UNDERSTANDING YOUR MDS 3.0 QUALITY MEASURES
Objectives

- Describe the Intended Purpose of Quality Measures (QMs)
- Provide a Background as well as Overview of QMs
- Identify as well as Classify the 18 Facility-Level and 3 Survey-Only QMs
- List Definition of Terms Used for QM Logic Specifications
- Describe the Selection Process for QM Samples
- Describe Definitions for Short and Long Stay Records
- Discuss the Purpose as well as Methods of Risk Adjustment Used for QMs
- Display the Logic Specifications for Each QM
Intended Purposes of QMs

- To provide information about the quality of care at nursing homes in order to assist with one’s selection of a nursing home
- To provide information about the care at nursing homes where residents or family members already live
- To provide information to facilitate one’s discussions with the nursing home staff regarding the quality of care; and
- To provide data to the nursing home to assist in their quality improvement efforts
Overview

- Data for QMs derive from Minimum Data Set (MDS) 3.0 assessments
- The National Quality Forum (NQF) developed (revised) QMs in 2011 to conform to the newly implemented MDS 3.0
- 18 facility-level QMs – 5 “Short-Stay” & 13 “Long-Stay” QMs
- 3 “Survey-Only” QMs
- Surveyor Guidance - Flags QMs ≥ the 75th National Percentile
- The 18 facility-level QMs display on CMS’ Nursing Home Compare Website
  - Displays facility data for each QM
  - Compares facility data to State & National Averages
5 “Short Stay” QMs

- Percent of Residents who Self-Report Moderate to Severe Pain
- Percent of Residents with Pressure Ulcers that are New or Worsened *
- Percent of Residents Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine **
- Percent of Residents Assessed and Appropriately Given the Pneumococcal Vaccine **
- Percent of Short-Stay Residents Who Newly Received an Antipsychotic Medication

* Risk-adjusted Quality Measure using resident-level covariates for public reporting
** QM data not displayed on Certification And Survey Provider Enhanced Reports (CASPER)
13 “Long Stay” QMs

- Percent of Residents Experiencing One or More Falls Major Injury
- Percent of Residents who Self-Report Moderate to Severe Pain *
- Percent of High-Risk Residents with Pressure Ulcers
- Percent of Residents Assessed and Appropriately Given the Seasonal Influenza Vaccine **
- Percent of Residents Assessed and Appropriately Given the Pneumococcal Vaccine **
- Percent of Residents with a Urinary Tract Infection
- Percent of Low-Risk Residents Who Lose Control of Their Bowels or Bladder

* Risk-adjusted Quality Measure using resident-level covariates for public reporting
** QM data not displayed on Certification And Survey Provider Enhanced Reports (CASPER)
13 “Long Stay” QMs Cont’d

- Percent of Residents Who Have/Had a Catheter Inserted and Left in Their Bladder *
- Percent of Residents Who Were Physically Restrained
- Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased
- Percent of Residents Who Lose Too Much Weight
- Percent of Residents Who Have Depressive Symptoms
- Percent of Long-Stay Residents Who Received An Antipsychotic Medication

* Risk-adjusted Quality Measure using resident-level covariates for public reporting
3 Survey-Only QMs

- The percentage of long-stay residents who have had a fall during their episode of care
- The percentage of long-stay residents who are receiving antianxiety medications or hypnotics but do not have evidence of psychotic or related conditions in the target period
- The percentage of long-stay residents who have behavior symptoms that affect others during the target period
QM Definitions

- **Target Date** - The event date for an MDS record, defined as follows:
  - For an entry record (A0310F = [01]), the target date is equal to the entry date (A1600).
  - For a discharge record (A0310F = [10, 11]) or death-in-facility record (A0310F = [12]), the target date is equal to the discharge date (A2000).
  - For all other records, the target date is equal to the assessment reference date (A2300)

- **Target period** - The span of time that defines the QM reporting period (e.g., a calendar quarter)

Example: 4/1/14 to 6/30/14
**QM Definitions Cont’d**

- **Stay** - The period of time between a resident’s entry into a facility and either (a) a discharge, or (b) the end of the target period, whichever comes first. A stay is also defined as a set of contiguous days in a facility. The start of a stay is either:
  - An admission entry (A0310F = [01] and A1700 = [1]), OR
  - A reentry (A0310F = [01] and A1700 = [2]).

