul style="list-style-type: none"> • Data on new or worsened Stage 2, 3, 4, and unstageable pressure ulcers, including deep tissue injuries, are missing [-] on the planned or unplanned discharge assessment: (M0300B1 = [-] or M0300B2 = [-]) and (M0300C1 = [-] or M0300C2 = [-]) and (M0300D1 = [-] or (M0300D2 = [-]) and (M0300E1 = [-] or M0300E2 = [-]) and (M0300F1 = [-] or M0300F2 = [-]) and (M0300G1 = [-] or M0300G2 = [-]). • Patient died during the LTCH stay: A0250 (Reason for Assessment) = [12]
Covariates
<p><i>Data for each covariate are derived from the admission assessment included in the target LTCH stay records.</i></p> <ol style="list-style-type: none"> Functional Mobility Admission Performance: <u>Supervision/touching assistance or more for the functional mobility item Lying to Sitting on Side of Bed:</u> <ol style="list-style-type: none"> Covariate = [1] (yes) if GG0170C = [01, 02, 07, 09, 10, 88] ([01] = Dependent, [02] = Substantial/maximal assistance, [07] = Patient refused, [09] = Not applicable, [10] = Not attempted due to environmental limitations, [88] = Not attempted due to medical condition or safety concerns) Covariate = [0] (no) if GG0170C = [03, 04, 05, 06, -] ([03] = Partial/moderate assistance, [04] = Supervision or touching assistance, [05] = Setup or clean-up assistance, [06] = Independent, [-] = Not assessed/no information) Bowel Continence: <ol style="list-style-type: none"> Covariate = [1] (yes) if H0400 = [1, 2, 3] ([1] = Occasionally incontinent, [2] = Frequently incontinent, [3] = Always incontinent) Covariate = [0] (no) if H0400 = [0, 9, ^, -] ([0] = Always continent, [9] = Not rated, [-] = No response available)

(continued)

³⁰ Effective on October 1, 2022, the LTCH CARE Data Set Version 5.0 is used to collect and submit assessment data for the LTCH QRP. A copy of the LTCH CARE Data Set Version 5.0 is available for download on the [CMS LCDS and LTCH QRP Manual website](#).

Table 7-1 (continued)
Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury
(CMS ID: L021.01)

Covariates	
3. Peripheral Vascular Disease / Peripheral Arterial Disease or Diabetes Mellitus:	
a. Covariate = [1] (yes) if any of the following are true:	
i. I0900 = [1] (checked)	
ii. I2900 = [1] (checked)	
b. Covariate = [0] (no) if I0900 = [0, -] and I2900 = [0,-] ([0] = No, [-] = No response available)	
4. Low body mass index (BMI), based on height (K0200A) and weight (K0200B) on the Admission assessment:	
c. Covariate = [1] (yes) if BMI \geq [12.0] AND \leq [19.0]	
d. Covariate = [0] (no) if BMI < [12.0] OR BMI > [19.0]	
e. Covariate = [0] (no) if K0200A = [0, 00, -] OR K0200B = [-] ([-] = Not assessed/ no information)	
Where: BMI = (weight * 703 / height ²) = ([K0200B] * 703) / (K0200A ²) and the resulting value is rounded to one decimal place.	

Table 7-2
Application of Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay)
(NQF #0674) (CMS ID: L012.01)³¹

Measure Description
This quality measure reports the percentage of patients/residents who experience one or more falls with major injury (defined as bone fractures, joint dislocations, closed head injuries with altered consciousness, or subdural hematoma) during the LTCH stay.
Measure Specifications ³²
<p>Numerator</p> <p>Total number of LTCH stays in the denominator with planned or unplanned Discharge assessment or Expired Record during the selected time window that experienced one or more falls that resulted in major injury: J1900C = [1] or [2].</p> <p>Denominator</p> <p>The total number of LTCH stays with a planned or unplanned Discharge assessment or Expired Record (A0250 = [10, 11, 12]) in the measure target period, which do not meet the exclusion criteria.</p> <p>Exclusions</p> <p>LTCH stay is excluded if the number of falls with major injury was not coded: J1900C (Falls with Major Injury) = [-].</p>
Covariates
None.

³¹ This measure is NQF-endorsed for long-stay residents in nursing homes (<https://www.qualityforum.org/QPS/0674>) and an application of this quality measure is finalized for reporting by LTCHs under the [FY 2014 IPPS/LTCH PPS final rule](#) (78 FR 50874 through 50877) and [FY 2016 IPPS/LTCH PPS final rule](#) (80 FR 49736 through 49739).

³² Effective on October 1, 2022, the LTCH CARE Data Set Version 5.0 is used to collect and submit assessment data for the LTCH QRP. A copy of the LTCH CARE Data Set Version 5.0 is available for download on the [CMS LCDS and LTCH QRP Manual website](#).

Table 7-3
Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility among Patients Requiring Ventilator Support (NQF #2632) (CMS ID: L011.05)³³

Measure Description
This measure estimates the risk-adjusted change in mobility score between admission and discharge among LTCH patients requiring ventilator support at admission. The change in mobility score is calculated as the difference between the discharge mobility score and the admission mobility score. This measure only includes patients requiring invasive mechanical ventilator support on admission.
Measure Specifications ³⁴
<p><i>Mobility items and rating scale:</i></p> <p>The following mobility items are collected at admission and discharge:</p> <ul style="list-style-type: none"> • GG0170A: Roll left and right • GG0170B: Sit to lying • GG0170C: Lying to sitting on side of bed • GG0170D: Sit to stand • GG0170E: Chair/bed-to-chair transfer • GG0170F: Toilet transfer • GG0170J: Walk 50 feet with two turns • GG0170K: Walk 150 feet <p>Each mobility item is coded using a 6-point scale, as follows:</p> <ul style="list-style-type: none"> • 06 (Independent) • 05 (Setup or clean-up assistance) • 04 (Supervision or touching assistance) • 03 (Partial/moderate assistance) • 02 (Substantial/maximal assistance) • 01 (Dependent)

(continued)

³³ This measure is NQF-endorsed for use in the LTCH setting (<https://www.qualityforum.org/QPS/2632>) and is finalized for reporting by LTCHs under the [FY 2015 IPPS/LTCH PPS final rule](#) (79 FR 50298 through 50301).

³⁴ Effective on October 1, 2022, the LTCH CARE Data Set Version 5.0 is used to collect and submit assessment data for the LTCH QRP. A copy of the LTCH CARE Data Set Version 5.0 is available for download on the [CMS LCDS and LTCH QRP Manual website](#).

Table 7-3 (continued)

Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility among Patients Requiring Ventilator Support (NQF #2632) (CMS ID: L011.05)

Measure Specifications³⁵

If an item is not attempted, an 'activity not attempted' code may be used:

- 07 (Patient refused)
- 09 (Not applicable)
- 10 (Not attempted due to environmental limitations)
- ^ (skip pattern only valid for items GG0170J1/J3 through GG0170K1/K3)
- - (Not assessed/no information, dash)
- 88 (Not attempted due to medical condition or safety concerns).
- If code is between 01 and 06, then use code as the score
- If code is 07, 09, 88, 10 then recode to 01 and use this code as the score
- If the mobility item is skipped (^), dashed (–), or missing, then recode to 01 and use this code as the score

Risk-adjusted change in mobility score

The facility-level risk-adjusted change in mobility score is calculated as follows:

(Facility-level observed change score - Facility-level expected change score) + National average change score.

Target population

Patients with an admission assessment (A0250=01) and a planned discharge assessment (A0250=10) that define a LTCH stay during the target period, who require invasive ventilator support at the time of admission O0150A = [1, 2] on admission assessment from 07/01/2018 through 09/30/2022; and O0150A = [1] on admission assessment on or after 10/01/2022.

Exclusions

LTCH stay is excluded if:

Patient is younger than 18 years:

- Age (A0220 minus A0900) < 18 years (Age is calculated based on the truncated difference between admission date (A0220) and birth date (A0900); i.e., the difference is not rounded to nearest whole number.)

Patient had an unplanned discharge or expired:

- A0250 (Reason for Assessment) = [11, 12] (Note: Discharges against medical advice are considered an unplanned discharge.)

