Long-Term Care Hospital Quality Reporting Program Measure Calculations and Reporting User's Manual Change Table Version 7.0

Overview

This document provides quality measure updates reflected in the Long-Term Care Hospital (LTCH) Quality Reporting Program (QRP) Measure Calculations and Reporting User's Manual, Version 7.0 taking effect October 1, 2025.

Notable updates to the QM User's Manual, Version 7.0 include the following:

- Removal of Section 5.3 providing information on the transition from LCDS v5.0 to LCDS v5.1.

- Three measure IDs were updated to reflect minor modifications to the measure:

    o Functional Outcome Measure: Change in Mobility Among Long-Term Care Hospital Patients Requiring Ventilator Support

    o Ventilator Liberation Rate

    o COVID-19 Vaccine: Percent of Patients/Residents Who Are Up to Date

- The Discharge Function Score measure was updated from not endorsed to CBE-endorsed. This measure was also updated to include new Imputation instructions.

- The Ventilator Liberation Rate measure was updated to include new measure calculation language and to include new Imputation instructions.

- Updated the Count definitions for the numerator and denominator of the "COVID-19 Vaccine: Percent of Patients/Residents Who Are Up To Date" measure where the item is no longer required on the Expired Assessment.

- Updates are organized by manual chapter, section, page number, step/table indicator. Updated language is indicated by strikeouts of prior language, and the description of the change. The step/table column adds specificity in locating the edits by indicating if the edits are located within a specific step or table on a given page. When edits are not found in a specific step/table, the column displays "N/A". Similarly, when edits are applied in multiple locations within the manual (e.g., updates to CMS measure IDs or dates associated with quarterly report periods), the column displays "Multiple".

LTCH QRP Measure Calculations and Reporting User's Manual V7.0 Updates

#	Chapter	Section	Page(s)	Step(s) / Table	LTCH QRP Measure Calculations and Reporting User's Manual V7.0	Description of Change
1.	All	All	All	N/A	**Long Term Care Hospital Quality Reporting Program Measure Calculations and Reporting User's Manual,** ~~V6.0~~ **V7.0** **LTCH QRP Measure Calculations and Reporting User's Manual,** ~~V6.0~~ **V7.0**	References to prior manual (V6.0) updated to V7.0 throughout the manual.
2.	All	All	All	All	~~October 1, 2024~~ October 1, 2025	Updated the date to reflect the QM User's Manual V7.0 effective date throughout the manual.
3.	Multiple	Multiple	Multiple	Multiple	Manual formatting and syntax updates	Reformatted several of the manual's features including the table of contents, tables and figures, heading styles, table captions, cross-references, footnotes, footers, table properties, document properties, spacing, equation alternative text, and syntax, including changes such as reformatting the table of contents, adjusting line spacing, and changing table column widths and row heights.
4.	Multiple	Multiple	Multiple	Multiple	COVID-19 Vaccine: Percent of Patients/Residents Who Are Up to Date (CMS ID: ~~L028.01~~L028.02)	Updated the CMS ID for the COVID-19 Vaccine: Percent of Patients/Residents Who Are Up to Date (CMS ID: L028.01) measure in the lists and tables throughout the manual.
5.	Multiple	Multiple	Multiple	Multiple	Ventilator Liberation Rate (CMS ID: ~~L023.02~~L023.03)	Updated the CMS ID for Ventilator Liberation Rate (CMS ID: L023.03) measure in the lists and tables throughout the manual.
6.	Multiple	Multiple	Multiple	Multiple	Multiple	Replaced broken and/or outdated hyperlinks and updated several footnote citations throughout the manual to improve clarity, accuracy, and consistency with the Inpatient Rehabilitation Facility (IRF) and Skilled Nursing Facility (SNF) QM User's Manuals.

#	Chapter	Section	Page(s)	Step(s) / Table	LTCH QRP Measure Calculations and Reporting User's Manual V7.0	Description of Change
7.	1	N/A	1	N/A	**Footnote** [1]: Centers for Medicare & Medicaid Services. (September 202~~3~~4). Quality Measures. Accessed in March ~~2024~~2025. Available at: https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityMeasures/index.html	Updated the footnote with a more recent citation for the Centers for Medicare & Medicaid Services website.
8.	1 and Multiple	1.1 and Multiple	1 and Multiple	Multiple	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 V5.0 to the LCDS V5.1. Data collection for LCDS V5.1 begins on October 1, 2024.~~	Removed **Section 5.3** "Measure Calculations During the Transition from LCDS V5.0 to LCDS V5.1" and any references to this section from the LTCH QM Manual V7.0.
9.	1	1.1 Multiple	2 and Multiple	Multiple	Additionally, this appendix provides instruction on the use of the associated ~~Discharge Function Score Imputation Appendix File~~**Imputation Appendix File (Discharge Function Score and Change in Mobility)**, which includes covariate definitions and model threshold and covariate coefficient values that are used to calculate statistically imputed values for use in Discharge Function Score and Change in Mobility Among Long-Term Care Hospital Patients Requiring Ventilator Support measure calculations.	Updated the language in this section to reflect the changes made in the Version 7.0 manual and implemented the updates across all sections in the Version 7.0 manual.
10.	1 and Multiple	1.3 and Multiple	2 and Multiple	Multiple	• Functional Outcome Measure: Change in Mobility Among Long-Term Care Hospital Patients Requiring Ventilator Support (CMS ID: L011.~~05~~06) • Discharge Function Score (CMS ID: L027.01)	Updated the CMS ID for the *Change in Mobility Among Long-Term Care Hospital Patients Requiring Ventilator Support* measure due to minor changes to the measure.
11.	1 and Multiple	1.4 and Multiple	3 and Multiple	1-1 and Multiple	**Table 1-1** **LTCH QRP Quality Measures: CMIT Measure ID, CMS ID, Measure Type, and Measure Reference Name Crosswalk** (See Appendix for full-page excerpt).	Updated the list of measures, their IDs, as well as their CBE-endorsement status.

#	Chapter	Section	Page(s)	Step(s) / Table	LTCH QRP Measure Calculations and Reporting User's Manual V7.0	Description of Change
12.	1 and Multiple	1.4 and Multiple	3 and Multiple	1-2 and Multiple	~~Table 1-2~~ ~~Quality Measures Added to the LTCH QRP~~ <mark>(See Appendix for full-page excerpt).</mark> **Footnote** [5]: ~~Planned initial release dates are based on the FY 2024 IPPS/LTCH PPS final rule.~~	Removed Table 1-2 as there were no new measures added to the LTCH QRP.
13.	4	4.1	11	4-1	**Table 4-1** **Target Period for all Assessment-Based (LCDS) Quality Measures** <mark>(See Appendix for full-page excerpt).</mark>	Updated the list of CMS measure IDs.
14.	5	N/A	12	N/A	• The CDC NHSN measures are updated quarterly for all measures, except for the HCP Influenza Vaccine ~~ation Coverage Among Healthcare Personnel~~ measure which is updated annually. The data for these measures are provided at the facility-level only.	Updated measure wording to align with other CMS materials.
15.	5	N/A	13	N/A	**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, since the criteria and reporting periods for the iQIES QM Reports are consistent across the patient- and facility-level reports. ~~Section 5.3 of this chapter addresses the transition from LCDS V5.0 to the LCDS V5.1. Data collection for LCDS V5.1 began on October 1, 2024 and impacts certain quality measure specifications.~~	Updated Sections 5.1 and 5.2 in order to align with the updates made in their respective sections. Removed Section 5.3 as it is no longer in Version 7.0 of the manual

#	Chapter	Section	Page(s)	Step(s) / Table	LTCH QRP Measure Calculations and Reporting User's Manual V7.0	Description of Change
16.	5	5.1	13	1.d	a. Data submission deadline: data must be submitted by 11:59 p.m. ET on the 15th of August, November, February, or May, 4.5 months 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. b. For example, the data submission deadline for Quarter 3 (July 1 through September 30) data collection would normally be 11:59 p.m. ET, February 15, which is the 15th day of the month, 4.5 months after the end of the data collection period. However, in ~~2025~~2026, February 15th falls on a ~~Saturday~~ Sunday and February ~~17th~~16th is a federal holiday; therefore, the deadline for this data submission will be extended to the next business day, which is February ~~18~~17, ~~2025~~2026, at 11:59 p.m. ET.	Updated the dates for the Data Submission Deadlines.
17.	5	5.1	14	4.j	j. COVID-19 Vaccine: Percent of Patient/Residents Who Are Up To Date (CMS ID: L028.02~~1~~)	Updated the measure name to align with other CMS materials.