The end of a stay is the earliest of the following:
  - Any discharge assessment (A0310F = [10, 11]), OR
  - A death in facility tracking record (A0310F = [12]), OR
  - The end of the target period.

Example

- **Entry/ADM**: 3/22/14
- **Discharge**: 6/1/14
- **Target Period**: 4/1/14 to 6/30/14
- **Stay**: 4/1/14 to 6/1/14
**QM Definitions Cont’d**

- **Episode** – A period of time spanning one or more stays. An episode begins with an admission (defined below) and ends with either (a) a discharge, or (b) the end of the target period, whichever comes first. An episode starts with:
  - An admission entry (A0310F = [01] and A1700 = [1]).

The end of an episode is the earliest of the following:
- A discharge assessment with return not anticipated (A0310F = [10]), OR
- A discharge assessment with return anticipated (A0310F = [11]) but the resident did not return (A0310F = [10]) within 30 days of discharge, OR
- A death in facility tracking record (A0310F = [12]), OR
- The end of the target period.
Episodes – Example

**Episode**

- **Entry/Adm.**
  - 3/15/14

- **1st Stay**
  - 4/1/14
  - Discharge Return Anticipated 4/22/14

- **2nd Stay**
  - Re-Entry 5/1/14

- **Target Period**
  - 4/22/14

- **Discharge Return Not Anticipated**
  - 6/2/14

- **Episode End**
  - 6/30/14
QM Definitions Cont’d

- **Admission** - An admission entry record (A0310F = [01] and A1700 = [1]) is required when any one of the following occurs:
  - Resident has never been admitted to this facility before; OR
  - Resident has been in this facility previously and was discharged return not anticipated; OR
  - Resident has been in this facility previously and was discharged return anticipated and did not return within 30 days of discharge.

- **Reentry** - A reentry record (A0310F = [01] and A1700 = [2]) is required when all of the following occurred prior to this entry, the resident was:
  - Discharged return anticipated, AND
  - Returned to facility within 30 days of discharge
QM Definitions Cont’d

- **Cumulative days in facility (CDIF)** - The total number of days within an episode during which the resident was in the facility
  - Counting rules:
    - Sum of the number of days within each stay included in an episode
    - Only those days within the facility would count towards CDIF
    - Counting stops with (a) the last record in the target period if that record is a discharge assessment (A0310F = [10, 11]), (b) the last record in the target period if that record is a death in facility (A0310F = [12]), or (c) the end of the target period is reached, whichever is earlier
    - Include the day of entry (A1600) but not the day of discharge (A2000) unless the entry and discharge occurred on the same day in which case the number of days in the stay is equal to 1
Cumulative days in facility (CDIF) - Example

CDIF = 70 Days
Dates of Discharge Not Counted
QM Definitions Cont’d

- **Short stay** - An episode with CDIF less than or equal to 100 days as of the end of the target period.

- **Long stay** - An episode with CDIF greater than or equal to 101 days as of the end of the target period.
Selecting the QM Samples

- Two resident samples are selected for computing the QMs: a short-stay sample and a long-stay sample. These samples are selected using the following steps:

  1. Select all residents whose latest episode either ends during the target period or is ongoing at the end of the target period. This latest episode is selected for QM calculation.
  2. For each episode that is selected, compute the cumulative days in the facility (CDIF).
  3. If the CDIF is less than or equal to 100 days, the resident is included in the short-stay sample.
  4. If the CDIF is greater than or equal to 101 days, the resident is included in the long-stay sample.
Selecting the QM Samples Cont’d

- All residents who are selected will be placed in either the short- or long-stay sample
- The two samples are mutually exclusive
- If a resident has multiple episodes within the target period, only the latest episode is used
- Within each sample, certain key records are identified which are used for calculating individual measures
- These records are defined in the following sections
QM Sample Selection
Flow Chart

Step 1 – All residents whose latest episode either ends during the target period or is ongoing at the end of the target period are selected.

Step 2 – For each latest episode that is selected, compute the CDIF.