(continued)

³⁵ Effective on October 1, 2022, the LTCH CARE Data Set Version 5.0 is used to collect and submit assessment data for the LTCH QRP. A copy of the LTCH CARE Data Set Version 5.0 is available for download on the [CMS LCDS and LTCH QRP Manual website](#).

Table 7-3 (continued)

Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility among Patients Requiring Ventilator Support (NQF #2632) (CMS ID: L011.05)

Measure Specifications ³⁶
<p>Patient discharged against Medical Advice:</p> <ul style="list-style-type: none"> A1990 (Discharged Against Medical Advice) = [1] <p>Patient was discharged to short-term general hospital, long-term care hospital, inpatient psychiatric hospital or unit, hospice, or critical access hospital:</p> <ul style="list-style-type: none"> A2105 (Discharge Location) = [04, 05, 07, 09, 10, 11] <p>Length of stay is less than 3 days:</p> <ul style="list-style-type: none"> A0270 (Discharge Date) minus A0220 (Admission Date) < 3 days <p>Patient is in a coma, persistent vegetative state, complete tetraplegia, or locked-in syndrome:</p> <ul style="list-style-type: none"> B0100 (Comatose) = [1] (checked) I5101 (Complete Tetraplegia) = [1] (checked) I5460 (Locked-In State) = [1] (checked) I5470 (Severe Anoxic Brain Damage, Cerebral Edema, or Compression of Brain) = [1] (checked) <p>Patient has a progressive neurological condition, including amyotrophic lateral sclerosis, multiple sclerosis, Parkinson's disease, or Huntington's chorea:</p> <ul style="list-style-type: none"> I5200 (Multiple Sclerosis) = [1] (checked) I5250 (Huntington's Disease) = [1] (checked) I5300 (Parkinson's Disease) = [1] (checked) I5450 (Amyotrophic Lateral Sclerosis) = [1] (checked)

(continued)

³⁶ Effective on October 1, 2022, the LTCH CARE Data Set Version 5.0 is used to collect and submit assessment data for the LTCH QRP. A copy of the LTCH CARE Data Set Version 5.0 is available for download on the [CMS LCDS and LTCH QRP Manual website](#).

Table 7-3 (continued)

Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility among Patients Requiring Ventilator Support (NQF #2632) (CMS ID: L011.05)

Measure Specifications ³⁷
<p>Patient is independent on <u>all</u> mobility items at admission:</p> <ul style="list-style-type: none"> • GG0170A1 = [06], and • GG0170B1 = [06], and • GG0170C1 = [06], and • GG0170D1 = [06], and • GG0170E1 = [06], and • GG0170F1 = [06], and • GG0170J1 = [06], and • GG0170K1 = [06]
Covariates
<p><i>Data for each covariate are derived from the admission assessment included in the target LTCH stay records.</i></p> <ol style="list-style-type: none"> Age groups (Age is calculated based on the truncated difference between admission date (A0220) and birth date (A0900); i.e. the difference is not rounded to nearest whole number. 65-74 years is the reference category). <ol style="list-style-type: none"> < 55 years 55-64 years 65-74 years 75-84 years ≥ 85 years

(continued)

³⁷ Effective on October 1, 2022, the LTCH CARE Data Set Version 5.0 is used to collect and submit assessment data for the LTCH QRP. A copy of the LTCH CARE Data Set Version 5.0 is available for download on the [CMS LCDS and LTCH QRP Manual website](#).

Table 7-3 (continued)
Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility among Patients Requiring Ventilator Support (NQF #2632) (CMS ID: L011.05)

Covariates
<p>2. Moderate to Severe Communication Impairment:</p> <p>a. = [1] (Yes) if BB0700 (Expression of ideas and wants) = [1, 2] (1= Rarely/Never expresses self or speech is very difficult to understand; 2=Frequently exhibits difficulty with expressing needs and ideas) OR</p> <p>b. = [1] (Yes) if BB0800 (Understanding verbal content) = [1, 2] (1=Rarely/Never Understands; 2=Sometimes Understands: Understands only basic conversations or simple, direct phrases. Frequently requires cues to understand.)</p> <p>c. Else = [0] (No)</p> <p>3. Prior Functioning: Indoor Mobility (Ambulation): Dependent</p> <p>a. = [1] (Yes) if GG0100B = [1] (Dependent) or GG0100B = [9] (Not Applicable)</p> <p>b. Else = [0] (No)</p> <p>4. Prior Functioning: Indoor Mobility (Ambulation): Some help</p> <p>a. = [1] (Yes) if GG0100B = [2] (Needed some help)</p> <p>b. Else = [0] (No)</p> <p>5. Prior Device Use: Wheelchair/Scooter</p> <p>a. = [1] (Yes) if GG0110A (Manual wheelchair) = [1] (checked) or GG0110B (Motorized wheelchair or scooter) = [1] (checked)</p> <p>b. Else = [0] (No)</p> <p>6. Prior Device Use: Mechanical Lift</p> <p>a. = [1] (Yes) if GG0110C (Mechanical lift) = [1] (checked)</p> <p>b. Else = [0] (No)</p> <p>7. Primary Medical Condition Category: Chronic respiratory condition:</p> <p>a. = [1] (Yes) if I0050 = [2]</p> <p>b. Else = [0] (No)</p>

(continued)

Table 7-3 (continued)
Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility among Patients Requiring Ventilator Support (NQF #2632) (CMS ID: L011.05)

Covariates
<p>8. Primary Medical Condition Category: Acute onset and chronic respiratory conditions:</p> <p>a. = [1] (Yes) if I0050 = [3]</p> <p>b. Else = [0] (No)</p> <p>9. Primary Medical Condition Category: Chronic cardiac condition:</p> <p>a. = [1] (Yes) if I0050 = [4]</p> <p>b. Else = [0] (No)</p> <p>10. Primary Medical Condition Category: Other medical condition:</p> <p>a. = [1] (Yes) if I0050 = [5]</p> <p>b. Else = [0] (No)</p> <p>11. Presence of a stage 3, 4, or unstageable pressure ulcer/injury:</p> <p>a. = [1] (Yes) if ([M0300C1 (Number of stage 3 pressure ulcers) > 0] or [M0300D1 (Number of stage 4 pressure ulcers) > 0] or [M0300E1 (Number of unstageable pressure ulcers due to non-removable dressing/device) > 0] or [M0300F1 (Number of unstageable pressure ulcers due to coverage of wound bed by slough and/or eschar) > 0] or [M0300G1 ((Number of unstageable pressure ulcers with suspected deep tissue injury in evolution) > 0])</p> <p>b. Else = [0] (No)</p> <p>12. Comorbidities: Severe and Metastatic Cancers:</p> <p>a. = [1] (Yes) if I0103 (Metastatic Cancer) = [1] (checked) or I0104 (Severe Cancer) = [1] (checked)</p> <p>b. Else = [0] (No)</p> <p>13. Comorbidities: Dialysis and Chronic Kidney Disease, Stage 5:</p> <p>a. = [1] (Yes) if O0110J1 = [1] (checked) or O0110J2 = [1] (checked) or O0110J3 = [1] (checked) or I1501 = [1] (checked)</p> <p>b. Else = [0] (No)</p>

(continued)

Table 7-3 (continued)

Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility among Patients Requiring Ventilator Support (NQF #2632) (CMS ID: L011.05)

Covariates
<p>14. Comorbidities: Diabetes Mellitus (DM):</p> <p>a. = [1] (Yes) if I2900 = [1] (checked)</p> <p>b. Else = [0] (No)</p> <p>15. Comorbidities: Major Lower Limb Amputation:</p> <p>a. = [1] (Yes) if I4100 = [1] (checked)</p> <p>b. Else = [0] (No)</p> <p>16. Comorbidities: Stroke, Hemiplegia or Hemiparesis:</p> <p>a. = [1] (Yes) if I4501 = [1] (checked) or I4900 = [1] (checked)</p> <p>b. Else = [0] (No)</p> <p>17. Comorbidities: Dementia:</p> <p>a. = [1] (Yes) if I4801 = [1] (checked)</p> <p>b. Else = [0] (No)</p> <p>18. Comorbidities: Paraplegia, Incomplete Tetraplegia, Other Spinal Cord Disorder/Injury:</p> <p>a. [1] (Yes) if I5000 = [1] (checked) or I5102 = [1] (checked) or I5110 = [1] (checked)</p> <p>b. Else = [0] (No)</p>