#	Chapter	Section	Page(s)	Step(s) / Table	LTCH QRP Measure Calculations and Reporting User's Manual V7.0	Description of Change
18.	5	5.1	15	5-2	*Table 5-2* below shows examples of quarterly rates included in the iQIES Review and Correct Reports for existing and for new measures~~:~~. For new measures, data is 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. • **Example of quarterly rates included in the iQIES Review and Correct Reports for an *existing* measure:** ~~For an existing measure, i~~If the requested calendar year quarter end date is Quarter 1, ~~2025~~ 2026 (end date of March 31st), the four quarters of data that will be provided in this request will include Q2 ~~2024~~ 2025 (April – June), Q3 ~~2024~~ 2025 (July – September), Q4 ~~2024~~ 2025 (October – December), and Q1 ~~2025~~ 2026 (January – March). • **Example of quarterly rates included in the iQIES Review and Correct Reports for a *new* measure:** ~~For a new measure, i~~If the requested calendar year quarter end date is Q1 ~~2025~~ 2026 (end date of March 31st), the data provided in this request includes Q4 ~~2024~~ 2025 (October-December) and Q1 ~~2025~~ 2026 (January – March).~~ 7~~ **Footnote** [7]: ~~Because the Discharge Function Score measure calculations utilize data that were already collected, quarterly rates will capture four quarters of data collected as early as Q1 2023.~~	Updated the text to reflect the difference between quarterly rates for new vs existing measures. Also removed a footnote that was no longer relevant.
19.	5	5.2	17	1.a	1. Measures are calculated consistent with the methods in the previous section, **Chapter 5**, **Section 5.1, "iQIES Review and Correct Reports."** Only the cumulative rates will be displayed using all data in the target period. c. ~~Only the cumulative rates will be displayed using all data in the target period.~~	Moving step 1.d to be part of the main step 1.

#	Chapter	Section	Page(s)	Step(s) / Table	LTCH QRP Measure Calculations and Reporting User's Manual V7.0	Description of Change
20.	5	5.3	18	N/A	~~Section 5.3: Measure Calculations During the Transition from LCDS V5.0 to LCDS V5.1~~ (See Appendix for full-page excerpt).	Removed Section 5.3 "Measure Calculations During the Transition from LCDS v5.0 to LCSD v5.1" and any references to this section from the LTCH QM Manual V7.0.
21.	6	6.1	20	N/A	*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 ~~Wesbite~~ on Medicare.gov website may vary from the national average observed score provided by these documents.*	Updated the terminology surrounding how CMS refers to the Care Compare on Medicare.gov website.
22.	6	6.3	24 - 31	Multiple	**Section 6.3: Functional Outcome Measure: Change in Mobility among Long-Term Care Hospital Patients Requiring Ventilator Support (CMS ID: L011.~~05~~06)** **iQIES Review and Correct Report Measure Calculations for Functional Outcome Measure: Change in Mobility among Long-Term Care Hospital Patients Requiring Ventilator Support (CMS ID: L011.~~05~~06)** **Footnote** [23]**:** The imputation coefficient and threshold values have been rounded to four decimal places. When applying these values to the equation to calculate imputed item values, these coefficient and threshold values should be used; do not round to fewer than four decimal places. This is to ensure consistency and accuracy of measure calculations. **Footnote** [24]**:** To calculate imputed values for GG items at admission, repeat Steps 2.4.1-2.4.4, replacing the word "discharge" with the word "admission." (See Appendix for full-page excerpt).	6.3.1 - Updated the items used to calculate the admission mobility score with updated coding instructions. Updated the procedures on how to calculate the values for these items. 6.3.2 - Updated the items used to calculate the discharge mobility score with updated coding instructions. Updated the procedures on how to calculate the values for these items. 6.3.3 - Updated the section on excluding LTCH stays. 6.3.4 - Updated the section on identifying and counting the included LTCH stays by removing and criteria. Footnotes 23 and 24 were added to elaborate on the changes made to the imputation coefficients.

#	Chapter	Section	Page(s)	Step(s) / Table	LTCH QRP Measure Calculations and Reporting User's Manual V7.0	Description of Change
23.	6	6.3	31 - 33	Multiple	**iQIES QM Report Measure Calculations for Functional Outcome Measure: Change in Mobility among Long-Term Care Hospital Patients Requiring Ventilator Support (CMS ID: L011.~~0506~~)** ==(See Appendix for full-page excerpt).==	6.3.3 - Updated the language used in the measure description to align with other CMS materials and the new measure calculations.
24.	6	6.5	35 - 37	Multiple	**Section 6.5: 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)** ==(See Appendix for full-page excerpt).==	
25.	6	6.6	37 - 40	Multiple	**iQIES QM Report Measure Calculations for Ventilator Liberation Rate (CMS ID: L023.~~0203~~)** **Footnote** [28]**:** ~~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.~~ ==(See Appendix for full-page excerpt).==	Removed the Steps to calculate the predicted score for the Ventilator Liberation Rate due to changes in how the measure's coefficients are calculated Updated measure calculation language to further match the updates made to the Ventilator Liberation Rate measure. Footnote 28 was deleted because the corresponding relevant information was removed from the Version 7.0 manual.
26.	6 and Multiple	6.9	Multiple	Multiple	(See Imputation Appendix File (Discharge Function Score ~~Imputation Appendix File and~~ Change in Mobility).	Updated the language for the Imputation Appendix File where there is now Discharge Function Score and Change in Mobility
27.	6	6.9	46 - 47	2.4.1 - 2.4.4	**Section 6.9: Discharge Function Score (CMS ID: L027.01)** **<u>iQIES Review and Correct Report Measure Calculations for Discharge Function Score (CMS ID: L027.01)</u>** ==(See Appendix for full-page excerpt).==	Updated Section 6.9 to include new Imputation instructions for the measure

#	Chapter	Section	Page(s)	Step(s) / Table	LTCH QRP Measure Calculations and Reporting User's Manual V7.0	Description of Change
28.	6	6.10	49 - 50	Multiple	1. **Determine the denominator count.** Determine the total number of LTCH stays with planned or unplanned Discharge Assessment ~~or Expired Record~~ (A0250 = [10 or~~,~~ 11 ~~or 12~~] in the measure target period. 1. **Determine the numerator count.** Determine the total number of LTCH stays with a planned or unplanned Discharge assessment ~~or Expired Record~~ during measure target period in which patients were up to date with the COVID-19 vaccine; (O0350 = [1]).	Updated the Count definitions for the numerator and denominator of the "COVID-19 Vaccine: Percent of Patients/Residents Who Are Up To Date" measure where the item is no longer required on the Expired Assessment.
29.	7	N/A	55 - 58	7-3	**Functional Outcome Measure: Change in Mobility among Long-Term Care Hospital Patients Requiring Ventilator Support (CMS ID: L011.06)** **Footnote** [43]: Admission mobility is the sum of admission values for mobility items included in the discharge score. NAs coded on admission items are treated the same way as NAs coded on discharge items, with NAs replaced with imputed values. Walking items and the wheeling item are used in the same manner as in the discharge score. (See Appendix for full-page excerpt).	Updated the 7-3 Table with the new measure specifications. Added Footnote 43 to elaborate on the Admission mobility covariate.
30.	7	N/A	60-61	7-5	**Compliance with Spontaneous Breathing Trial (SBT) by Day 2 of the LTCH Stay (CMS ID: L022.02)** (See Appendix for full-page excerpt).	Updated the 7-5 Table with the new denominator date ranges.
31.	7	N/A	62 - 63	7-6	**Ventilator Liberation Rate (CMS ID: L023.03)** (See Appendix for full-page excerpt).	Updated the 7-6 Table with the new measure specifications.

#	Chapter	Section	Page(s)	Step(s) / Table	LTCH QRP Measure Calculations and Reporting User's Manual V7.0	Description of Change
32.	7	N/A	70	7-10	**Table 7-10** **COVID-19 Vaccine: Percent of Patients/Residents Who Are Up To Date (CMD ID: L028.02)** **Footnote** [62]**:** The definition of "up to date" may change based on the CDC's latest guidance, and can be found on the CDC webpage "Stay Up to Date with COVID-19 Vaccines Including Boosters," https://www.cdc.gov/covid/vaccines/stay-up-to-date.html (last accessed 34/54/20245). ==(See Appendix for full-page excerpt).==	Updated the 7-10 Table with the new measure specifications and updated a footnote.
33.	Appendix A	A.1	71 - 74	A-1	**Table A-1 (cont.)** **Effective Dates by CMS ID Update for all LTCH QRP Quality Measures** ==(See Appendix for full-page excerpt).==	Updated the effective dates of Version 7.0 of the manual.
34.	Appendix A	A.1	75	A-2	**Table A-2** **Effective Dates of LTCH Quality Measures User's Manual Versions** ==(See Appendix for full-page excerpt).==	Updated the effective dates of Version 6.0 of the manual and added a row for Version 7.0 of the manual.