If CDIF \( \leq 100 \) Days, then
Short Stay Sample

If CDIF \( > 100 \) Days, then
Long Stay Sample
Short Stay Record Definitions

- **Target Assessment**
  - Selection Period - Most recent 6 months (the short stay target period)
  - Specific OBRA/PPS reasons for assessment as well as discharge assessments qualify:
    - A0310A = \{01, 02, 03, 04, 05, 06\} or
    - A0310B = \{01, 02, 03, 04, 05, 06\} or
    - A0310F = \{10, 11\}
  - Latest assessment is contained within the resident’s selected episode, has a qualifying reason for assessment, and its target date is no more than 120 days before the end of the episode.

**Example**

- Admission/Entry: 9/1/13
- Target Assessment: 10/1/13
- Death in Facility: 11/30/13
- End of Episode: 3/31/14
- Short Stay Target Period: 10/1/13 to 3/31/14
- Target Assessment is No More Than 120 Days Before End Of Episode
**Initial Assessment Cont’d**

- The initial assessment cannot be the same as the target assessment.
- If the same assessment qualifies as both the initial and target assessments, it is used as the target assessment and the initial assessment is considered to be missing.
Short Stay Record Definitions Cont’d

- **Look-back Scan**
  - Selection period - Scan all assessments within the current episode
  - Qualifying RFAs:
    - A0310A = [01, 02, 03, 04, 05, 06] or
    - A0310B = [01, 02, 03, 04, 05, 06] or
    - A0310F = [10, 11]
  - Include the target assessment and qualifying earlier assessments in the scan
  - Include an earlier assessment in the scan if it is contained within the resident’s episode, it has a qualifying RFA, and its target date is on or before the target date for the target assessment
The target assessment and qualifying earlier assessments are scanned to determine whether certain events or conditions occurred during the look-back period.

- Short Stay QMs that use the look-back scan are:
  - Percent of Residents With Pressure Ulcers That Are New or Worsened (Short Stay)
  - Percent of Short-Stay Residents Who Newly Received an Antipsychotic Medication
Long Stay Record Definitions

Target Assessment

- Selection Period - Most recent 3 months (the long stay target period)
- Qualifying RFAs:
  A0310A = [01, 02, 03, 04, 05, 06] or
  A0310B = [01, 02, 03, 04, 05, 06] or
  A0310F = [10, 11]
- Latest assessment that is contained within the resident’s selected episode, has a qualifying RFA, and its target date is no more than 120 before the end of the episode
Prior assessment

- Selection Period - Latest assessment that is 46 to 165 days before the target assessment
- Qualifying RFAs:
  A0310A = [01, 02, 03, 04, 05, 06] or
  A0310B = [01, 02, 03, 04, 05, 06] or
  A0310F = [10, 11]

- Latest assessment that is contained within the resident’s episode, it has a qualifying RFA, and its target date is contained in the window that is 46 days to 165 days preceding the target date of the target assessment

- If no qualifying assessment exists, the prior assessment is considered missing
Prior assessment - Example

Rationale: The Prior Assessment must occur 46-165 days BEFORE the target assessment. The Quarterly Assessment with Target Date 2/12/14 is excluded from the calculation.
Look-back Scan

- **Selection Period** - Scan all assessments within the current episode that have target dates no more than 275 days prior to the target assessment.

- **Qualifying RFAs:**
  - A0310A = \([01, 02, 03, 04, 05, 06]\) or
  - A0310B = \([01, 02, 03, 04, 05, 06]\) or
  - A0310F = \([10, 11]\)

- Include the target assessment and all qualifying earlier assessments in the scan.
Look-back Scan Cont’d

- Include an earlier assessment in the scan if it is contained within the resident’s episode, it has a qualifying RFA, its target date is on or before the target date for the target assessment, and its target date is no more than 275 days prior to the target date of the target assessment.

- The target assessment and qualifying earlier assessments are scanned to determine whether certain events or conditions occurred during the look-back period.