Table 7-4
Percent of Long-Term Care Hospital (LTCH) Patients with an Admission and Discharge Functional Assessment and a Care Plan that Addresses Function (NQF #2631³⁸) (CMS ID: L009.03)³⁹

Measure Description
This measure reports the percentage of all LTCH patients with an admission and discharge functional assessment and a care plan that addresses function.
Measure Specifications ⁴⁰
<p>Incomplete and Complete LTCH stays:</p> <p>Patients with incomplete LTCH stays are identified based on:</p> <ol style="list-style-type: none"> 1. A0250 (Reason for Assessment) = 11, 12; or 2. A0270 (Discharge Date) minus A0220 (Admission Date) < 3 days; or 3. A2105 (Discharge Location) = 04, 05, 07, 11; or 4. A1990 (Discharged Against Medical Advice) = 1. <p>Patients not meeting the definition of incomplete LTCH stays are considered complete LTCH stays.</p> <p>Numerator:</p> <p>For patients with complete LTCH stays, three criteria are required for inclusion in the numerator: (i) complete admission functional assessment data, AND (ii) a discharge goal for at least one self-care or mobility item on the Admission assessment, AND (iii) complete discharge functional assessment data.</p> <p>For patients with incomplete LTCH stays, two criteria are required for inclusion in the numerator: (i) complete admission functional assessment data, AND (ii) a discharge goal for at least one self-care or mobility item on the Admission assessment.</p> <p>Specifications for complete admission functional assessment data:</p> <p>For admission functional assessment data to be complete, each condition listed below must met.</p> <ol style="list-style-type: none"> 1. [((BB0700. Expression of Ideas and Wants = [1, 2, 3, 4]) and (B0100 = [0])) OR (B0100 = [1])]; and 2. [((BB0800. Understanding Verbal Content = [1, 2, 3, 4]) and (B0100 = [0])) OR (B0100 = [1])]; and 3. C1310A. Acute Onset Mental Status Change = [0, 1] OR (B0100 = [1]); and 4. C1310B. Inattention = [0, 1, 2] OR (B0100 = [1]); and 5. C1310C. Disorganized Thinking = [0, 1, 2] OR (B0100 = [1]); and

(continued)

³⁸ The Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function measure is no longer NQF endorsed as of 11/16/2021.

³⁹ This measure is finalized for reporting by LTCHs under the [FY 2015 IPPS/LTCH PPS final rule](#) (79 FR 50291 through 50298).

⁴⁰ Effective on October 1, 2022, the LTCH CARE Data Set Version 5.0 is used to collect and submit assessment data for the LTCH QRP. A copy of the LTCH CARE Data Set Version 5.0 is available for download on the [CMS LCDS and LTCH QRP Manual website](#).

Table 7-4 (continued)
Percent of Long-Term Care Hospital (LTCH) Patients with an Admission and Discharge Functional Assessment
and a Care Plan that Addresses Function (NQF #2631) (CMS ID: L009.03)

Measure Specifications ⁴¹
<p>6. C1310D. Altered Level of Consciousness = [0, 1, 2] OR (B0100 = [1]); and</p> <p>7. GG0130A1. Eating = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and</p> <p>8. GG0130B1. Oral hygiene = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and</p> <p>9. GG0130C1. Toileting hygiene = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and</p> <p>10. GG0130D1. Wash upper body = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and</p> <p>11. GG0170A1. Roll left and right = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and</p> <p>12. GG0170B1. Sit to lying = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and</p> <p>13. GG0170C1. Lying to sitting on side of bed = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and</p> <p>14. GG0170D1. Sit to stand = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and</p> <p>15. GG0170E1. Chair/bed-to-chair transfer = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and</p> <p>16. GG0170F1. Toilet transfer = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and</p> <p>17. (GG0170I1. Walk 10 feet = [01, 02, 03, 04, 05, 06] and GG0170J1. Walk 50 feet with two turns = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88] and GG0170K1. Walk 150 feet = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]) OR GG0170I1. Walk 10 feet = [07, 09, 10, 88]; and</p> <p>18. (GG0170R1. Wheel 50 feet with two turns = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88] and GG0170RR1. Indicate the type of wheelchair/scooter used = [1, 2] and GG0170S1. Wheel 150 feet = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88] and GG0170SS1. Indicate the type of wheelchair/scooter used = [1, 2]) OR GG0170Q1. Does the patient use a wheelchair/scooter = [0]; and</p> <p>19. H0350. Bladder Continence = [0, 1, 2, 3, 4, 5, 9].</p> <p><i>Specifications for a care plan (discharge goal):</i></p> <p>For the care plan (discharge goal) to be complete, at least one of the items listed below should have a valid code as specified.</p> <p>1. GG0130A2. Eating = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; or</p> <p>2. GG0130B2. Oral hygiene = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; or</p> <p>3. GG0130C2. Toileting hygiene = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; or</p>

(continued)

⁴¹ Effective on October 1, 2022, the LTCH CARE Data Set Version 5.0 is used to collect and submit assessment data for the LTCH QRP. A copy of the LTCH CARE Data Set Version 5.0 is available for download on the [CMS LCDS and LTCH QRP Manual website](#).

Table 7-4 (continued)

**Percent of Long-Term Care Hospital (LTCH) Patients with an Admission and Discharge Functional Assessment
and a Care Plan that Addresses Function (NQF #2631) (CMS ID: L009.03)**

Measure Specifications ⁴²	
4.	GG0130D2. Wash upper body = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; or
5.	GG0170A2. Roll left and right = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; or
6.	GG0170B2. Sit to lying = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; or
7.	GG0170C2. Lying to sitting on side of bed = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; or
8.	GG0170D2. Sit to stand = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; or
9.	GG0170E2. Chair/bed-to-chair transfer = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; or
10.	GG0170F2. Toilet transfer = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; or
11.	GG0170I2. Walk 10 feet = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; or
12.	GG0170J2. Walk 50 feet with two turns = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; or
13.	GG0170K2. Walk 150 feet = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; or
14.	GG0170R2. Wheel 50 feet with two turns = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; or
15.	GG0170S2. Wheel 150 feet = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88].
<i>Specifications for complete discharge functional assessment data:</i>	
For discharge functional assessment data to be complete, each condition listed below must met.	
1.	[((BB0700. Expression of Ideas and Wants = [1, 2, 3, 4]) and (B0100 = [0])) OR (B0100 = [1])]; and
2.	[((BB0800. Understanding Verbal Content = [1, 2, 3, 4]) and (B0100 = [0])) OR (B0100 = [1])]; and
3.	C1310A. Acute Onset Mental Status Change = [0, 1] OR (B0100 = [1]); and
4.	C1310B. Inattention = [0, 1, 2] OR (B0100 = [1]); and
5.	C1310C. Disorganized Thinking = [0, 1, 2] OR (B0100 = [1]); and
6.	C1310D. Altered Level of Consciousness = [0, 1, 2] OR (B0100 = [1]); and
7.	GG0130A3. Eating = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and
8.	GG0130B3. Oral hygiene = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and
9.	GG0130C3. Toileting hygiene = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and
10.	GG0130D3. Wash upper body = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and
11.	GG0170A3. Roll left and right = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and
12.	GG0170B3. Sit to lying = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and

(continued)

⁴² Effective on October 1, 2022, the LTCH CARE Data Set Version 5.0 is used to collect and submit assessment data for the LTCH QRP. A copy of the LTCH CARE Data Set Version 5.0 is available for download on the [CMS LCDS and LTCH QRP Manual website](#).