#	Chapter	Section	Page(s)	Step(s) / Table	LTCH QRP Measure Calculations and Reporting User's Manual V7.0	Description of Change
35.	Appendix B	B.2	78	Example (Steps 4-6)	LTCH stay had a discharge date of 06/15/202~~5~~6. • In the Schedule tab of the **Risk-Adjustment Appendix File**, refer to the Change in Mobility measure. • The discharge date of 06/15/202~~5~~6 is within the discharge date range for Risk- Adjustment Update ID 8 (10/01/202~~4~~5 – 09/30/202~~5~~6). Therefore, the user should use the information provided in the Risk-Adjustment ID 8 column. • Select the Change in Mobility tab and apply the intercept and coefficient values in the Risk-Adjustment ID 8 column for each covariate. • Select the National Average tab and use the Risk-Adjustment Update ID 8 column for the Change in Mobility national average observed score.	Updated the example in the risk adjustment procedure to include recent dates, and the current version of the measure.
36.	Appendix B	B.4	80	Example (Steps 2-4)	LCDS assessment had a discharge date of 06/15/202~~5~~6 and a "Not Attempted" value coded for GG0130A1 (Eating at Admission). • In the Schedule tab of the ~~**Discharge Function Score Imputation Appendix File**~~ **Imputation Appendix File (Discharge Function Score and Change in Mobility)**, refer to the Discharge Function Score measure. • The discharge date of 06/15/202~~5~~6 is within the discharge date range for Imputation Update ID 2 (10/01/202~~5~~4-09/30/202~~5~~6). Therefore, the user should use the information provided in the Imputation Update ID 2 tabs. • Select the Coefficients – Admissions – ID 2 tab and apply the coefficient values for each covariate and the model threshold values in the Imputation Update ID 2, GG0130A1 column.	Updated the example in the risk adjustment procedure to include recent dates, and the current version of the measure.

Appendix

Appendix Contents

This appendix provides excerpts from the LTCH QRP Measure Calculations and Reporting User's Manual, V6.0 to contextualize the information that has been substantially changed and included in the change table of this manual version, V7.0 (i.e., the appendix provides the updates to the tables from V6.0 of the manual that have substantial changes). The pages within the appendix directly correspond to the QM User's Manual V7.0 and the updates to the pages have been marked in red font.

The Appendix Table of Contents provides an overview of the content contained within the appendix, and maps this content to the corresponding rows in the V7.0 change table, as well as the chapter, page number, and section where the content is located in the QM User's Manual V7.0. Please note, the footnote numbering in this appendix differs from the footnote numbering in Version 6.0 of the manual. Additionally, due to marked changes, page breaks between and within tables do not align exactly with QM User's Manual V7.0.

Appendix Table of Contents

V7.0 Change Table #	V7.0 Chapter	V7.0 Page Number	LTCH QRP Measure Calculations and Reporting User's Manual V7.0 Reference	Updated Section/Table
11, 12	1	3 - 5	Section 1.4: QRP Measures	LTCH QRP Measures: Tables 1-1 and 1-2
13	4	11	Section 4.1: Quality Measures Based on the Calendar Year	Table 4-1 Target Period for all Assessment-Based (LCDS) Quality Measures
20	5	18	Section 5.3: Measure Calculations During the Transition from LCDS V5.0 to LCDS V5.1	Section 5.3: Measure Calculations During the Transition from LCDS V5.0 to LCDS V5.1
22, 23	6	24 - 33	Section 6.3: Functional Outcome Measure: Change in Mobility among Long-Term Care Hospital Patients Requiring Ventilator Support (CMS ID: L011.06)	Section 6.3: Functional Outcome Measure: Change in Mobility among Long-Term Care Hospital Patients Requiring Ventilator Support (CMS ID: L011.06)
24	6	35 - 37	Section 6.5: Compliance with Spontaneous Breathing Trial (SBT) by Day 2 of the LTCH Stay (CMS ID: L022.02)	Section 6.5: Compliance with Spontaneous Breathing Trial (SBT) by Day 2 of the LTCH Stay (CMS ID: L022.02)
25	6	37-40	Section 6.6: Ventilator Liberation Rate (CMS ID: L023.03)	Section 6.6: Ventilator Liberation Rate (CMS ID: L023.03)
27	6	43 - 49	Section 6.9: Discharge Function Score (CMS ID: L027.01)	Section 6.9: Discharge Function Score (CMS ID: L027.01)
29	7	55 - 58	Functional Outcome Measure: Change in Mobility among Long-Term Care Hospital Patients Requiring Ventilator Support (CMS ID:	Table 7-3 Functional Outcome Measure: Change in Mobility among Long-Term Care Hospital Patients Requiring Ventilator Support (CMS ID: L011.06)

V7.0 Change Table #	V7.0 Chapter	V7.0 Page Number	LTCH QRP Measure Calculations and Reporting User's Manual V7.0 Reference	Updated Section/Table
			L011.06)	
30	7	60-61	Compliance with Spontaneous Breathing Trial (SBT) by Day 2 of the LTCH Stay (CMS ID: L022.02)	Table 7-5 Compliance with Spontaneous Breathing Trial (SBT) by Day 2 of the LTCH Stay (CMS ID: L022.02)
31	7	62 - 63	Ventilator Liberation Rate (CMS ID: L023.03)	Table 7-6 Ventilator Liberation Rate (CMS ID: L023.03)
32	7	70	COVID-19 Vaccine: Percent of Patients/Residents Who Are Up To Date	Table 7-10 COVID-19 Vaccine: Percent of Patients/Residents Who Are Up To Date
33, 34	Appendix A	71 - 75	Appendix A: Measure Specification History	Updated Table A-1 with the measure list for Version 7.0 of the manual. Updated Table A-2 Effective Dates of LTCH Quality Measures User's Manual Versions

Section 1.4: QRP Measures

Table 1-1 provides a list of the measures included in the LTCH QRP, the measure IDs, the measure type, and the reference name (short name) for each measure.

Table 1-1
LTCH QRP Quality Measures: CMIT Measure ID, CMS ID, Measure Type, and Measure Reference Name Crosswalk

Quality Measure	CMIT Measure ID # 2	CMS ID3	Measure Type	Measure Reference Name
National Healthcare Safety Network (NHSN) Measures				
National Healthcare Safety Network (NHSN) Catheter-Associated Urinary Tract Infection (CAUTI) Outcome Measure	00459 (CBE-endorsed)	L006.01	Outcome	CAUTI
National Healthcare Safety Network (NHSN) Central Line-Associated Bloodstream Infection (CLABSI) Outcome Measure	00460 (CBE-endorsed)	L007.01	Outcome	CLABSI
National Healthcare Safety Network (NHSN) Facility-Wide Inpatient Hospital-onset Clostridium difficile Infection (CDI) Outcome Measure	00462 (CBE-endorsed)	L014.01	Outcome	CDI
Influenza Vaccination Coverage Among Healthcare Personnel	00390 (CBE-endorsed)	L015.01	Process	HCP Influenza Vaccine
COVID-19 Vaccination Coverage Among Healthcare Personnel (HCP)	00180 (CBE-endorsed)	L024.02	Process	HCP COVID-19 Vaccine

(continued)

Table 1-1 (continued)
LTCH QRP Quality Measures: CMIT Measure ID Number, CMS ID, and Measure Reference Name Crosswalk

Quality Measure	CMIT Measure ID #	CMS ID	Measure Type	Measure Reference Name
Medicare Claims-Based Measures				
Potentially Preventable 30-Days Post-Discharge Readmission Measure for Long-Term Care Hospital (LTCH) Quality Reporting Program (QRP)	00575 (not endorsed)	L017.01	Outcome	PPR
Discharge to Community – Post-Acute Care (PAC) Long-Term Care Hospital (LTCH) Quality Reporting Program (QRP)	00210 (CBE-endorsed)	L018.02	Outcome	DTC

Medicare Spending Per Beneficiary–Post-Acute Care (PAC) Long-Term Care Hospital (LTCH) Quality Reporting Program (QRP)	00434 (CBE-endorsed)	L019.01	Cost/Resource	Medicare Spending Per Beneficiary
Assessment-Based Measures				
Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury	00121 (not endorsed)	L021.01	Outcome	Pressure Ulcer/Injury
Application of Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay)	00520 (not endorsed)	L012.01	Outcome	Application of Falls
Functional Outcome Measure: Change in Mobility Among Long-Term Care Hospital Patients Requiring Ventilator Support	00275 (CBE-endorsed)	L011.~~0506~~	Outcome	Change in Mobility

(continued)

Table 1-1 (continued)
LTCH QRP Quality Measures: CMIT Measure ID Number, CMS ID, and Measure Reference Name Crosswalk