  - Long Stay QMs that use the look-back scan are:
    - Percent of Residents Experiencing One or More Falls with Major Injury
    - Prevalence of Falls (Surveyor Measure)
Look-back Scan - Example

Total Days = 269

All 4 assessments included in the Look-Back Scan
Risk Adjustment

- Risk adjustment refines raw QM scores to better reflect the prevalence of problems that facilities encounter with special resident groups.
- Risk adjustment assists to make comparisons of facilities “fair” and not skewed by the presence of unique populations with certain diseases and conditions.
- Several QMs are risk adjusted to take into account individual resident level differences, which would place a resident at greater risk for a condition.
- Risk-adjustment approaches use:
  - Stratification of populations into high- and low-risk groups;
  - Exclusions;
  - Covariates to improve the comparability of populations being measured.
Risk Groups

- There are two QMs that use Risk Groups to classify into High Risk or Low Risk:
  - Percent of High-Risk Residents With Pressure Ulcers (Long Stay)
  - Percent of Low Risk Residents Who Lose Control of Their Bowel or Bladder (Long Stay)
QM - Percent of High-Risk Residents With Pressure Ulcers

**Numerator:**

- All long-stay residents with a selected target assessment that meets both of the following conditions:
  
  1. Condition #1: There is a high risk for pressure ulcers, where “high-risk” is defined in the denominator definition below.
  
  2. Condition #2: Stage II-IV pressure ulcers are present

**Denominator:**

- All long-stay residents with a selected target assessment who meet the definition of high risk, except those with exclusions. Residents are defined as high-risk if they meet one or more of the following three criteria on the target assessment: Impaired Bed Mobility or Transfers; Comatose; or Malnutrition (or at risk of Malnutrition)
Exclusions

- Resident removed from the QM calculations if:
  - Resident outcomes are not under nursing facility control (e.g., outcome is evidenced on admission to the facility)
  - Resident outcomes may be unavoidable (e.g., the resident has end-stage disease or is comatose)
  - Resident is excluded if certain MDS data is missing
  - All of the QMs, except the vaccination QMs, are shaped by one or more exclusions
  - For each QM, the prevalence of the outcome across all residents in a nursing facility, after exclusions, is the facility-level observed QM score
QM-Percent of Residents Who Have/Had a Catheter Inserted and Left in Their Bladder (Long Stay)

- **Numerator:**
  - Long-stay residents with a selected target assessment that indicates the use of indwelling catheters (H0100A = [1])

- **Denominator:**
  - All long-stay residents with a selected target assessment, except those with exclusions
Exclusions:

1. Target assessment is an admission assessment (A0310A = [01]) or a PPS 5-day or readmission/return assessment (A0310B = [01, 06]).

2. Target assessment indicates that indwelling catheter status is missing (H0100A = [-]).

3. Target assessment indicates neurogenic bladder (I1550 = [1]) or neurogenic bladder status is missing (I1550 = [-]).

4. Target assessment indicates obstructive uropathy (I1650 = [1]) or obstructive uropathy status is missing (I1650 = [-]).
Risk Adjustment Cont’d Covariates

- **Definition** – Resident-level risk factors that increase the likelihood that the resident will have the outcome are used to adjust the facility’s rate higher or lower based on the proportion of residents with defined characteristics.

- Only three CMS QMs use covariates to adjust the facility rate:
  1. Residents with pressure ulcers that are new or worsened (short-stay);
  2. Residents who self-report moderate to severe pain (long-stay) and
  3. Residents who have/had a catheter inserted and left in their bladder (long-stay).
QM - Residents who have/had a catheter inserted and left in their bladder (long-stay).

- In addition to the Numerator, Denominator, and Exclusions for this QM (discussed previously), this QM risk adjusts with **Covariates as follows:**
  - Frequent bowel incontinence on prior assessment.
  - Pressure ulcers at stages II, III, or IV on prior assessment.
  - All covariates are missing if no prior assessment is available.
# Logical Specifications
## Short Stay QM # 1