Table 7-4 (continued)
**Percent of Long-Term Care Hospital (LTCH) Patients with an Admission and Discharge Functional Assessment
and a Care Plan that Addresses Function (NQF #2631) (CMS ID: L009.03)**

Measure Specifications ⁴³	
13. GG0170C3. Lying to sitting on side of bed = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and	
14. GG0170D3. Sit to stand = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and	
15. GG0170E3. Chair/bed-to-chair transfer = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and	
16. GG0170F3. Toilet transfer = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88], and	
17. (GG0170I3. Walk 10 feet = [01, 02, 03, 04, 05, 06]; and	
GG0170J3. Walk 50 feet with two turns = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and	
GG0170K3. Walk 150 feet = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]	
OR	
GG0170I3. Walk 10 feet = [07, 09, 10, 88]; and	
18. (GG0170R3. Wheel 50 feet with two turns = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and	
GG0170RR3. Indicate the type of wheelchair/scooter used = [1, 2]; and	
GG0170S3. Wheel 150 feet = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and	
GG0170SS3. Indicate the type of wheelchair/scooter used = [1, 2])	
OR	
GG0170Q3. Does the patient use a wheelchair/scooter= [0]; and	
H0350. Bladder Continence = [0, 1, 2, 3, 4, 5, 9].	
Denominator	
The denominator is the total number of LTCH patients discharged during the measure target period.	
Exclusions	
1. There are no denominator exclusions for this measure.	
Covariates	
None.	

⁴³ Effective on October 1, 2022, the LTCH CARE Data Set Version 5.0 is used to collect and submit assessment data for the LTCH QRP. A copy of the LTCH CARE Data Set Version 5.0 is available for download on the [CMS LCDS and LTCH QRP Manual website](#).

Table 7-5
Application of Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function (NQF #2631) (CMS ID: L010.03)⁴⁴

Measure Description
This quality measure reports the percentage of all Long-Term Care Hospital (LTCH) patients with an admission and discharge functional assessment and a care plan that addresses function.
Measure Specifications ⁴⁵
<p>Incomplete and complete LTCH stays: Patients with incomplete LTCH stays are identified based on:</p> <ol style="list-style-type: none"> 1. A0250 (Reason for Assessment) = 11, 12; or 2. A2105 (Discharge Location) = 04, 05, 07, 11; or 3. A0270 (Discharge Date) minus A0220 (Admission Date) < 3 days; or 4. A1990 (Discharged Against Medical Advice) = 1. <p>Stays not meeting the definition of incomplete LTCH stays are considered complete LTCH stays.</p> <p>Numerator: For patients with complete LTCH stays, three criteria are required for inclusion in the numerator: (i) complete admission functional assessment data, AND (ii) a discharge goal for at least one self-care or mobility item on admission assessment, AND (iii) complete discharge functional assessment data.</p> <p>For patients with incomplete LTCH stays, two criteria are required for inclusion in the numerator: (i) complete admission functional assessment data, AND (ii) a discharge goal for at least one self-care or mobility item on admission assessment.</p> <p><i>Specifications for complete admission functional assessment data:</i> For admission functional assessment data to be complete, each condition listed below must be met.</p> <ol style="list-style-type: none"> 1. GG0130A1. Eating = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and 2. GG0130B1. Oral hygiene = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and 3. GG0130C1. Toileting hygiene = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and

(continued)

⁴⁴ This measure is (L010.03) is an application of measure L009.03 and is finalized for reporting by LTCHs under the [FY 2016 IPPS/LTCH PPS final rule](#) (80 FR 49739 through 49747). This measure is not NQF endorsed.

⁴⁵ Effective on October 1, 2022, the LTCH CARE Data Set Version 5.0 is used to collect and submit assessment data for the LTCH QRP. A copy of the LTCH CARE Data Set Version 5.0 is available for download on the [CMS LCDS and LTCH QRP Manual website](#).

Table 7-5 (continued)

Application of Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function (NQF #2631) (CMS ID: L010.03)

Measure Specifications ⁴⁶	
4.	GG0170B1. Sit to lying = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and
5.	GG0170C1. Lying to sitting on side of bed = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and
6.	GG0170D1. Sit to stand = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and
7.	GG0170E1. Chair/bed-to-chair transfer = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and
8.	GG0170F1. Toilet transfer = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and
9.	(GG0170I1. Walk 10 feet = [01, 02, 03, 04, 05, 06] and GG0170J1. Walk 50 feet with two turns = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88] and GG0170K1. Walk 150 feet = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88])
	OR
	GG0170I1. Walk 10 feet = [07, 09, 10, 88]; and
10.	(GG0170R1. Wheel 50 feet with two turns = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and GG0170RR1. Indicate the type of wheelchair/scooter used = [1, 2]; and GG0170S1. Wheel 150 feet = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and GG0170SS1. Indicate the type of wheelchair/scooter used = [1, 2])
	OR
	GG0170Q1. Does the patient use a wheelchair/scooter = [0]
<i>Specifications for a discharge goal (care plan):</i>	
For the discharge goal (care plan) to be complete, at least one of the items listed below should have a valid code as specified.	
1.	GG0130A2. Eating = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; or
2.	GG0130B2. Oral hygiene = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; or
3.	GG0130C2. Toileting hygiene = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; or
4.	GG0170A2. Roll left and right = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; or
5.	GG0170B2. Sit to lying = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; or
6.	GG0170C2. Lying to sitting on side of bed = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; or
7.	GG0170D2. Sit to stand = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; or
8.	GG0170E2. Chair/bed-to-chair transfer = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; or

(continued)

⁴⁶ Effective on October 1, 2022, the LTCH CARE Data Set Version 5.0 is used to collect and submit assessment data for the LTCH QRP. A copy of the LTCH CARE Data Set Version 5.0 is available for download on the [CMS LCDS and LTCH QRP Manual website](#).

Table 7-5 (continued)

Application of Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function (NQF #2631) (CMS ID: L010.03)

Measure Specifications ⁴⁷
<p>9. GG0170F2. Toilet transfer = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; or</p> <p>10. GG0170G2. Car transfer = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; or</p> <p>11. GG0170I2. Walk 10 feet = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; or</p> <p>12. GG0170J2. Walk 50 feet with two turns = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; or</p> <p>13. GG0170K2. Walk 150 feet = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; or</p> <p>14. GG0170L2. Walking 10 feet on uneven surface = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; or</p> <p>15. GG0170M2. 1 step (curb) = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; or</p> <p>16. GG0170N2. 4 steps = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; or</p> <p>17. GG0170O2. 12 steps = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; or</p> <p>18. GG0170P2. Picking up object = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; or</p> <p>19. GG0170R2. Wheel 50 feet with two turns = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; or</p> <p>20. GG0170S2. Wheel 150 feet = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88].</p> <p><i>Specifications for complete discharge functional assessment data:</i></p> <p>For discharge functional assessment data to be complete, each condition listed below must met.</p> <p>1. GG0130A3. Eating = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and</p> <p>2. GG0130B3. Oral hygiene = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and</p> <p>3. GG0130C3. Toileting hygiene = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and</p> <p>4. GG0170B3. Sit to lying = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and</p> <p>5. GG0170C3. Lying to sitting on side of bed = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and</p> <p>6. GG0170D3. Sit to stand = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and</p> <p>7. GG0170E3. Chair/bed-to-chair transfer = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and</p> <p>8. GG0170F3. Toilet transfer = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and</p> <p>9. (GG0170I3. Walk 10 feet = [01, 02, 03, 04, 05, 06]; and GG0170J3. Walk 50 feet with two turns = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and GG0170K3. Walk 150 feet = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88])</p> <p>OR</p> <p>GG0170I3. Walk 10 feet = [07, 09, 10, 88]; and</p>

(continued)

⁴⁷ Effective on October 1, 2022, the LTCH CARE Data Set Version 5.0 is used to collect and submit assessment data for the LTCH QRP. A copy of the LTCH CARE Data Set Version 5.0 is available for download on the [CMS LCDS and LTCH QRP Manual website](#).

Table 7-5 (continued)

Application of Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function (NQF #2631) (CMS ID: L010.03)

Measure Specifications ⁴⁸
<p>10. (GG0170R3. Wheel 50 feet with two turns = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and GG0170RR3. Indicate the type of wheelchair/scooter used = [1, 2]; and GG0170S3. Wheel 150 feet = [01, 02, 03, 04, 05, 06, 07, 09, 10, 88]; and GG0170SS3. Indicate the type of wheelchair/scooter used = [1, 2]; and GG0170Q3. Does the patient use a wheelchair/scooter = [1]) OR GG0170Q3. Does the patient use a wheelchair/scooter = [0]</p> <p>Denominator The denominator is the total number of LTCH patients discharged during the measure target period.</p> <p>Exclusions There are no denominator exclusions for this measure.</p>
Covariates
None.