Quality Measure	CMIT Measure ID #	CMS ID	Measure Type	Measure Reference Name
Assessment-Based Measures (cont.)				
Drug Regimen Review Conducted with Follow-Up for Identified Issues–Post-Acute Care (PAC) Long-Term Care Hospital (LTCH) Quality Reporting Program (QRP)	00225 (not endorsed)	L020.01	Process	DRR
Compliance with Spontaneous Breathing Trial (SBT) by Day 2 of the LTCH Stay	00143 (not endorsed)	L022.02	Process	Compliance with SBT
Ventilator Liberation Rate	00759 (not endorsed)	L023.~~0203~~	Outcome	Ventilator Liberation
Transfer of Health (TOH) Information to the Provider Post-Acute Care (PAC)	00728 (not endorsed)	L025.01	Process	TOH - Provider
Transfer of Health (TOH) Information to the Patient Post-Acute Care (PAC)	00727 (not endorsed)	L026.02	Process	TOH - Patient
Discharge Function Score	1698 (~~not~~ CBE-endorsed)	L027.01	Outcome	Discharge Function Score

COVID-19 Vaccine: Percent of Patients/Residents Who Are Up to Date	01699 (not endorsed)	L028.02~~1~~	Process	Patient/Resident COVID-19 Vaccine

~~**_Table 1-2_** shows when new measures added to the LTCH QRP will be included in reports and released on Care Compare and the Provider Data Catalog.~~

~~**Table 1-2**~~
~~**Quality Measures Added to the LTCH QRP5**~~

~~Quality Measure~~	~~Planned Initial Release Date~~		
	~~Review and Correct Reports~~	~~Quality Measure Reports~~	~~Care Compare and Provider Data Catalog~~
~~COVID-19 Vaccine: Percent of Patients/Residents Who Are Up to Date~~	~~January 2025~~	~~October 2025~~	~~September 2025~~

Section 4.1: Quality Measures Based on the Calendar Year

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

Quality Measure	Target Period[6]
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) (CMS ID: L012.01)	January 1 through December 31
Functional Outcome Measure: Change in Mobility Among Long-Term Care Hospital Patients Requiring Ventilator Support (CMS ID: L011.~~05~~06)	January 1 through December 31 (24 months)
Drug Regimen Review Conducted with Follow-Up for Identified Issues –Post Acute Care (PAC) Long-Term Care Hospital (LTCH) Quality Reporting Program (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.~~0203~~)	January 1 through December 31
Transfer of Health (TOH) Information to the Provider Post-Acute Care (PAC) (CMS ID: L025.01)	January 1 through December 31
Transfer of Health (TOH) Information to the Patient Post-Acute Care (PAC) (CMS ID: L026.02)	January 1 through December 31
Discharge Function Score (CMS ID: L027.01)	January 1 through December 31
COVID-19 Vaccine: Percent of Patient/Residents Who Are Up To Date (CMS ID: L028.02~~1~~)	January 1 through March 31 \ April 1 through June 30 \ July 1 through September 30 \ October 1 through December 31

Section 5.3: Measure Calculations During the Transition from LCDS V5.0 to LCDS V5.1

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, 2024, that is with an admission prior to October 1, 2024 and a discharge on or after October 1, 2024, the measure calculations will use the V5.0 QM User's Manual measure specifications for items related to the Admission assessment and will use the V6.0 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, 2024 and discharged on October 15, 2024
   - Admission assessment will be LCDS V5.0
   - Discharge assessment will be LCDS V5.1
   - Specifications will be based on QM specifications in the QM User's Manual V5.0 for references to the admission assessment and QM User's Manual V6.0 for references to the discharge assessment.
      o Rationale: The patient was admitted on September 1, 2024 using LCDS V5.0, which is associated with the QM User's Manual V5.0 instructions, and discharged using LCDS V5.1, which is associated with the QM User's Manual V6.0 instructions.
b. Patient admitted to LTCH on October 1, 2024 and discharged on October 15, 2024
   - Admission assessment will be LCDS V5.1
   - Discharge assessment will be LCDS V5.1
   - Specifications will be based on QM specifications in the QM User's Manual V6.0 for references to the admission and discharge assessments.
      o Rationale: Both the admission and discharge assessments use LCDS V5.1 and the specifications refer to QM User's Manual V6.0.

For the iQIES reports, measure calculations are based on the discharge date. These examples would be included in Quarter 4, 2024 since the discharge dates are between October 1 and December 31, 2024.

A copy of the LTCH CARE Data Set Version 5.1 is available for download on the CMS LCDS and LTCH QRP Manual website.

Section 6.3: Functional Outcome Measure: Change in Mobility among Long-Term Care Hospital Patients Requiring Ventilator Support (CMS ID: L011.~~0506~~)

iQIES Review and Correct Report Measure Calculations for Functional Outcome Measure: Change in Mobility among Long-Term Care Hospital Patients Requiring Ventilator Support (CMS ID: L011.~~0506~~)

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:~~5).
   ~~The eight admission mobility items used for admission mobility score calculations are:~~

   1.1. Calculate the admission mobility score using the admission mobility items and valid codes and incorporating imputed item values. Please note there are different items used if the patient does not walk at both admission and discharge (Step 1.1) than for the remaining patients (Step 1.2). For patients who are coded as 07, 09, 10, or 88 for the Walk 10 feet item at both admission (GG0170I1) and discharge (GG0170I3), and who are coded between 01 and 06 for Wheel 50 Feet with two turns (GG0170R) either at admission or at discharge, the following assessment items are used for admission mobility score calculations:
      - 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
      - GG0170R1. Wheel 50 feet with two turns*

   * Please count the value from this item twice; 7 items are used to calculate a patients' mobility score (scores range from 7 to 42).

   1.2. For the remaining patients, the following assessment items are used for the admission mobility score calculations:
      - GG0170A1. Roll left and right
      - 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
      - GG0170J1. Walk 50 feet with two turns-
      - ~~GG0170K1. Walk 150 feet~~

   Valid codes and their definitions for 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)

1.3. To obtain the admission mobility score, use the following procedure:

- If code is between 01 and 06, then use code as the value.
- If code is 07, 09, 10, ~~or~~ 88, dashed (-), skipped (^), or missing (all henceforth referred to as NA), then ~~recode to 01~~ use statistical imputation to estimate the code for that item and use this code as the value. See Step 1.4 for more details on the statistical imputation approach.

1.4. Calculate the imputed values for items with NA codes. To obtain the imputed values, use the procedure below. (Note that these steps first describe imputing the value for a single item at admission and then describe the relevant modifications for the other items.)

    1.4.1. Start with Roll Left and Right (GG0170A). For each LTCH stay where the item has a NA code at admission, calculate z, a continuous variable that represents a patient's underlying degree of independence on this item, using the imputation coefficients specific to the GG0170A admission model:

$$[1] \quad z = \gamma_1 x_1 + \ldots + \gamma_m x_m$$

Where:

γ_1 through γ_m are the imputation regression coefficients for the covariates specific to the GG0170A admission model. (See Imputation Appendix File (Discharge Function Score and Change in Mobility). Note that the coefficients used in this calculation do not include the thresholds described in Step 1.4.2.)

$x_1 - x_m$ are the imputation risk adjustors specific to the GG0170A admission model.

    1.4.2 Calculate the probability for each possible item value, had the GG item been assessed, using z (Step 1.4.1) and the equations below.

$$[2] \quad \Pr(z \leq \alpha_1) = \Phi(\alpha_1 - z),$$
$$\Pr(\alpha_1 < z \leq \alpha_2) = \Phi(\alpha_2 - z) - \Phi(\alpha_1 - z),$$
$$\Pr(\alpha_2 < z \leq \alpha_3) = \Phi(\alpha_3 - z) - \Phi(\alpha_2 - z),$$
$$\Pr(\alpha_3 < z \leq \alpha_4) = \Phi(\alpha_4 - z) - \Phi(\alpha_3 - z),$$
$$\Pr(\alpha_4 < z \leq \alpha_5) = \Phi(\alpha_5 - z) - \Phi(\alpha_4 - z),$$
$$\Pr(z > \alpha_5) = 1 - \Phi(\alpha_5 - z),$$

- Where: ~~If the mobility item is skipped (^), dashed (-), or missing, then recode to 01 and use this code as the value.~~

  - $\Phi(.)$ is the standard normal cumulative distribution function.
  - α_1… α_5 represent thresholds of levels of independence that are used to assign a value of 1-6 based on z for the GG0170A admission model (see Imputation Appendix File (Discharge Function Score and Change in Mobility)).

1.4.3 Compute the imputed value of the GG item using the six probabilities determined in Step 1.5 and the equation below.

$$[3] \; Imputed \; value \; of \; GG \; item = \Pr(z \leq \alpha_1) + 2 * \Pr(\alpha_1 < z \leq \alpha_2) + 3 * \Pr(\alpha_2 < z \leq \alpha_3) +$$
$$4 * \Pr(\alpha_3 < z \leq \alpha_4) + 5 * \Pr(\alpha_4 < z \leq \alpha_5) + 6 * \Pr(z > \alpha_5)$$

1.4.4 Repeat Steps 1.4.1-1.4.3 to calculate imputed values for each GG item included in the observed admission mobility score that was coded as NA, replacing the Roll left and right (GG0170A) item with each applicable GG item.

