

## APPENDIX E: MEASURE SPECIFICATIONS FOR QUALITY MEASURES REPORTED USING LTCH CARE DATA SET VERSION 2.01

### Quality Measure Record Selection Methodology

The purpose of this section is to describe the methodology employed to select assessment records that are used to compute the quality measures (QMs) from data collected by LTCHs and submitted to the CMS using the LTCH CARE Data Set under the LTCH Quality Reporting Program.

#### Definitions

**Target period.** The span of time that defines the QM reporting period.

**Target date.** The target date for an assessment is defined as follows:

- For an admission assessment (A0250 Reason for Assessment=[01]), the target date is equal to the admission date (A0220). This is the admission target date.
- For a discharge assessment (A0250 Reason for Assessment=[10, 11]) or expiration record (A0250 Reason for Assessment=[12]), the target date is equal to the discharge date (A0270). This is the discharge target date.

**Patient data stream.** The patient's data stream consists of all records that have target dates within the target period and that are for the specific patient at a specific LTCH.

**Sort order.** The records in a patient's data stream must be sorted by the following keys:

- Target date (descending). This will cause records to appear in reverse chronological order so that most recent records appear first in the data stream. This will also ensure discharge or expiration record appear prior to admission record in the data stream.
- Item A0250 Reason for Assessment (descending). If more than one record shares a target date, this will cause expiration record to appear first in the data stream, followed by discharge records, followed by admission records.

**Stay.** The period of time between a patient's admission date into a LTCH and discharge date. A stay, thus defined, will include patient stay during a set of contiguous days in a LTCH; this will include interrupted stays of less than 3 calendar days.

**QM sample.** The set of patient records that is selected in order to calculate a particular QM.

**Patient Stay for QM sample.** A patient stay is defined by a pair of patient records that meet all of the following criteria:

- One of the two records is an admission assessment (A0250=[01]). This record is the *start-of-patient stay* record.
- The other record is a discharge assessment or expiration record (A0250=[10,11,12]). This record is the *end-of-patient stay* record.
- The target date for the *end-of-patient stay* record must be the same as or later than the target date for the *start-of-patient stay* record.
- Both the *start-* and *end-of-patient stay* records must have identical admission date (A0220).
- There are no intervening records between the start- and end-of-patient stay records in the patient's sorted data stream.
- The records included in a *patient stay for QM sample* could span across quarter(s).
- For QM calculation purpose, both the admission and discharge (or expiration) assessment included in the *patient stay* are assigned to the quarter of the discharge date (A0270).

## Record Selection

The QM is calculated by selecting eligible records from patient data streams and applying the QM definitions to the selected records. The purpose of this section is to describe how records are selected for each QM for the LTCHQR Program.

### *Percent of Residents or Patients with Pressure Ulcers that are New or Worsened (Short Stay) (NQF #0678)*

The eligible records for this QM are selected as follows:

1. Define the target period for the measure.
2. Select all LTCH CARE Data Set records with discharge target date within the target period.
3. For each patient within each LTCH, do the following:
  - a. Sort the records according to the sort order defined on the previous page (E-1).
  - b. Scan the sorted records in reverse chronological order.
  - c. Select all records that meet the patient stay definition on previous page and that ends with a discharge or expired assessment (A0250=[10, 11,12]). These are **target patient stay records**. If a patient stay is encountered where the end-of-patient stay is an expiration record (A0250=[12]), ignore that patient stay and continue scanning for an earlier patient stay for that patient that falls within the target period and ends with a discharge assessment (A0250=10,11). If patient has multiple patient stay records with a discharge target date within the target period, then include each qualifying patient stay in the measure.
4. Apply the QM definition to the eligible target patient stay records.

*Percent of Residents or Patients Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine (Short Stay) (NQF #0680)*

The sample for this QM is selected as follows:

1. The target period for this measure is the influenza vaccination season: October 1 through March 31 (e.g., October 1, 2014 through March 31, 2015 for the 2014-2015 influenza vaccination season).
2. The measure includes all patients with one or more days in the LTCH during the target period. Select all LTCH CARE Data Set records with an admission date (A0220) *or* a discharge date (A0270) within the target period. For example, the record of a patient admitted to an LTCH on March 31<sup>st</sup> will be selected based on the admission date, regardless of the discharge date. The record of a patient discharged from an LTCH on October 1<sup>st</sup> will be selected based on the discharge date, regardless of the admission date.
3. For each patient within each LTCH, do the following:
  - a. Sort the stay-level records according to the sort order defined on the previous page.
  - b. Scan the sorted records in reverse chronological order.
  - c. Select the patient stay-level records that meet all of the following conditions:
    - i. Patient was in the LTCH one or more days based on admission date or discharge date.
    - ii. The discharge target date is on or after October 1<sup>st</sup> of the most recently completed influenza season AND before March 31<sup>st</sup> of the most recently completed influenza seasonOR  
The admission date (A0220) is on or before March 31<sup>st</sup> of the most recently completed influenza season.
  - iii. If qualifying patient stay records are found, select the latest record from the patient stay record which is either an admission or discharge assessment (A0250=01,10,11]. This is called an *influenza vaccination assessment*.
  - iv. If the patient has multiple patient stay records during the target period, then include each influenza vaccination assessment from all qualifying patient stays in the measure.
- d. If no qualifying record is found for a patient, then the patient is excluded from the measure.
4. Apply the QM definition to the qualifying influenza vaccination assessment records.

Appendix E - Table 1

Percent of Residents or Patients with Pressure Ulcers that are New or Worsened (Short Stay) (NQF #0678)<sup>1</sup>

Measure Description	Measure Specifications <sup>2</sup>	Covariates
<p>This measure reports the percentage of patients with Stage 2-4 pressure ulcers that are new or worsened pressure ulcers since the admission assessment (A0250=01).</p> <p>The measure is calculated by review of a patient's discharge assessment for reports of Stage 2-4 pressure ulcers that were not present or were at a lesser stage at the time of the admission assessment.</p>	<p><b>Numerator</b>                      Patients for whom the discharge assessment indicates one or more new or worsened Stage 2-4 pressure ulcers:                      1. Stage 2 (M0800A) &gt; 0 OR                      2. Stage 3 (M0800B) &gt; 0 OR                      3. Stage 4 (M0800C) &gt; 0.</p> <p><b>Denominator</b>                      Patients with a pair of target patient stay records: an admission assessment (A0250=01) and a discharge assessment (A0250=[10,11]) that define a patient stay during the target period, except those with exclusions.</p> <p><b>Exclusions</b>                      1. Patient stay is excluded if M0800A=[-] and M0800B=[-] and M0800C=[-] on the discharge assessment.                      2. Patient stay that end with patient expiration (A0250=[12]) is excluded from the measure.                      3. Patient stay is excluded if there is no admission assessment available to derive data for risk adjustment (covariates).</p> <p><b>Additional Exclusion for Future Public Reporting Program</b>                      LTCHs with denominator counts of less than 20 in the sample will be excluded from public reporting owing to small sample size.</p>	<p>Data for each covariate is derived from the admission assessment included in the target patient stay records.</p> <ol style="list-style-type: none"> <li>Indicator of supervision/touching assistance or more for the functional mobility item Lying to Sitting on Side of Bed:                              Covariate = [1] (yes) if GG0160C = [01,02,03,04,07,09,88] ([01]=Dependent, [02]=Substantial/maximal assistance, [03]=Partial/moderate assistance, [04]=Supervision or touching assistance, [07]=Patient refused, [09]=Not applicable, [88]=(activity) not attempted due to medical condition or safety concerns)                              Covariate = [0] (no) if GG0160C = [05, 06, -, ^] ([05]=Setup or clean-up assistance, [06]=Independent, [-]=No response available, [^]=Valid skip)</li> <li>Indicator of bowel incontinence at least occasionally:                              Covariate = [1] (yes) if H0400 = [1, 2, 3] ([1]=Occasionally incontinent, [2]=Frequently incontinent, [3]=Always incontinent)                              Covariate = [0] (no) if H0400 = [0, 9, -, ^] ([0]=Always continent, [9]=Not rated, [-]=No response available, [^]=Valid skip)</li> <li>Have diabetes or peripheral vascular disease:                              Covariate = [1] (yes) if one or both of the following are true:                              a. I0900 = [1] (checked)                              b. I2900 = [1] (checked)                              Covariate = [0] (no) if I0900 = [0,-] AND I2900 = [0,-] ([0]=No, [-]=No response available)</li> <li>Indicator of Low Body Mass Index, based on Height (K0200A) and Weight (K0200B):                              Covariate = [1] (yes) if BMI ≥ [12.0] AND ≤ [19.0]                              Covariate = [0] (no) if BMI &gt; [19.0]                              Covariate = [0] (no) if K0200A = [-] OR K0200B = [-] OR BMI &lt; [12.0] OR ([-]=No response available)</li> </ol> <p>Where: BMI = (weight * 703 / height<sup>2</sup>) = ([K0200B] * 703) / (K0200A<sup>2</sup>) and the resulting value is rounded to one decimal.</p>