⁴⁸ Effective on October 1, 2022, the LTCH CARE Data Set Version 5.0 is used to collect and submit assessment data for the LTCH QRP. A copy of the LTCH CARE Data Set Version 5.0 is available for download on the [CMS LCDS and LTCH QRP Manual website](#).

Table 7-6
Drug Regimen Review Conducted with Follow-Up for Identified Issues – PAC LTCH QRP
(CMS ID: L020.01)⁴⁹

Measure Description
This measure reports the percentage of LTCH stays in which a drug regimen review was conducted at the time of admission and timely follow-up with a physician occurred each time potential clinically significant medication issues were identified throughout that stay.
Measure Specifications ⁵⁰
<p>Numerator Total number of LTCH stays in the denominator meeting each of the following two criteria:</p> <ol style="list-style-type: none"> The facility conducted a drug regimen review on admission which resulted in one of the three following scenarios: <ol style="list-style-type: none"> No potential and actual clinically significant medication issues were found during the review (N2001 = [0]); or Potential and actual clinically significant medication issues were found during the review (N2001 = [1]) and then a physician (or physician- designee) was contacted and prescribed/recommended actions were completed by midnight of the next calendar day (N2003 = [1]); or The patient was not taking any medications (N2001 = [9]) Appropriate follow-up occurred each time a potential or actual clinically significant medication issue was identified during the stay (N2005 = [1]); or no potential or actual clinically significant medications issues were identified since the admission or patient was not taking any medications (N2005 = [9]). <p>Denominator Any LTCH stays with a planned or unplanned Discharge assessment or Expired Record (A0250 = [10, 11, 12]) during the reporting period.</p> <p>Exclusions There are no denominator exclusions for this measure.</p>
Covariates
None.

⁴⁹ This measure was finalized for reporting by LTCHs under the [FY 2017 IPPS/LTCH PPS final rule](#) (81 FR 25215)

⁵⁰ Effective on October 1, 2022, the LTCH CARE Data Set Version 5.0 is used to collect and submit assessment data for the LTCH QRP. A copy of the LTCH CARE Data Set Version 5.0 is available for download on the [CMS LCDS and LTCH QRP Manual website](#).

Table 7-7
Compliance with Spontaneous Breathing Trial (SBT) by Day 2 of the LTCH Stay
(CMS ID: L022.02)⁵¹

Measure Description
<p>This measure assesses facility-level compliance with Spontaneous Breathing Trial (SBT), including Tracheostomy Collar Trial (TCT) or Continuous Positive Airway Pressure (CPAP) breathing trial, by Day 2 of the Long-Term Care Hospital (LTCH) stay for patients on invasive mechanical ventilation support upon admission, and for whom at admission weaning attempts were expected or anticipated. This measure will be computed and reported separately according to each of the following components:</p> <ul style="list-style-type: none"> – Component 1: Percentage of Patients Assessed for Readiness for SBT by Day 2 of the LTCH Stay – Component 2: Percentage of Patients Ready for SBT Who Received SBT by Day 2 of LTCH Stay
Measure Specifications ⁵²
<p>Numerator</p> <ul style="list-style-type: none"> • Component 1: Patients admitted on invasive mechanical ventilation for whom the LTCH Admission assessment (A0250 = [01]) indicates: <ul style="list-style-type: none"> ○ Completed assessment for readiness for SBT by day 2 of the LTCH stay (O0150B = [1] (yes)) and were either deemed medically ready (O0150C = [1] (yes)) OR ○ Medically unready, with documentation of reason(s) (O0150D = [1] (Yes)). • Component 2: Patients admitted on invasive mechanical ventilation for whom the LTCH Admission assessment (A0250 = [01]) indicates SBT performed by day 2 of the LTCH stay (O0150E = [1] (yes)). <p>Denominator</p> <ul style="list-style-type: none"> • Component 1: Patients who were on invasive mechanical ventilation support upon admission to an LTCH, for whom weaning attempts are expected or anticipated (for LTCH stays with admission date from 07/01/2018 through 09/30/2022: O0150A = [1] (yes, on weaning); for LTCH stays with admission date on and after 10/01/2022: O0150A = [1] (yes, on ventilation) and O0150A2 = [1] (yes, weaning)).

(continued)

⁵¹ This measure is finalized for reporting by LTCHs under the [FY 2018 IPPS/LTCH PPS final rule](#) (82 FR 38439 through 38443).

⁵² Effective on October 1, 2022, the LTCH CARE Data Set Version 5.0 is used to collect and submit assessment data for the LTCH QRP. A copy of the LTCH CARE Data Set Version 5.0 is available for download on the [CMS LCDS and LTCH QRP Manual website](#).

Table 7-7 (continued)
Compliance with Spontaneous Breathing Trial (SBT) by Day 2 of the LTCH Stay
(CMS ID: L022.02)

Measure Specifications ⁵³
<ul style="list-style-type: none"> Component 2: The subset of patients in the numerator of Component 1 who were assessed and deemed ready for SBT by Day 2 of the LTCH stay (O0150B = [1] (yes) and O0150C = [1] (yes)). <p>Exclusions</p> <p>LTCH stay is excluded from both Component 1 and Component 2 if:</p> <ol style="list-style-type: none"> LTCH stay is missing data to calculate the measure (for LTCH stays with admission date from 07/01/2018 through 09/30/2022: O0150A = [-]; for stays with admission date on and after 10/01/2022: O0150A = [-] or O0150A2 = [-]), OR Weaning attempts are not expected or anticipated at admission for the patient (for LTCH stays with admission date from 07/01/2018 through 09/30/2022: O0150A = [0] (No, not invasive mechanical ventilation support), or O0150A = [2] (Yes, non-weaning); for LTCH stays with admission date on and after 10/01/2022: O0150A = [0] (No, not invasive mechanical ventilation support), or O0150A = [1] and O150A2 = [0] (Yes, non-weaning)).

⁵³ Effective on October 1, 2022, the LTCH CARE Data Set Version 5.0 is used to collect and submit assessment data for the LTCH QRP. A copy of the LTCH CARE Data Set Version 5.0 is available for download on the [CMS LCDS and LTCH QRP Manual website](#).

Table 7-8
Ventilator Liberation Rate (CMS ID: L023.02)⁵⁴

Measure Description
This measure reports facility-level Ventilator Liberation Rate for patients admitted to an LTCH requiring invasive mechanical ventilation support, and for whom weaning attempts were expected or anticipated as reported on the Admission Assessment.
Measure Specifications ⁵⁵
<p>Numerator</p> <p>Patients who were reported as fully liberated (weaned) (O0200A = [1] (fully liberated at discharge)) on the LTCH CARE Data Set Planned or Unplanned Discharge Assessments (A0250 = [10, 11]).</p> <p>Denominator</p> <p>Patients who were on mechanical ventilation support for whom at admission weaning attempts were expected or anticipated (for LTCH stays with admission date from 07/01/2018 through 09/30/2022: O0150A = [1] (yes, weaning); for LTCH stays with admission date on and after 10/01/2022: O0150A = [1] (yes, on ventilation) and O0150A2 = [1] (yes, weaning)).</p> <p>Exclusions</p> <p>LTCH stay is excluded if:</p> <ul style="list-style-type: none"> LTCH stay is missing data to calculate the measure (for LTCH stays with admission date from 07/01/2018 through 09/30/2022: O0150A = [-]; for LTCH stays with admission date on and after 10/01/2022: O0150A = [-] or O0150A2 = [-]), OR Weaning attempts are not expected or anticipated at admission for the patient (for LTCH stays with admission date from 07/01/2018 through 09/30/2022: O0150A = [0] (No, not invasive mechanical ventilation support), or O0150A = [2] (Yes, non-weaning); for LTCH stays with admission date on and after 10/01/2022: O0150A = [0] (No, not invasive mechanical ventilation support), or O0150A = [1] and O150A2 = [0] (No determined to be, non-weaning)).