See **Table IA-6** and **Table IA-7** in the associated **Imputation Appendix File (Discharge Function Score and Change in Mobility)** for the imputation coefficients and thresholds, as well as detailed LCDS coding for each risk adjustor.[1] The imputation coefficients and thresholds for each GG item are values obtained through ordered probit model analyses of all eligible LTCH stays where the item value is not missing (i.e., had a value 01-06) at admission, and covariates includes the predictors used in risk adjustment (See Step 3) and values on all GG items available in LCDS. The admission mobility scores are included in the covariates and calculated using the same procedure as the observed admission mobility scores, including the replacement of NA codes with imputed values.[2] Please note that the iQIES QM and Provider Preview Reports use fixed regression coefficients and thresholds based on the target period in **Table IA-6 Table IA-7** in the associated **Imputation Appendix File (Discharge Function Score and Change in Mobility)**.

1.5 Sum the values of the ~~eight~~seven admission mobility items to create an admission mobility score for each LTCH stay. The admission mobility score can range from ~~8 -48~~7-42, with a higher score indicating greater functional ability. A score of ~~48~~42 represents a value of 6

(independence) for all 87 mobility items.

2. **Calculate the discharge mobility score** (Steps 2.1 through 2.25) using the discharge mobility items and valid codes, identified below:

The eight discharge mobility and incorporating imputed item values. Please note there are different items used if the patient does not walk at both admission and discharge (Step 2.1) than for the remaining patients (Step 2.2).

2.1. For patients who are coded as 07, 09, 10, or 88 for the Walk 10 feet item at both admission (GG0170I1) and discharge (GG0170I3), and who are coded between 01 and 06 for Wheel 50 Feet with two turns (GG0170R) either at admission or at discharge, the following assessment items are used for admission mobility score calculations are::

- GG0170A1. Roll left and right
- GG0170C1. Lying to sitting on side of bed
- GG0170D1. Sit to stand
- GG0170E1. Chair/bed-to-chair transfer
- GG0170F1. Toilet transfer
- GG0170R1. Wheel 50 feet with two turns*

* Please count the value from this item twice; 7 items are used to calculate a patients' mobility score (scores range from 7 to 42).

2.2 For the remaining patients, the following assessment items are used for the admission mobility score calculations:

The seven 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
- GG0179I3. Walk 10 feet
- GG0170J3. Walk 50 feet with two turns
- GG0170K3. Walk 150 feet

Valid codes and their definitions for 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

To obtain the score, use the following procedure:

- If code is between 01 and 06, then use code as the value.

If code is 07, 09, 10, ~~or~~ 88, dashed (-), skipped (^), or missing (all henceforth referred to as NA), then ~~recode to 01~~ use statistical imputation to estimate the code for that item and use this code as the value.

2.3 Using the ~~If the mobility item is skipped (^), dashed (-), or missing, then recode to 01 and use this code as the value.~~
discharge data, follow Steps 1.3 through 1.5 to impute data.

2.4. Sum the values of the ~~eight~~seven discharge mobility items to create a discharge mobility score for each LTCH stay. The discharge mobility score can range from ~~8—48~~7-42, with a higher score indicating greater functional ability. A score of ~~48~~42 represents a value of 6 (independence) for all ~~8~~7 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 3.6).
    3.1. Incomplete LTCH stays:
        3.1.1. Patient was discharged 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 10 feet (GG0170I1 = [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~~item:

~~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 score to two decimal places.**
   7.1. If the digit in the third decimal place is 5 or greater, add 1 to the second decimal place; otherwise, leave the second decimal place unchanged.
   7.2. Drop all of the digits following the second decimal place.

iQIES QM Report Measure Calculations for Functional Outcome Measure: Change in Mobility among Long-Term Care Hospital Patients Requiring Ventilator Support (CMS ID: L011.~~05~~06)

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 Functional Outcome Measure: Change in Mobility among Long-Term Care Hospital Patients Requiring Ventilator Support (CMS ID: L011.~~05~~06)."

1.2. Do not round to the second decimal place. All rounding will be done at the end of the measure calculation

2. **Calculate the national average change in mobility score**[3] 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 **Table RA-2** 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 Compare Website may vary from the national average observed score provided by these documents.*

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

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

   ~~Where:~~

   [4] *Expected discharge mobility score = $\beta_0 + \beta_1 x_1 + \ldots + \beta_n x_n$*

   Where:

   - *Expected ~~change in~~discharge mobility score* ~~identifies the~~estimates an expected ~~change in~~discharge 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 **Table RA-5** and **Table RA-6** in the associated **Risk-Adjustment Appendix File** for the regression constant and coefficients as well as detailed LCDS coding for each risk adjustor. 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 in **Table RA-5** and **Table RA-6** in the **Risk-Adjustment Appendix File**.

   ~~3.2. Calculate an average expected change in mobility score for each LTCH as the mean of the calculated expected change in discharge mobility scores minus the observed admission discharge mobility score for all LTCH stays in the facility.~~

4. **Calculate the risk-adjusted average change in mobility score** (Steps 4.1 through 4.~~2~~4)

   4.1 Calculate an expected change in mobility score for each LTCH stay as the difference between the observed admission mobility score and the expected discharge mobility score (expected discharge score minus the observed admission mobility score).

   4.2 Calculate the average facility-level average expected change in mobility score for all

LTCH stays in the facility as the mean of the expected change in mobility scores determined in Step 4.1.

4.3. Calculate the difference between the facility-level average observed change in mobility score (Step 1) and the facility-level average expected change in mobility score (Step 34) 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 greater (better) than the expected score.
- A value that is less than 0 indicates that the observed change in score is less (worse) than the expected score.

4.4. 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 score to two decimal places.**
    5.1. If the digit in the third decimal place is 5 or greater, add 1 to the second decimal place; otherwise, leave the second decimal place unchanged.
        5.1.1. Drop all of the digits following the second decimal place.

National Average Calculation for Functional Outcome Measure: Change in Mobility among Long-Term Care Hospital Patients Requiring Ventilator Support (CMS ID: L011.0506)

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 6.5: 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 7-5*, 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:

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1.1. LTCH stay is excluded if it is missing data to calculate the measure (O0150A = [-] or O0150A2 = [-]).

1.1. LTCH stay is excluded if the patient is not on invasive mechanical ventilation support upon admission to the LTCH (O0150A = [0]).

1.2. 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 LTCH Stays in Which Patients Were Assessed for Readiness for SBT by Day 2 of the LTCH Stay
- Component 2: Percentage of LTCH Stays in Which Patients Were Ready for SBT and Received SBT by Day 2 of the LTCH Stay

Component 1, Percentage of LTCH Stays in Which Patients Were 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), and then multiply by 100 to obtain a percent value.

5. Round the percent value to two decimal places.
   5.1. If the digit in the third decimal place is 5 or greater, add 1 to the second decimal place; otherwise, leave the second decimal place unchanged.
   5.2. Drop all of the digits following the second decimal place.

Component 2, Percentage LTCH Stays in Which Patients Were Ready for SBT and 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), and then multiply by 100 to obtain a percent value.
9. Round the percent value to two decimal places.
    9.1. If the digit in the third decimal place is 5 or greater, add 1 to the second decimal place; otherwise, leave the second decimal place unchanged.
    9.2. Drop all of the digits following the second 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) measure.

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 <u>LTCH stay-level</u> (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.
10. 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.
11. Divide the numerator (Step 2) by the denominator (Step 1) then multiply by 100, and round the percent value to two decimal places to obtain the national average.
    11.1. If the digit in the third decimal place is 5 or greater, add 1 to the second decimal place; otherwise, leave the second decimal place unchanged.
    11.2. Drop all of the digits following the second decimal place.

Section 6.6: Ventilator Liberation Rate (CMS ID: L023.~~02~~03)

iQIES Review and Correct Report Measure Calculations for Ventilator Liberation Rate (CMS ID: L023.~~02~~03)

For the Review and Correct Reports, only the facility-level observed score is computed. Using the definitions in *__Table 7-6__*, 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, and then multiply by 100 to obtain a percent value.