**MDS 3.0 Measure: Percent of Residents Who Self-Report Moderate to Severe Pain (Short Stay)**

<table>
<thead>
<tr>
<th>MEASURE DESCRIPTION</th>
<th>MEASURE SPECIFICATIONS</th>
<th>COVARIATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMS: N001.01</td>
<td>Numerator</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>NQF: 0676</td>
<td><strong>Numerator</strong></td>
<td></td>
</tr>
<tr>
<td>This measure captures the percent of short stay residents, with at least one episode of moderate/severe pain or horrible/excruciating pain of any frequency, in the last 5 days.</td>
<td>Short-stay residents with a selected target assessment where the target assessment meets <em>either</em> or <em>both</em> of the following two conditions:</td>
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<tr>
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<td>1. Condition #1: resident reports daily pain with at least one episode of moderate/severe pain. <em>Both</em> of the following conditions must be met:</td>
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<tr>
<td></td>
<td>1.1. Almost constant or frequent pain (J0400=[1,2]) and</td>
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<tr>
<td></td>
<td>1.2. At least one episode of moderate to severe pain (J0600A=[05,06,07,08,09] OR J0600B=[2,3]).</td>
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<tr>
<td></td>
<td><strong>Denominator</strong></td>
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<tr>
<td></td>
<td>All short-stay residents with a selected target assessment, except those with exclusions.</td>
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<tr>
<td></td>
<td><strong>Exclusions</strong></td>
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<tr>
<td></td>
<td>If the resident is not included in the numerator (the resident did not meet the pain symptom conditions for the numerator) AND any of the following conditions are true:</td>
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<td></td>
<td>1. The pain assessment interview was not completed (J0200=[0,,-,^]).</td>
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<tr>
<td></td>
<td>2. The pain presence item was not completed (J0300=[9,,-,^]).</td>
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<tr>
<td></td>
<td>3. For residents with pain or hurting at any time in the last 5 days (J0300 = [1]), any of the following are true:</td>
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</tr>
<tr>
<td></td>
<td>3.1. The pain frequency item was not completed (J0400=[9,,-,^]).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.2. Neither of the pain intensity items was completed (J0600A=[99,,-,^] and J0600B=[9,,-,^]).</td>
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<tr>
<td></td>
<td>3.3. The numeric pain intensity item indicates no pain (J0600A=[00]).</td>
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</tr>
</tbody>
</table>
## Logical Specifications

### Short Stay QM # 2

**MDS 3.0 Measure:** Percent of Residents With Pressure Ulcers That Are New or Worsened (Short Stay)

<table>
<thead>
<tr>
<th>MEASURE DESCRIPTION</th>
<th>MEASURE SPECIFICATIONS</th>
<th>COVARIATES</th>
</tr>
</thead>
</table>
| **Numerator**        |                         | 1. Indicator of requiring limited or more assistance in bed mobility self-performance on the initial assessment:  
                        |                         | Covariate = [0] if G0110A1 = [0, 1, -]  
                        |                         | 2. Indicator of bowel incontinence at least occasionally on the initial assessment:  
                        |                         | Covariate = [1] if H0400 = [1, 2, 3]  
                        |                         | Covariate = [0] if H0400 = [0, 9, -]  
                        |                         | 3. Have diabetes or peripheral vascular disease on initial assessment:  
                        |                         | Covariate = [1] if any of the following are true:  
                        |                         |   a. 10900 = [1] (checked)  
                        |                         |   b. 12900 = [1] (checked)  
                        |                         |   c. 18000A through 18000J contains any of the following peripheral vascular disease codes: [205.7, 440.20, 440.21, 440.22, 440.23, 440.24, 440.29, 440.31, 440.32, 443.81, 443.9].  
                        |                         | Covariate = [0] if 10900 = [0, -, missing^2] AND 12900 = [0, -] AND 18000A through 18000J do not contain any of the peripheral vascular disease diagnosis codes listed above.  
                        |                         | 4. Indicator of Low Body Mass Index, based on Height (K0200A) and Weight (K0200B) on the initial assessment:  
                        |                         | Covariate = [0] if BMI = [19.0] AND = [40.0]  
                        |                         | Where: BMI = (weight * 703 / height^2) = ((K0200B) * 703) / (K0200A)^2 and the resulting value is rounded to one decimal.  
                        |                         | Covariate = missing if K0200A = [0, -] OR K0200B = [0, -] OR BMI < [12.0] OR BMI > [40.0].  
                        |                         | 5. All covariates are missing if no initial assessment is available. |
| **Denominator**      |                         | 2. If all of the assessments that are eligible for the look-back scan are discarded and no usable assessments remain, then the resident is excluded from the numerator and the denominator. |
| This measure captures the percentage of short-stay residents with new or worsening Stage II-IV pressure ulcers. |                         |            |

- **CMS:** N002.01  
  - **NQF:** 0678  

- **Numerator:**  
  - Short stay residents for which a look-back scan indicates one or more new or worsening Stage II-IV pressure ulcers  
  - Where any assessment in the look-back scan:  
    1. Stage II (M0800A) > [0] and M0800A <= M0300B1, OR  
    2. Stage III (M0800B) > [0] and M0800B <= M0300C1, OR  
    3. Stage IV (M0800C) > [0] and M0800C <= M0300D1.  