<sup>1</sup> This measure is NQF-endorsed for use in the Long Term Care Hospital (LTCH) setting (<http://www.qualityforum.org/QPS/0678>) (in addition to Inpatient Rehabilitation Facility and SNF/NH settings) and finalized for reporting by LTCHs under the LTCH Quality Reporting Program (*Federal Register* 76 (18 August 2011): 51476-51846. Web. <http://www.gpo.gov/fdsys/pkg/FR-2011-08-18/pdf/2011-19719.pdf> and *Federal Register* 77 (31 August 2012): 53619-53621. Web. <http://www.gpo.gov/fdsys/pkg/FR-2012-08-31/pdf/2012-19079.pdf>). The use of the words “resident” and “short-stay” in the title of this measure refer to the use of this measure in the Skilled Nursing Facility/Nursing Home (SNF/NH) setting. CMS’s use of these words does not imply that the LTCH patient is a “resident” or that a stay in a LTCH is a “short stay.”

<sup>2</sup> Beginning on October 1, 2012, LTCHs began to use the “LTCH Care Assessment and Continuity Record (CARE) Data Set” as the vehicle by which to collect and submit the pressure ulcer data for the LTCH Quality Reporting Program. A copy of LTCH CARE Data Set V 2.01 is included in Appendix C of the LTCH Quality Reporting Program Manual V 2.0. A copy of LTCH CARE Data Set V 1.01 is included in Appendix C of the LTCHQR Program Manual Version 1.1.

**Appendix E - Table 2**  
**Percent of Residents or Patients Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine (Short Stay)**  
**(NQF #0680)<sup>1</sup>**

Measure Description	Measure Specifications <sup>2</sup>	Covariates
<p>This measure reports the percentage of residents or patients who are assessed and appropriately given the influenza vaccine during the most recent influenza season.</p> <p>The measure score is computed and reported for the three numerator components separately. Patient Influenza Vaccination measure is calculated only once per year.</p>	<p><b>Numerator</b></p> <p>Patients meeting any of the following criteria on the selected influenza vaccination assessment:</p> <ol style="list-style-type: none"> <li>1. patient received the influenza vaccine during the most recent influenza vaccine season, either in the facility (O250A=1) or outside the facility (O0250C=2); or</li> <li>2. patient was offered and declined the influenza vaccine (O0250C=4) (computed and reported separately); or</li> <li>3. patient was ineligible due to contraindication(s) (O0250C=3) (computed and reported separately).</li> </ol> <p><b>Denominator</b></p> <p>All patients with a selected influenza vaccination assessment, except those with exclusions.</p> <p><b>Exclusions</b></p> <p>Patient's age on target date of selected influenza vaccination assessment is 179 days or less.</p> <p><b>Additional Exclusion for Future Public Reporting Program</b></p> <p>LTCHs with denominator counts of less than 20 in the sample will be excluded from public reporting owing to small sample size.</p>	<p>Not applicable.</p>

<sup>1</sup> This measure is NQF-endorsed for use in the Long Term Care Hospital (LTCH) setting (<http://www.qualityforum.org/QPS/0680>) (in addition to Inpatient Rehabilitation Facility and SNF/NH settings) and finalized for reporting by LTCHs under the LTCH Quality Reporting Program (*Federal Register* 77 (31 August 2012): 53624-53627. Web. <http://www.gpo.gov/fdsys/pkg/FR-2012-08-31/pdf/2012-19079.pdf>). The use of the words “resident” and “short-stay” in the title of this measure refer to the use of this measure in the SNF/NH home setting. CMS’s use of these words does not imply that the LTCH patient is a “resident” or that a stay in a LTCH is a “short stay.”

<sup>2</sup> A copy of LTCH CARE Data Set V 2.01, including items for patient influenza vaccination measure, is included in Appendix C of the LTCH Quality Reporting Program Manual Version 2.0.