5. **Round the percent value to two decimal places.**
   5.1. If the digit in the third decimal place is 5 or greater, add 1 to the second decimal place; otherwise, leave the second decimal place unchanged.
   5.2. Drop all of the digits following the second decimal place.

iQIES QM Report Measure Calculations for Ventilator Liberation Rate (CMS ID: L023.~~02~~03)

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 7-6__*, 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 6.6**, "iQIES Review and Correct Report Measure Calculations" for this measure.
   1.2. Do not multiply by 100 or round to the second decimal place. All rounding will be done at the end of the measure calculation.
2. **Calculate the national average observed score**[1] as the mean ventilator liberation rate for all LTCH stays calculated using Steps 1 – 3 from **Chapter 6, Section 6.6**. 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 __Table RA-2__ 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~~expected ventilator liberation rate** (Steps 3.1 through 3.4).~~-~~

~~Determine the presence or absence of the measure covariates for each LTCH stay.~~
   ~~Using the covariate definitions in *__Table RA-10__* in the associated **Risk-Adjustment Appendix File** to 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.~~

   ~~Calculate the predicted score for each LTCH stay using the following formula:~~

   ~~Where:~~

   - ~~*Predicted score* identifies the predicted probability of ventilator liberation for each LTCH stay.~~
   - ~~*e* is the base of natural logarithms.~~
   - ~~*X* is calculated as follows:~~
       ~~Where:~~

   - ~~*Predicted score* identifies the predicted probability of ventilator liberation for each LTCH stay.~~
   - ~~*α* is the LTCH-specific regression constant or intercept.~~
   - ~~*b₁ through bₙ* 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-**~~

3.1. Determine the presence or absence of the measure covariates for each LTCH stay.

3.2. Using the covariate definitions in *Table RA-8* in the associated **Risk-Adjustment Appendix** File to assign covariate values (COV), either '0' for covariate condition not present or missing, 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 expected score for each LTCH stay using the following formula:

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

[1]

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:

$$Y = \beta_0 + \beta_1(COV_1) + \ldots + \beta_n(COV_n)$$

[2]

Where:

- β_0 is the logistic regression constant or(also known as the intercept-.).

- β_1 *through* β_n are the regression coefficients for the covariates (see **Risk-Adjustment Appendix File**).

See *Table RA-8* and *Table RA-9* the associated **Risk-Adjustment Appendix File** for the regression constant and coefficients as well as detailed LCDS coding for each risk adjustor.[2] 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 in *Table RA-8* and *Table RA-9* in the associated **Risk-Adjustment Appendix File**.

3.4. 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.

4. **Calculate the facility-level ~~standardized risk~~observed-to-expected ratio.** Calculate the facility-level standardized risk ratio (SRRj) using the following equation:

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

[3]

Where:

- ~~pred,~~obs_j = the ~~predicted~~observed ventilator liberation rate for each LTCH, as calculated in Step 3.4.

- exp_j = the expected ventilator liberation rate for each LTCH, as calculated in Step 43.3.

5. **Calculate the LTCH risk-adjusted ventilator liberation rate**. Calculate the LTCH risk-adjusted ventilator liberation rate by multiplying the facility-level ~~standardized risk~~observed-to-expected ratio (Step 5) by the national average observed score (Step 2), and then multiply by 100 to obtain a percent value.

6. **Round the percent value to two decimal places.**
   6.1. If the digit in the third decimal place is 5 or greater, add 1 to the second decimal place; otherwise, leave the second decimal place unchanged.
   6.2. Drop all of the digits following the second decimal place.

National Average Calculation for Ventilator Liberation Rate (CMS ID: L023.~~02~~03)

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 6.9: Discharge Function Score (CMS ID: L027.01)

iQIES Review and Correct Report Measure Calculations for Discharge Function Score (CMS ID: L027.01)

This measure requires risk-adjusted data for the Review and Correct Reports since it estimates the percent of LTCH stays in which patients meet or exceed an expected discharge function score. Using the definitions from ***Table 7-9***, the following steps are used to calculate the quality measure.

   Identify excluded LTCH stays. The LTCH stay is excluded if any of the following are true (Steps 1.1 through 1.4).
1.4   Incomplete LTCH stays:
   - Patient was discharged to a Short-Term General Hospital (A2105 = [04]), Inpatient Psychiatric Facility (A2105 = [07]), or Critical Access Hospital (CAH) (A2105 = [11]).
   - Patient transferred to another LTCH facility (A2105 = [05]).
   - Patient discharged against medical advice? (A1990 = [1]).
   - Patient had an unplanned discharge or expired (A0250 = [11, 12]). Note: discharges against medical advice are considered an unplanned discharge.
   - Length of stay is less than 3 days: Discharge Date (A0270) – Admission Date (A0220) < 3 days.
2.4   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.
3.4   Patient is discharged to hospice (A2105 = [09, 10]).
4.4   Patient is in a coma, persistent vegetative state, or locked-in syndrome, or has complete tetraplegia.
   - 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])
1. **Calculate the observed discharge function score** (Steps 2.1 through 2.5) using the discharge function items and valid codes identified below and incorporating imputed item values. Please note there are different items used if the patient does not walk at both admission and discharge (Step 2.1) than for the remaining patients (Step 2.2):
1.1. For patients who are coded as 07, 09, 10, or 88 for the Walk 10 feet item at both admission (GG0170I1) and discharge (GG0170I3), and who are coded between 01 and 06 for either Wheel 50 Feet with two turns (GG0170R) or Wheel 150 Feet (GG0170S) either at admission or at discharge, the following assessment items are used for discharge function score calculations:
   - GG0130A3. Eating
   - GG0130B3. Oral hygiene
   - GG0130C3. Toileting hygiene
   - GG0170A3. Roll left and right

- GG0170C3. Lying to sitting on side of bed
- GG0170D3. Sit to stand
- GG0170E3. Chair/bed-to-chair transfer
- GG0170F3. Toilet transfer
- GG0170R3. Wheel 50 feet with two turns*

Please count the value for this item twice; 10 items are used to calculate a patient's score (scores range from 10 – 60).

1.2. For the remaining patients, the following assessment items are used for discharge function score calculations:
- GG0130A3. Eating
- GG0130B3. Oral hygiene
- GG0130C3. Toileting hygiene
- GG0170A3. Roll left and right
- 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
- GG0170J3: Walk 50 Feet with two turns

Valid codes and their definitions for the discharge function 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
- - – Not assessed/no information

1.3. To obtain the score, use the following procedure:
- If code is between 01 and 06, use the code as the value.
- If code is 07, 09, 10, 88, dashed (-), skipped (^), or missing (all henceforth referred to as NA), then use statistical imputation to estimate the code for that item and use this code as the value. See Step 2.4 for more details on the statistical imputation approach.

1.4. Calculate the imputed values for items with NA codes. To obtain the imputed values, use the procedure below. (Note that these steps first describe imputing the value for a single item at discharge and then describe the relevant modifications for the other items.)

 1.4.1. Start with Eating (GG0130A). For each LTCH stay where the item has a NA code at discharge, calculate z, a continuous variable that represents a patient's underlying degree of independence on this item, using the imputation coefficients specific to the GG0130A discharge model:

[1] $z = \gamma_1 x_1 + \ldots + \gamma_m x_m$

Where:

γ_1 through γ_m are the imputation regression coefficients for the covariates specific to the GG0130A

~~**[1]** $z = \gamma_1 x_1 + \ldots + \gamma_m x_m$~~

~~Where:~~

    1.4.1.1. ~~γ_1 through γ_m are the imputation regression coefficients for the covariates specific to the GG0130A~~ discharge model. (See Imputation Appendix File (Discharge Function Score ~~Imputation Appendix File.~~and Change in Mobility). Note that the coefficients used in this calculation do not include the thresholds described in Step 2.4.2.)

    1.4.1.2. $x_1 - x_m$ are the imputation risk adjustors specific to the GG0130A discharge model.

  1.4.2. Calculate the probability for each possible item value, had the GG item been assessed, using z (Step 2.4.1) and the equations below.

    Where:
- is the standard normal cumulative distribution function.
- $\alpha_1 \ldots \alpha_5$ represent thresholds of levels of independence that are used to assign a value of 1-6 based on z for the GG0130A discharge model (see Imputation Appendix File (Discharge Function Score ~~Imputation Appendix File).~~and Change in Mobility)).

  1.4.3. Compute the imputed value of the GG item using the six probabilities determined in Step 2.4.2 and the equation below.

  1.4.4. Repeat Steps 2.4.1-2.4.3 to calculate imputed values for each GG item included in the observed discharge function score that was coded as NA, replacing the Eating (GG0130A) item with each applicable GG item.

    See *__Table IA-1__*, *__Table IA-4__*, and *__Table IA-5__* in the associated **Imputation Appendix File (Discharge Function Score ~~Imputation Appendix File~~and Change in Mobility)** for the imputation coefficients and thresholds, as well as detailed LCDS coding for each risk adjustor.[1] The imputation coefficients and thresholds for each GG item are values obtained through ordered probit model analyses of all eligible LTCH stays where the item value is not missing (i.e., had a value 01-06) at discharge, and covariates includes the predictors used in risk adjustment (See Step 3) and values on all GG items available in LCDS. The admission function scores are included in the covariates and calculated using the same procedure as the observed discharge function scores, including the replacement of NA codes with imputed values.[2] Please note that the iQIES QM and Provider Preview Reports use fixed regression coefficients and thresholds based on the target period in *__Table IA-1__*, *__Table IA-4__*, and *__Table IA-5__* in the associated **Imputation Appendix File (Discharge Function Score ~~Imputation Appendix File.~~and Change in Mobility)**.