- **Exclusions:**  
  - Residents are excluded if none of the assessments that are included in the look-back scan have a usable response for M0800A, M0800B, or M0800C. This situation is identified as follows:  
    1. Examine each assessment that is included in the look-back scan. For each assessment, do the following:  
      1. The response to M0800A is usable if either of the following conditions are true:  
         1.1.1. M0300B1 = [0, 1, 2, 3, 4, 5, 6, 7, 8, 9] and M0800A = [0, 1, 2, 3, 4, 5, 6, 7, 8, 9] and M0800A <= M0300B1.  
         1.1.2. M0300B1 = [*] and M0800A = [*].  
      1.2. The response to M0800B is usable if either of the following conditions are true:  
         1.2.1. M0300C1 = [0, 1, 2, 3, 4, 5, 6, 7, 8, 9] and M0800B = [0, 1, 2, 3, 4, 5, 6, 7, 8, 9] and M0800B <= M0300C1.  
         1.2.2. M0300C1 = [*] and M0800B = [*].  
      1.3. The response to M0800C is usable if either of the following conditions are true:  
         1.3.1. M0300D1 = [0, 1, 2, 3, 4, 5, 6, 7, 8, 9] and M0800C = [0, 1, 2, 3, 4, 5, 6, 7, 8, 9] and M0800C <= M0300D1.  
         1.3.2. M0300D1 = [*] and M0800C = [*].  
    2. If none of the three items M0800A, M0800B, and M0800C is usable, then the assessment is not usable and is discarded.  
    3. If all of the assessments that are eligible for the look-back scan are discarded and no usable assessments remain, then the resident is excluded from the numerator and the denominator.
### Logical Specifications

**Short Stay QM # 3**

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**MDS 3.0 Measure: Percent of Residents Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine (Short Stay)**

<table>
<thead>
<tr>
<th>MEASURE DESCRIPTION</th>
<th>MEASURE SPECIFICATIONS</th>
<th>COVARIATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMS: N003.01 NQF: 0680</td>
<td><strong>Numerator</strong>&lt;br&gt;Residents meeting any of the following criteria on the selected target assessment:&lt;br&gt;1. resident received the influenza vaccine during the current or most recent influenza season, either in the facility (O0250A = [1]) or outside the facility (O0250C = [2]); or&lt;br&gt;2. resident was offered and declined the influenza vaccine (O0250C = [4]); or&lt;br&gt;3. resident was ineligible due to contraindication(s) (O0250C = [3]) (e.g., anaphylactic hypersensitivity to eggs or other components of the vaccine, history of Guillain-Barre Syndrome within 6 weeks after a previous influenza vaccination, bone marrow transplant within the past 6 months).&lt;br&gt;&lt;br&gt;<strong>Denominator</strong>&lt;br&gt;All short-stay residents with a selected target assessment, except those with exclusions.&lt;br&gt;&lt;br&gt;<strong>Exclusions</strong>&lt;br&gt;1. O0250C = [1] (resident not in facility during the current or most recent influenza season).&lt;br&gt;2. Resident’s age on target date of selected target assessment is 179 days or less.</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>
**Logical Specifications**  
**Short Stay QM # 4**

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**MDS 3.0 Measure: Percent of Residents Assessed and Appropriately Given the Pneumococcal Vaccine (Short Stay)**