(continued)

⁵⁴ This measure is finalized for reporting by LTCHs under the [FY 2018 IPPS/LTCH PPS final rule](#) (82 FR 38443 through 38446). The Ventilator Liberation Rate is defined as the percentage of patients who are alive and fully liberated (weaned) at discharge. A patient is considered fully liberated if he or she does not require any invasive mechanical ventilation support for at least 2 consecutive calendar days immediately prior to the date of discharge.

⁵⁵ Effective on October 1, 2022, the LTCH CARE Data Set Version 5.0 is used to collect and submit assessment data for the LTCH QRP. A copy of the LTCH CARE Data Set Version 5.0 is available for download on the [CMS LCDS and LTCH QRP Manual website](#).

Table 7-8 (continued)
Ventilator Liberation Rate (CMS ID: L023.02)

Covariates	
<i>Data for each covariate is derived from the admission assessment included in the target LTCH stays.</i>	
1. Age Groups (Age is calculated based on the truncated difference between admission date (A0220) and birth date (A0900); i.e., the difference is not rounded to the nearest whole number. 65-74 years is the reference category):	
a. <55 years	
b. 55–64 years	
c. 65–74 years	
d. 75–84 years	
e. ≥ 85 years	
2. Prior Functioning: Everyday Activities, Indoor Mobility (Ambulation):	
a. Covariate = [1] (yes) if GG0100B = [1] (Dependent)	
b. Covariate = [0] (no) if GG0100B = [3, 2, 8, 9] ([3] = independent, [2] = needed some help, [8] = unknown, [9] = not applicable)	
3. Metastatic Cancer:	
a. Covariate = [1] (yes) if I0103 = 1 (checked)	
b. Else = [0] (No)	
4. Severe Cancer:	
a. Covariate = [1] (yes) if I0104 = 1 (checked)	
b. Else = [0] (No)	
5. Left Ventricular Assistive Device with Known Ejection Fraction ≤30%:	
a. Covariate = [1] (yes) if I0605 = 1 (checked)	
b. Else = [0] (No)	
6. Progressive Neuromuscular Disease:	
a. Covariate = [1] (yes) if one or more of the following are true:	
i. I4900 – Hemiplegia or Hemiparesis = 1 (checked)	
ii. I5000 – Paraplegia = 1 (checked)	
iii. I5101 – Complete Tetraplegia = 1 (checked)	
iv. I5102 – Incomplete Tetraplegia = 1 (checked)	
v. I5110 – Other Spinal Cord Disorder/Injury = 1 (checked)	

(continued)

Table 7-8 (continued)
Ventilator Liberation Rate (CMS ID: L023.02)

Covariates	
	<ul style="list-style-type: none"> vi. I5200 – Multiple Sclerosis (MS) = 1 (checked) vii. I5450 – Amyotrophic Lateral Sclerosis = 1 (checked) viii. I5455 – Other Progressive Neuromuscular Disease = 1 (checked) b. Else = [0] (No)
7. Severe Neurological Injury, Disease, or Dysfunction:	
<ul style="list-style-type: none"> a. Covariate = [1] (yes) if one or more of the following are true: <ul style="list-style-type: none"> i. I5470 – Severe Anoxic Brain Damage, Cerebral Edema, or Compression of Brain= 1 (checked) ii. I5480 – Other Severe Neurological Injury, Disease, or Dysfunction = 1 (checked) b. Else = [0] (No) 	
8. Post-Transplant (lung, heart, liver, kidney, and bone marrow):	
<ul style="list-style-type: none"> a. Covariate = [1] (yes) if one or more of the following are true: <ul style="list-style-type: none"> i. I7100 – Lung Transplant = 1 (checked) ii. I7101 – Heart Transplant = 1 (checked) iii. I7102 – Liver Transplant = 1 (checked) iv. I7103 – Kidney Transplant = 1 (checked) v. I7104 – Bone Marrow Transplant = 1 (checked) b. Else = [0] (No) 	
9. Vasoactive Medication (i.e. continuous infusions of vasopressors or inotropes):	
<ul style="list-style-type: none"> a. Covariate = [1] (yes) if: <ul style="list-style-type: none"> i. O0110H2 – Vasoactive Medications (e.g. continuous infusions of vasopressors or inotropes) = 1 (checked) b. Else = [0] (No) 	
10. Dialysis:	
<ul style="list-style-type: none"> a. Covariate = [1] (yes) if O0110J1 = 1 (checked) or O0110J2 = 1 (checked) or O0110J3 = 1 (checked) b. Else = [0] (No) 	

Table 7-9
Transfer of Health Information to the Provider – Post Acute Care (PAC) (CMS ID L025.01)⁵⁶

Measure Description
This measure reports the percentage of LTCH stays indicating a current reconciled medication list was transferred to the subsequent provider at the time of planned/unplanned discharge. For patients with multiple stays during the reporting period, each stay is eligible for inclusion in the measure.
Measure Specifications ⁵⁷
<p>The measure is calculated by reviewing a patient's LCDS planned/unplanned discharge assessment items for provision of a current reconciled medication list to the subsequent provider at the time of discharge.</p> <p>Numerator</p> <p>The numerator is the number of stays for which the LCDS discharge assessment indicated that the following is true: At the time of discharge, the facility provided a current reconciled medication list to the subsequent provider (A2121 = [1]).</p> <p>Denominator</p> <p>The denominator is the total number of LTCH stay-level LCDS planned/unplanned discharge records with a discharge date in the measure target period, ending in discharge to a short-term general hospital, a SNF, intermediate care, home under care of an organized home health service organization or hospice, hospice in an institutional facility, a swing bed, another IRF, an LTCH, a Medicaid nursing facility, an inpatient psychiatric facility, or a critical access hospital. Discharge to one of these providers is based on response to the discharge location item, A2105, of the LCDS V5.0 assessment: (A2105= [02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12])</p> <p>Exclusions</p> <p>There are no denominator exclusions for this measure.</p>
Covariates
None.

⁵⁶ This measure was finalized for reporting by LTCHs under the [FY 2020 IPPS/LTCH PPS final rule](#) (84 FR 42044).

⁵⁷ Effective on October 1, 2022, the LTCH CARE Data Set Version 5.0 is used to collect and submit assessment data for the LTCH QRP. A copy of the LTCH CARE Data Set Version 5.0 is available for download on the [CMS LCDS and LTCH QRP Manual website](#).

Table 7-10
Transfer of Health Information to the Patient – Post Acute Care (PAC) (CMS ID L026.02)⁵⁸

Measure Description
This measure reports the percentage of LTCH stays indicating a current reconciled medication list was transferred to the patient, family, and/or caregiver at the time of discharge. For patients with multiple stays during the reporting period, each stay is eligible for inclusion in the measure.
Measure Specifications ⁵⁹
<p>The measure is calculated by reviewing a patient's LCDS planned/unplanned discharge assessment items for provision of a current reconciled medication list to the patient, family, and/or caregiver at the time of discharge.</p> <p>Numerator</p> <p>The numerator is the number of stays for which the LCDS discharge assessment indicated that the following is true: At the time of discharge, the facility provided a current reconciled medication list to the patient, family, and/or caregiver (A2123 = [1]).</p> <p>Denominator</p> <p>The denominator is the total number of LTCH stay-level LCDS planned/unplanned discharge assessments with a discharge date in the measure target period, ending in discharge to a private home/apartment, board/care, assisted living, group home, transitional living, or other residential care arrangements. Discharge to one of these locations is based on response to the discharge location item, A2105, of the LCDS V5.0 assessment: (A2105= [01, 99])</p> <p>Exclusions</p> <p>There are no denominator exclusions for this measure.</p>
Covariates
None.

⁵⁸ This measure was finalized for reporting by LTCHs under the [FY 2020 IPPS/LTCH PPS final rule](#) (84 FR 42044). An update to the denominator for the TOH to the Patient measure was finalized in the [FY 2022 IPPS/LTCH PPS final rule](#) (86 FR 45446 – 45447)

⁵⁹ Effective on October 1, 2022, the LTCH CARE Data Set Version 5.0 is used to collect and submit assessment data for the LTCH QRP. A copy of the LTCH CARE Data Set Version 5.0 is available for download on the [CMS LCDS and LTCH QRP Manual website](#).