  1.5. Sum the values of the discharge function items to calculate the observed discharge function score for each LTCH stay. Scores can range from 10 to 60, with a higher score indicating greater independence.

2. Calculate the **expected discharge function score.** For each LTCH stay: use the intercept and regression coefficients to calculate the expected discharge function score using the formula below:

$$[4]\ \textit{Expected discharge function score} = \beta_0 + \beta_1 x_1 + \ldots + \beta_n x_n$$

Where:

- *Expected discharge function score* estimates an expected discharge function score.
- β_0 is the regression intercept.
- β_1 through β_n are the regression coefficients for the covariates (see Risk Adjustment Appendix File).
- $x_1 - x_n$ are the risk adjustors.

Note that any expected discharge function score greater than the maximum should be recoded to the maximum score (i.e., 60).

See *Table RA-5* and *Table RA-7* in the associated **Risk-Adjustment Appendix File** for the regression intercept and coefficients as well as detailed LCDS coding for each risk adjustor.[3] The admission function values are included in the covariates and calculated using the same procedure as the observed discharge function scores, including the replacement of NA codes with imputed values.[4] The regression intercept and coefficients are values obtained through ordinary least squares linear regression analysis on all eligible LTCH stays. Please note that the iQIES QM and Provider Preview Reports use fixed regression intercepts and coefficients based on the target period in *Table RA-5* and *Table RA-7* in the **Risk-Adjustment Appendix File**.

3. **Calculate the difference in observed and expected discharge function scores**. For each LTCH stay which does not meet the exclusion criteria, compare each patient's observed discharge function score (Step 2) and expected discharge function score (Step 3) and classify the difference as one of the following:

   3.1. Observed discharge function score is equal to or greater than the expected discharge function score.

   3.2. Observed discharge function score is less than the expected discharge function score.

4. **Determine the denominator count**. Determine the total number of LTCH stays with a LCDS discharge date in the measure target period, which do not meet the exclusion criteria.

5. **Determine the numerator count**. The numerator is the number of LTCH stays in which the observed discharge function score is the same as or greater than the expected discharge function score (Step 4.1).

6. **Calculate the facility-level discharge function percent**. Divide the facility's numerator count (Step 6) by its denominator count (Step 5) to obtain the facility-level discharge function proportion, and then multiply by 100 to obtain a percent value.

7. **Round the percent value to two decimal places.**

   7.1. If the digit in the third decimal place is 5 or greater, add 1 to the second decimal place; otherwise, leave the second decimal place unchanged.

   7.2. Drop all digits following the second decimal place.

iQIES QM Report Measure Calculations for Discharge Function Score CMS ID: L027.01)

This measure requires risk-adjustment for the iQIES QM Reports. Follow the steps provided above for the iQIES Review and Correct Report measure calculations for the Discharge Function Score (CMS ID: L027.01) measure.

National Average Calculation for Discharge Function Score (CMS ID: L027.01)

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 two decimal places to obtain the national average.
    1.3. If the digit in the third decimal place is 5 or greater, add 1 to the second decimal place; otherwise, leave the second decimal place unchanged.
    1.4. Drop all of the digits following the second decimal place.

Table 7-3
Functional Outcome Measure: Change in Mobility among Long-Term Care Hospital Patients Requiring
Ventilator Support (CMS ID: L011.~~0506~~)[1]

Measure Description

This measure estimates the risk-adjusted change in mobility score between admission and discharge among LTCH stays in which patients require 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 LTCH stays in which patients require invasive mechanical ventilator support at admission.

Measure Specifications[2]

Mobility items and rating scale:
The following mobility items are collected at admission and discharge:
- 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
- GG0170I: Walk 10 feet*
- GG0170J: Walk 50 feet with two turns*
- ~~GG0170K: Walk 150 feet~~GG0170R. Wheel 50 feet with two turns*

.* Count Wheel 50 Feet with two turns (GG0170R) value twice to calculate the total observed discharge function score for stays where (i) Walk 10 Feet (GG0170I) has an activity not attempted (ANA) code at both admission and discharge and (ii) Wheel 50 Feet with two turns (GG0170R) has a code between 01 and 06 at either admission or discharge. The remaining stays use Walk 10 Feet (GG0170I) + Walk 50 Feet with two turns (GG0170J) to calculate the total observed discharge function score. In either case, 7 items are used to calculate the total observed mobility score for a stay and scores range from 7 – 42

Each mobility item is coded using a 6-point scale, as follows:
- 06 (Independent)
- 05 (Setup or clean-up assistance)
- 04 (Supervision or touching assistance)
- 03 (Partial/moderate assistance)
- 02 (Substantial/maximal assistance)
- 01 (Dependent)

Table 7-3 (continued)
Functional Outcome Measure: Change in Mobility among Long-Term Care Hospital Patients Requiring
Ventilator Support (CMS ID: L011.06)

Measure Specifications[3]

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 value.

If code is 07, 09, 88, 10 then use statistical imputation to estimate the item value for that item and use this code as the value.

If the mobility item is skipped (^), dashed (–), or missing, then use statistical imputation to estimate the item value for that item and use this code as the value.

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] 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)

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

Measure Specifications[5]

Patient discharged against Medical Advice:
- A1990 (Discharged Against Medical Advice) = [1]

Patient was discharged to short-term general hospital, long-term care hospital, inpatient psychiatric hospital or unit, hospice, or critical access hospital:
- A2105 (Discharge Location) = [04, 05, 07, 09, 10, 11]

Length of stay is less than 3 days:
- A0270 (Discharge Date) minus A0220 (Admission Date) < 3 days

Patient is in a coma, persistent vegetative state, complete tetraplegia, or locked-in syndrome:
- 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)

Patient has a progressive neurological condition, including amyotrophic lateral sclerosis, multiple sclerosis, Parkinson's disease, or Huntington's chorea:
- I5200 (Multiple Sclerosis) = [1] (checked)
- I5250 (Huntington's Disease) = [1] (checked)
- I5300 (Parkinson's Disease) = [1] (checked)
- I5450 (Amyotrophic Lateral Sclerosis) = [1] (checked)

(continued)

Table 7-3 (continued)
Functional Outcome Measure: Change in Mobility among Long-Term Care Hospital Patients Requiring
Ventilator Support (CMS ID: L011.~~05~~06)

Measure Specifications[6]

Patient is independent on _all_ mobility items at admission:
- GG0170A1 = [06], and
- ~~GG0170B1 = [06], and~~
- GG0170C1 = [06], and
- GG0170D1 = [06], and
- GG0170E1 = [06], and
- GG0170F1 = [06], and
- GG0170I1 = [06], and
- GG0170J1 = [06~~, and~~]
- ~~GG0170K1 = [06]~~

Covariates

Data for each covariate are derived from the admission assessment included in the target LTCH stay records.

1. Age groups (< 55 years, 55-64 years, 65-74 years, 75-84 years, ≥ 85 years)
2. ~~Moderate to Severe~~ Admission mobility – continuous[7]
3. Bladder continence
4. Bowel continence
5. Communication ~~Impairment~~impairment
6. ~~Prior Functioning: Indoor Mobility (Ambulation): Dependent~~
7. ~~Prior Functioning: Indoor Mobility (Ambulation): Some help~~
8. ~~Prior Device Use: Wheelchair/Scooter~~
9. ~~Prior Device Use: Mechanical Lift~~
10. Prior functioning: indoor ambulation
11. Prior mobility device/aids
12. ~~12.~~ Primary ~~Medical Condition Category: Chronic respiratory condition~~
13. ~~Primary Medical Condition Category: Acute onset and chronic respiratory conditions~~
14. ~~Primary Medical Condition Category: Chronic cardiac condition~~
15. ~~Primary Medical Condition Category: Other~~ medical condition category
16. Interaction between admission function and primary medical condition category
17. Stage 2 pressure ulcer
18. Stage 3, 4, or unstageable pressure ulcer/injury
19. High BMI
20. Low BMI
21. Nutritional approaches
15. Comorbidities

right

(continued)

Table 7-3 (continued)

Functional Outcome Measure: Change in Mobility among Long-Term Care Hospital Patients Requiring

Ventilator Support (CMS ID: L011.~~0506~~)

Covariates
~~22. Presence of a stage 3, 4, or unstageable pressure ulcer/injury~~
~~23. Comorbidities: Severe and Metastatic Cancers~~
~~24. Comorbidities: Dialysis, Hemodialysis, Peritoneal dialysis, and Chronic Kidney Disease, Stage 5~~
~~25. Comorbidities: Diabetes Mellitus (DM)~~
~~26. Comorbidities: Major Lower Limb Amputation~~
~~27. Comorbidities: Stroke, Hemiplegia or Hemiparesis~~
~~28. Comorbidities: Dementia~~
~~29. Comorbidities: Paraplegia, Incomplete Tetraplegia, Other Spinal Cord Disorder/Injury~~

See covariate details in *Table RA-5* and *Table RA-6* in the associated **Risk-Adjustment Appendix File**.