<table>
<thead>
<tr>
<th>MEASURE DESCRIPTION</th>
<th>MEASURE SPECIFICATIONS</th>
<th>COVARIATES</th>
</tr>
</thead>
</table>
| CMS: N007.01 NQF: 0682  
This measure reports the percent of short-stay residents whose pneumococcal vaccine status is up to date during the 12-month reporting period. | **Numerator**  
Residents meeting any of the following criteria on the selected target assessment:  
1. Pneumococcal vaccine status is up to date (O0300A = [1]); or  
2. were offered and declined the vaccine (O0300B = [2]); or  
3. were ineligible due to medical contraindication(s) (O0300B = [1]) (e.g., anaphylactic hypersensitivity to components of the vaccine; bone marrow transplant within the past 12 months; or receiving a course of chemotherapy within the past two weeks). | Not applicable. |
|                      | **Denominator**  
All short-stay residents with a selected target assessment. | |
|                      | **Exclusions**  
Resident’s age on target date of selected target assessment is less than 5 years (i.e., resident has not yet reached 5th birthday on target date). | |
Logical Specifications  
Short Stay QM # 5

MDS 3.0 Measure: Percent of Short-Stay Residents Who Newly Received an Antipsychotic Medication

<table>
<thead>
<tr>
<th>MEASURE DESCRIPTION</th>
<th>MEASURE SPECIFICATIONS</th>
<th>COVARIATES</th>
</tr>
</thead>
</table>
| CMS: N011.01 NQF: none | **Numerator**  
Short-stay residents for whom one or more assessments in a look-back scan (not including the initial assessment) indicates that antipsychotic medication was received:  
- For assessments with target dates on or before 03/31/2012: N0400A = [1].  
- For assessments with target dates on or after 04/01/2012: N0410A=[1,2,3,4,5,6,7]  
Note that residents are excluded from this measure if their initial assessment indicates antipsychotic medication use or if antipsychotic medication use is unknown on the initial assessment (see exclusion #3, below).  
**Denominator**  
All short-stay residents who do not have exclusions and who meet all of the following conditions:  
- The resident has a target assessment, and  
- The resident has an initial assessment, and  
- The target assessment is not the same as the initial assessment.  
**Exclusions**  
1. The following is true for all assessments in the look-back scan (excluding the initial assessment):  
   1.1. For assessments with target dates on or before 03/31/2012: N0400A = [-].  
   1.2. For assessments with target dates on or after 04/01/2012: N0410A=[-].  
2. Any of the following related conditions are present on any assessment in a look-back scan:  
   2.1. Schizophrenia (I6000 = [1]).  
   2.2. Tourette’s Syndrome (I5350 = [1]).  
   2.3. Huntington’s Disease (I5250 = [1]).  
3. The resident’s initial assessment indicates antipsychotic medication use or antipsychotic medication use is unknown.  
   3.1. For initial assessments with target dates on or before 03/31/2012: N0400A = [1,-].  
   3.2. For initial assessments with target dates on or after 04/01/2012: N0410A=[1,2,3,4,5,6,7,-]. | Not applicable. |
### Logical Specifications

#### Long Stay QM # 1

**MDS 3.0 Measure: Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay)**

<table>
<thead>
<tr>
<th>Measure Description</th>
<th>Measure Specifications</th>
<th>Covariates</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Numerator</strong></td>
<td>Long-stay residents with one or more look-back scan assessments that indicate one or more falls that resulted in major injury (J1900C = [1, 2]).</td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Denominator</strong></td>
<td>All long-stay nursing home residents with a one or more look-back scan assessments except those with exclusions.</td>
<td></td>
</tr>
</tbody>
</table>
| **Exclusions**      | Resident is excluded if one of the following is true for all of the look-back scan assessments:  
  1. The occurrence of falls was not assessed (J1800 = [-]), OR  
  2. The assessment indicates that a fall occurred (J1800 = [1]) AND the number of falls with major injury was not assessed (J1900C = [-]). | |
# Logical Specifications