Appendix A: Model Parameters

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Appendix A provides the following information:

- Tables listing the covariates and associated LTCH CARE Data Set items used to calculate each covariate for assessment-based quality measures requiring risk-adjustment (Section A.1).
- Overview of the Risk-Adjustment Appendix File for the Long-Term Care Hospital Quality Reporting Program Measure Calculations and Reporting User's Manual (Risk- Adjustment Appendix File) (Section A.2).
- Procedure on how to use the Long-Term Care Hospital Quality Reporting Program Measure Calculations and Reporting User's Manual and the associated Risk-Adjustment Appendix File information to apply intercept and coefficient values for measure calculations (Section A.3).

The risk-adjusted quality measures addressed in this Appendix are listed in [Table A-1](#). Note that an “✓” indicates that the national average observed score or covariate values are included in the risk-adjustment calculation for that quality measure. An “n/a” indicates that it is not applicable in the risk-adjustment calculation for that quality measure.

Table A-1
LTCH CARE Data Set Quality Measures Requiring National Average Observed Scores and Covariate Values for Risk-Adjustment

Quality Measure	NQF #	CMS ID	Measure Reference Name	National Average Observed Scores*	Covariate Values*
Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury	N/A	I020.01	Pressure Ulcer/Injury	✓	✓
Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility Among Patients Requiring Ventilator Support	2632	L011.05	Change in Mobility	✓	✓
Ventilator Liberation Rate	N/A	L023.02	Ventilator Liberation	✓	✓

*National Average Observed Scores and Intercept/Coefficient values provided in Risk-Adjustment Appendix File

Section A.1: Covariate Tables

This section contains tables listing the covariates and associated LTCH CARE Data Set items used to calculate each covariate for assessment-based quality measures requiring risk-adjustment.

Table A-2
Risk-Adjustment Covariates for the Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury

Covariate	LTCH CARE Data Set Item(s) and Calculations
Model Intercept	—
Functional Limitation	= 1 if GG0170C = [01, 02, 07, 09, 10, 88] = 0 if GG0170C = [03, 04, 05, 06, -]
Bowel Incontinence	= 1 if H0400 = [1, 2, 3] = 0 if H0400 = [0, 9, ^, -]
Diabetes or PVD/PAD	= 1 if any of the following are true: <ul style="list-style-type: none"> I0900 = [1] (checked) I2900 = [1] (checked) = 0 if I0900 = [0, -] AND I2900 = [0, -]
Low BMI	= 1 if BMI ≥ [12.0] AND ≤ [19.0] = 0 if BMI < [12.0] OR BMI > [19.0] = 0 if K0200A = [0, 00, -] OR K0200B = [-] Where: BMI = (weight * 703 / height ²) = ([K0200B] * 703) / (K0200A ²) and the resulting value is rounded to one decimal place.

Table A-3
Risk-Adjustment Covariates for the Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility among Patients Requiring Ventilator Support (NQF #2632)

Risk Adjustor	Category	LTCH CARE Data Set Coding
Model Intercept	--	--
Age Group	<55 years	Truncate(A0220 – A0900) = age; If age < 55 years = 1; else = 0
Age Group	55–64 years	Truncate(A0220 – A0900) = age; If age 55-64 years = 1; else = 0
Age Group	65–74 years (reference category)	Truncate(A0220 – A0900) = age; If age 65-74 years = 1; else = 0
Age Group	75–84 years	Truncate(A0220 – A0900) = age; If age 75-84 years = 1; else = 0
Age Group	85+ years	Truncate(A0220 – A0900) = age; If age >= 85 years = 1; else = 0
Communication Impairment	Moderate to Severe	= [1] (Yes) if BB0700 (Expression of ideas and wants) = [1, 2] or [1] (Yes) if BB0800 (Understanding verbal content) = [1, 2] Else = [0] (No)
Prior Functioning: Indoor Ambulation	Dependent	= [1] (Yes) if GG0100B = [1] (Dependent) or GG0100B = [9] (Not Applicable); Else = [0] (No)
Prior Functioning: Indoor Ambulation	Some help	= [1] (Yes) if GG0100B = [2] (Needed some help) Else = [0] (No)
Prior Device Use	Manual Wheelchair or Motorized and/or Scooter	= [1] (Yes) if GG0110A (Manual wheelchair) = [1] or GG0110B (Motorized wheelchair or scooter) = [1] Else = [0] (No)
Prior Device Use	Mechanical Lift	= [1] (Yes) if GG0110C (Mechanical lift) = [1] Else = [0] (No)
Primary Medical Condition Category	Chronic respiratory condition	= [1] (Yes) if I0050 = [2] Else = [0] (No)
Primary Medical Condition Category	Acute onset and chronic respiratory conditions	= [1] (Yes) if I0050 = [3] Else = [0] (No)
Primary Medical Condition Category	Chronic cardiac condition	= [1] (Yes) if I0050 = [4] Else = [0] (No)
Primary Medical Condition Category	Other medical condition	= [1] (Yes) if I0050 = [5] Else = [0] (No)
Stage 3, 4, or unstageable pressure ulcer/injury	Presence	= [1] (Yes) if ([M0300C1 (Number of stage 3 pressure ulcers) > 0] or [M0300D1 (Number of stage 4 pressure ulcers) > 0] or [M0300E1 (Number of unstageable pressure ulcers due to non-removable dressing/device) > 0] or [M0300F1 (Number of unstageable pressure ulcers due to coverage of wound bed by slough and/or eschar) > 0] or [M0300G1 ((Number of unstageable pressure ulcers with suspected deep tissue injury in evolution) > 0]) Else = [0] (No)

(continued)

Table A-3 (continued)
Risk-Adjustment Covariates for the Long-Term Care Hospital (LTCH) Functional Outcome Measure: Change in Mobility among Patients Requiring Ventilator Support (NQF #2632)

Risk Adjustor	Category	LTCH CARE Data Set Coding
Comorbidities	Severe and Metastatic Cancers	= [1] (Yes) if I0103 = [1] or I0104 = [1] (checked) Else = [0] (No)
Comorbidities	Dialysis and Chronic Kidney Disease, Stage 5	= [1] (Yes) if O0110J1 = [1] or O0110J2 = [1] (checked) or O0110J3 = [1] (checked) or I1501 = [1] (checked) Else = [0] (No)
Comorbidities	Diabetes Mellitus (DM)	= [1] (Yes) if I2900 = [1] (checked) Else = [0] (No)
Comorbidities	Major Lower Limb Amputation	= [1] (Yes) if I4100 = [1] (checked) Else = [0] (No)
Comorbidities	Stroke, Hemiplegia or Hemiparesis	= [1] (Yes) if I4501 = [1] or I4900 = [1] (checked) Else = [0] (No)
Comorbidities	Dementia	= [1] (Yes) if I4801 = [1] (checked) Else = [0] (No)
Comorbidities	Paraplegia, Incomplete Tetraplegia, Other Spinal Cord Disorder/Injury	= [1] (Yes) if I5000 = [1] or I5102 = [1] or I5110 = [1] (checked) Else = [0] (No)

Table A-4
Risk-Adjustment Covariates in the Hierarchical Logistic Regression Model (Predicted) for the Ventilator Liberation Rate