Table 7-5
Compliance with Spontaneous Breathing Trial (SBT) by Day 2 of the LTCH Stay
(CMS ID: L022.02)[1]

Measure Description

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 LTCH stays for patients on invasive mechanical ventilation support upon admission, and for whom weaning attempts were expected or anticipated at admission. This measure will be computed and reported separately according to each of the following components:

- Component 1: Percentage of LTCH Stays in Which Patients Were Assessed for Readiness for SBT by Day 2 of the LTCH Stay
- Component 2: Percentage of LTCH Stays in Which Patients Were Ready for SBT and Received SBT by Day 2 of LTCH Stay

Measure Specifications[2]

Numerator

- Component 1: LTCH stays in which patients are admitted on invasive mechanical ventilation for whom the LTCH Admission assessment (A0250 = [01]) indicates:
  - 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: LTCH stays in which patients are 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)).

Denominator

- Component 1: LTCH stays in which patients 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)

Table 7-5 (continued)
Compliance with Spontaneous Breathing Trial (SBT) by Day 2 of the LTCH Stay
(CMS ID: L022.02)

Measure Specifications[3]

- Component 2: The subset of LTCH stays in which patients in the numerator of Component 1 were assessed and deemed ready for SBT by Day 2 of the LTCH stay (O0150B = [1] (yes) and O0150C = [1] (yes)).

Exclusions

LTCH stay is excluded from both Component 1 and Component 2 if:

1. 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
2. LTCH stays in which 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)).

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

[2] Effective on October 1, 2024, the LTCH CARE Data Set Version 5.1 is used to collect and submit assessment data for the LTCH QRP. A copy of the LTCH CARE Data Set Version 5.1 is available for download on the CMS LCDS and LTCH QRP Manual website.

[3] Effective on October 1, 2024, the LTCH CARE Data Set Version 5.1 is used to collect and submit assessment data for the LTCH QRP. A copy of the LTCH CARE Data Set Version 5.1 is available for download on the CMS LCDS and LTCH QRP Manual website.

Table 7-6
Ventilator Liberation Rate (CMS ID: L023.~~0203~~)[1]

Measure Description

This measure reports facility-level Ventilator Liberation Rate for LTCH stays in which patients are 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[2]

Numerator

LTCH stays in which patients 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]).

Denominator

LTCH stays in which patients were on mechanical ventilation support for whom weaning attempts were expected or anticipated at admission (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)).

Exclusions

LTCH stay is excluded if:
- 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)

Table 7-6 (continued)
Ventilator Liberation Rate (CMS ID: L023.~~0203~~)

Covariates

Data for each covariate is derived from the admission assessment included in the target LTCH stays.
1. **Age Groups**
2. **Prior Functioning: Everyday Activities, Indoor Mobility (Ambulation)**
3. **Metastatic Cancer**
4. **Severe Cancer**
5. **Left Ventricular Assistive Device with Known Ejection Fraction ≤ 30%**
6. **Progressive Neuromuscular Disease**
7. **Severe Neurological Injury, Disease, or Dysfunction**
8. **Post-Transplant (lung, heart, liver, kidney, and bone marrow)**
9. **Vasoactive Medication (i.e. continuous infusions of vasopressors or inotropes)**
10. **Dialysis**

See covariate details in ***Table RA-8 and* Table RA-9**, ~~*Table RA-10*~~, ~~*Table RA-11*~~, **and** ~~*Table RA-12*~~ in the associated **Risk-Adjustment Appendix File**.

Table 7-10
COVID-19 Vaccine: Percent of Patients/Residents Who Are Up To Date (CMD ID: L028.~~01)~~02))[1]

Measure Description

This measure reports the percentage of LTCH stays in which patients are "up to date" with their COVID-19 vaccinations per the CDC's latest guidance.[2]

Measure Specifications[3]

Numerator
The total number of LTCH stays in the denominator in which patients are up to date with the COVID-19 vaccine (O0350=[1]) during the target period.

Denominator
Any LTCH stays with a planned or unplanned Discharge assessment ~~or Expired Record~~ (A0250 = [10, 11~~, 12~~]) during the target period.

Exclusions
There are no denominator exclusions for this measure.

Covariates

None.

Table A-1
Effective Dates by CMS ID Update for all LTCH QRP Quality Measures

Measure ID Updates					
Quality Measure	.01	.02	.03	.04	.05
National Healthcare Safety Network (NHSN) Measures					
National Healthcare Safety Network (NHSN) Catheter-Associated Urinary Tract Infection (CAUTI) Outcome Measure (CMS ID: L006.01)	Inception – Present	--	--	--	--
National Healthcare Safety Network (NHSN) Central Line-Associated Bloodstream Infection (CLABSI) Outcome Measure (CMS ID: L007.01)	Inception – Present	--	--	--	--
National Healthcare Safety Network (NHSN) Facility-Wide Inpatient Hospital-onset Clostridium difficile Infection (CDI) Outcome Measure (CMS ID: L014.01)	Inception – Present	--	--	--	--
Influenza Vaccination Coverage Among Healthcare (CMS ID: L015.01)	Inception – Present	--	--	--	--
COVID-19 Vaccination Coverage Among Healthcare Personnel (HCP) (CMS ID: L024.02)	Inception – 09/30/2023	10/01/2023 – Present	--	--	--

(Continued)

Table A-1 (cont.)
Effective Dates by CMS ID Update for all LTCH QRP Quality Measures

Measure ID Updates					
Quality Measure	.01	.02	.03	.04	.05
Medicare Claims-Based Measures					
Potentially Preventable 30-Days Post-Discharge Readmission Measure for Long-Term Care Hospital (LTCH) Quality Reporting Program (QRP) (CMS ID: L017.01)	Inception – Present	--	--	--	--
Discharge to Community–Post-Acute Care (PAC) Long-Term Care Hospital (LTCH) Quality Reporting Program (QRP) (CMS ID: L018.02)	Inception – 09/30/2020	10/01/2020 – Present	--	--	--
Medicare Spending Per Beneficiary – Post-Acute Care (PAC) Long-Term Care Hospital (LTCH) Quality Reporting Program (QRP) (CMS ID: L019.01)	Inception – Present	--	--	--	--

(Continued)

Table A-1 (cont.)
Effective Dates by CMS ID Update for all LTCH QRP Quality Measures

Measure ID Updates Quality Measure	.01	.02	.03	.04	.05	.06
Assessment-Based Measures						
Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury (CMS ID: L021.01)	Inception – Present	--	--	--	--	--
Application of Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay) (CMS ID: L012.01)	Inception – Present	--	--	--	--	--
Functional Outcome Measure: Change in Mobility Among Long-Term Care Hospital Patients Requiring Ventilator Support (CMS ID: L011.~~05~~06)	Inception – 06/30/2018	07/01/2018 – 09/30/2019	10/01/2019 – 09/30/2020	10/01/2020 – 09/30/2022	10/01/2022 – 09/30/2024	10/01/202~~2~~5 – Present
Compliance with Spontaneous Breathing Trial (SBT) by Day 2 of the LTCH Stay (CMS ID: L022.02)	Inception – 09/30/2022	10/01/2022 – Present	--	--	--	--
Ventilator Liberation Rate (CMS ID: L023.~~02~~03)	Inception – 09/30/2022	10/01/2022 – Present	--	--	--	--
Drug Regimen Review Conducted with Follow-Up for Identified Issues –Post Acute Care (PAC) Long-Term Care Hospital (LTCH) Quality Reporting Program (QRP) (CMS ID: L020.01)	Inception – Present	--	--	--	--	--
Transfer of Health (TOH) Information to the Provider Post-Acute Care (PAC) (CMS ID: L025.01)	Inception – Present	--	--	--	--	--
Transfer of Health (TOH)Information to the Patient Post-Acute Care (PAC) (CMS ID: L026.02)	Inception – 09/30/2021	10/01/2022 – Present	--	--	--	--
Discharge Function Score (CMS ID: L027.01)	Inception – Present	--	--	--	--	--
COVID-19 Vaccine: Percent of Patients/Residents Who Are Up To Date (CMS ID: L028.021)	Inception – Present	--	--	--	--	--

Table A-2
Effective Dates of LTCH Quality Measures User's Manual Versions

Manual Version	Effective Dates
Manual V1.0	09/04/2015 – 06/26/2017
Manual V2.0	06/27/2017 – 06/30/2018
Manual V3.0	07/01/2018 – 09/30/2019
Addendum V3.1	10/01/2019 – 09/30/2020
Addendum V3.1.1/V3.1.2	10/01/2020 – 09/30/2022
Manual V4.0	10/01/2022 – 09/30/2023
Manual V5.0	10/01/2023 – 09/30/2024
Manual V6.0	10/01/2024 – ~~Present~~ 09/30/2025
Manual V7.0	10/01/2025 – Present