Risk Adjustor	Category	LTCH CARE Data Set Coding
Model Intercept (γ)	--	--
Age Group	<55 years	Truncate(A0220 – A0900) = age; If age < 55 years = 1; else = 0
Age Group	55–64 years	Truncate(A0220 – A0900) = age; If age 55-64 years = 1; else = 0
Age Group	65–74 years (reference category)	Truncate(A0220 – A0900) = age; If age 65-74 years = 1; else = 0
Age Group	75–84 years	Truncate(A0220 – A0900) = age; If age 75-84 years = 1; else = 0
Age Group	85+ years	Truncate(A0220 – A0900) = age; If age >= 85 years = 1; else = 0
Prior Functioning: Indoor Ambulation	Dependent	= [1] (Yes) if GG0100B = [1] (Dependent) Else = [0] (No)
Comorbidities	Metastatic Cancer	= [1] (Yes) if I0103 = [1] (checked) Else = [0] (No)
Comorbidities	Severe Cancer	= [1] (Yes) if I0104 = [1] (checked) Else = [0] (No)
Comorbidities	Left Ventricular Assistive Device with Known Ejection Fraction \leq 30%	= [1] (Yes) if I0605 = [1] (checked) Else = [0] (No)
Comorbidities	Progressive Neuromuscular Disease	= [1] (Yes) if I4900 = [1] or I5000 = [1] or I5101 = [1] or I5102 = [1] or I5110 = [1] or I5200 = [1] or I5450 = [1] or I5455 = [1] (checked) Else = [0] (No)
Comorbidities	Severe Neurological Injury, Disease, or Dysfunction	= [1] (Yes) if I5470 = [1] or I5480 = [1] (checked) Else = [0] (No)
Comorbidities	Post-Transplant	= [1] (Yes) if I7100 = [1] or I7101 = [1] or I7102 = [1] or I7103 = [1] or I7104 = [1] (checked) Else = [0] (No)
Other Treatments	Vasoactive Medication	= [1] (Yes) if O0110H2 = [1] (checked) Else = [0] (No)
Other Treatments	Dialysis	= [1] (Yes) if O0110J1 = [1] (checked) or O0110J2 = [1] (checked) or O0110J3 = [1] (checked) Else = [0] (No)

Table A-5
Risk-Adjustment Covariates in the Logistic Regression Model (Expected) for the Ventilator Liberation Rate

Risk Adjustor	Category	LTCH CARE Data Set Coding
Model Intercept (β_0)	--	--
Age Group	<55 years	Truncate(A0220 – A0900) = age; If age < 55 years = 1; else = 0
Age Group	55–64 years	Truncate(A0220 – A0900) = age; If age 55-64 years = 1; else = 0
Age Group	65–74 years (reference category)	Truncate(A0220 – A0900) = age; If age 65-74 years = 1; else = 0
Age Group	75–84 years	Truncate(A0220 – A0900) = age; If age 75-84 years = 1; else = 0
Age Group	85+ years	Truncate(A0220 – A0900) = age; If age >= 85 years = 1; else = 0
Prior Functioning: Indoor Ambulation	Dependent	= [1] (Yes) if GG0100B = [1] (Dependent) Else = [0] (No)
Comorbidities	Metastatic Cancer	= [1] (Yes) if I0103 = [1] (checked) Else = [0] (No)
Comorbidities	Severe Cancer	= [1] (Yes) if I0104 = [1] (checked) Else = [0] (No)
Comorbidities	Left Ventricular Assistive Device with Known Ejection Fraction $\leq 30\%$	= [1] (Yes) if I0605 = [1] (checked) Else = [0] (No)
Comorbidities	Progressive Neuromuscular Disease	= [1] (Yes) if I4900 = [1] or I5000 = [1] or I5101 = [1] or I5102 = [1] or I5110 = [1] or I5200 = [1] or I5450 = [1] or I5455 = [1] (checked) Else = [0] (No)
Comorbidities	Severe Neurological Injury, Disease, or Dysfunction	= [1] (Yes) if I5470 = [1] or I5480 = [1] (checked) Else = [0] (No)
Comorbidities	Post-Transplant	= [1] (Yes) if I7100 = [1] or I7101 = [1] or I7102 = [1] or I7103 = [1] or I7104 = [1] (checked) Else = [0] (No)
Other Treatments	Vasoactive Medication	= [1] (Yes) if O0110H2 = [1] (checked) Else = [0] (No)
Other Treatments	Dialysis	= [1] (Yes) if O0110J1 = [1] (checked) or O0110J2 = [1] (checked) or O0110J3 = [1] (checked) Else = [0] (No)

Section A.2: Risk-Adjustment Appendix File Overview

The intercept and coefficient values for each of the covariates listed by quality measure in Section A-1 are available in the Risk-Adjustment Appendix File, which can be accessed on the [LTCH Quality Reporting Measures Information website](#). This Risk-Adjustment Appendix File, which is used alongside this appendix, contains current and historical intercept and coefficient values and the risk-adjustment schedule including applicable discharge dates for each update to the intercept and coefficient values.

Excel Worksheets in the Risk-Adjustment Appendix File:

Overview: Brief description of the document and its content.

Schedule: The risk-adjustment schedule for each quality measure.

- *Quality Measure Name:* Full measure name as referenced throughout the Long-Term Care Hospital Quality Reporting Program Measure Calculations and Reporting User's Manual V4.0. A National Quality Forum (NQF) identification number is provided with the quality measure name, as applicable.
- *Measure Reference Name:* Abbreviated name for the quality measure.
- *Risk-Adjustment Update ID:* Number assigned to the initial and subsequent updates of the coefficient and intercept values for a unique risk-adjusted quality measure.
- *QM User's Manual Specification Version:* Number assigned to the initial and subsequent versions of the Long-Term Care Hospital Quality Reporting Program Measure Calculations and Reporting User's Manual, located on the title page.
- *QM User's Manual Specification Posting Date:* Month and year of the Long-Term Care Hospital Quality Reporting Program Measure Calculations and Reporting User's Manual posting on the [LTCH Quality Reporting Measures Information website](#).
- *Measure Calculation Application Dates:* Discharge dates associated with the intercept and coefficient values for each Risk-Adjustment Update ID.

National Average: This document provides a national average observed score for each Risk-Adjustment Update ID to be used for applicable risk-adjusted quality measures. Values are provided because there is limited public accessibility to national assessment data. Please note that, depending on the reporting period and time of calculation, the national average observed score used in the iQIES QM Reports, Provider Preview Reports, and on public display on the Compare Website may vary from the national average observed score provided by this document.

Quality Measure Specific Tabs: Lists each covariate and its associated coefficient value for each risk-adjustment update ID.

Section A.3: Risk-Adjustment Procedure

Below is the procedure on how to use the Long-Term Care Hospital Quality Reporting Program Measure Calculations and Reporting User's Manual and the associated Risk-Adjustment Appendix File information to apply intercept and coefficients values to calculate the risk-adjusted score. Steps to calculate the risk-adjusted quality measure may vary by each measure. The following procedure contains the general steps:

1. Utilize the stay selection guidance as listed in Chapter 4 Stay Selection for Assessment-Based Quality Measures (LCDS) in this manual.
2. Follow the guidance for the version or versions of the LTCH CARE Data Set applicable to the assessment dates (based on discharge date) required for your calculation found in Chapter 5, Section 5.3: Measure Calculations During the Transition from LTCH CARE Data Set V4.00 to LTCH CARE Data Set V5.0.
3. Use the specific calculation steps provided in Chapter 6 Measure Calculations for Assessment-Based Quality Measures (LTCH CARE Data Set) for the measure(s).
 - a. Refer to **Appendix A** on details to calculate the covariates for each quality measure.
4. Refer to the Risk-Adjustment Appendix File information to apply intercept and coefficient values to measure calculations. Under the Schedule tab, refer to the QM User's Manual Specification Version relevant to the timeframe for which you want to calculate the measure.
5. Use the column "Measure Calculation Application Dates" to select the applicable discharge dates then identify the Risk-Adjustment Update ID associated with those discharge dates.
6. Select the applicable quality measure tab then use the applicable Risk-Adjustment Values Update ID column. Apply the intercept and coefficient values for each covariate.
 - a. For quality measures using the national average observed score in the measure calculation, select the National Average tab and use the national average observed score that corresponds to the Risk-Adjustment Values Update ID column used.

Example (Steps 4–6): LTCH Functional Outcome Measure: Change in Mobility Score among Patients Requiring Ventilator Support (NQF #2632)

- LCDS assessment had a discharge date of 06/15/2017.
- In the Schedule tab of the Risk-Adjustment Appendix File, refer to the Change in Mobility measure.
 - The discharge date of 06/15/2017 is within the discharge date range for Risk-Adjustment Update ID 1 (04/01/2016 – 09/30/2018). Therefore, the user should use the information provided in the Risk-Adjustment ID 1 column.
- Select the Change in Mobility tab and apply the intercept and coefficient values in the Risk-Adjustment ID 1 column for each covariate.
- Select the National Average tab and use the Risk-Adjustment Update ID 1 column for the Change in Mobility national average observed score.