**Long Stay QM # 2**

## MDS 3.0 Measure: Percent of Residents Who Self-Report Moderate to Severe Pain (Long Stay)

<table>
<thead>
<tr>
<th>MEASURE DESCRIPTION</th>
<th>MEASURE SPECIFICATIONS</th>
<th>COVARIATES</th>
</tr>
</thead>
</table>
| **Numerator**       | Long-stay residents with a selected target assessment where the target assessment meets *either or both* of the following two conditions:  
1. Condition #1: resident report almost constant or frequent moderate to severe pain in the last 5 days. *Both* of the following conditions must be met:  
   1.1. Almost constant or frequent pain (J0400=[1,2]), *and*  
   1.2. At least one episode of moderate to severe pain:  
      (J0600A=[05,06,07,08,09] OR J600B=[2,3]).  
2. Condition #2: resident reports very severe/horrible pain of any frequency (J0600A=[10] OR J0600B=[4]). | Independence or modified independence in daily decision making on the prior assessment  
Covariate = 1 if C1000 = [0, 1] or if (C0500 ≥ [13] and C0500 ≤ [15])  
Covariate = 0 if C1000 = [2, 3] or if (C0500 ≥ [00] and C0500 ≤ [12])  
Covariate = missing if *either* of the following are true:  
1. C0500 = [99,.^,^] and C1000 = [,.^,.^]  
2. No prior assessment is available. |
| **Denominator**     | All long-stay residents with a selected target assessment, except those with exclusions.  
Exclusions  
1. The target assessment is an admission assessment, a PPS 5-day assessment, or a PPS readmission/return assessment (A0310A=[01] or A0310B=[01,06]).  
2. The resident is not included in the numerator (the resident did not meet the pain symptom conditions for the numerator) AND any of the following conditions are true:  
   2.1. The pain assessment interview was not completed (J0200=[0,.^,.^]).  
   2.2. The pain presence item was not completed (J0300=[9,.^,.^]).  
   2.3. For residents with pain or hurling at any time in the last 5 days (J0300 = [1]), *any* of the following are true:  
      2.3.1. The pain frequency item was not completed (J0400=[9,.^,.^]).  
      2.3.2. Neither of the pain intensity items was completed (J0600A=[99,.^,.^] and J0600B=[9,.^,.^]).  
      2.3.3. The numeric pain intensity item indicates no pain (J0600A=[00]). |
# Logical Specifications
## Long Stay QM # 3

### MDS 3.0 Measure: Percent of High-Risk Residents With Pressure Ulcers (Long Stay)

<table>
<thead>
<tr>
<th>MEASURE DESCRIPTION</th>
<th>MEASURE SPECIFICATIONS</th>
<th>COVARIATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMS: N015.01</td>
<td>Numerator</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>NQF: 0679</td>
<td>All long-stay residents with a selected target assessment that meets both of the following conditions:</td>
<td></td>
</tr>
</tbody>
</table>
| This measure captures the percentage of long-stay, high-risk residents with Stage II-IV pressure ulcers. | 1. Condition #1: There is a high risk for pressure ulcers, where “high-risk” is defined in the denominator definition below.  
2. Condition #2: Stage II-IV pressure ulcers are present, as indicated by any of the following three conditions: |
|                     | 2.1 M0300B1 = [1, 2, 3, 4, 5, 6, 7, 8, 9] or  
2.2. M0300C1 = [1, 2, 3, 4, 5, 6, 7, 8, 9] or  
2.3. M0300D1 = [1, 2, 3, 4, 5, 6, 7, 8, 9]. | |
|                     | Denominator             | |
|                     | All long-stay residents with a selected target assessment who meet the definition of high risk, except those with exclusions. Residents are defined as high risk if they meet one or more of the following three criteria on the target assessment: |
|                     | 1. Impaired bed mobility or transfer indicated, by either or both of the following: |
|                     | 1.1. Bed mobility, self-performance (G0110A1) = [3, 4, 7, 8].  
1.2. Transfer, self-performance (G0110B1) = [3, 4, 7, 8].  
2. Comatose (B0100 = [1])  
3. Malnutrition or at risk of malnutrition (I5600 = [1]) (checked). |
|                     | Exclusions               | |
|                     | 1. Target assessment is an admission assessment (A0310A = [01]) or a PPS 5-day or readmission/return assessment (A0310B = [01, 06]).  
2. If the resident is not included in the numerator (the resident did not meet the pressure ulcer conditions for the numerator) AND any of the following conditions are true: |
|                     | a. M0300B1 = [-]  
b. M0300C1 = [-]  
c. M0300D1 = [-]. | |
### Logical Specifications
#### Long Stay QM # 4

#### MDS 3.0 Measure: Percent of Residents Assessed and Appropriately Given the Seasonal Influenza Vaccine (Long Stay)

<table>
<thead>
<tr>
<th>Measure Description</th>
<th>Measure Specifications</th>
<th>Covariates</th>
</tr>
</thead>
</table>
| **Numerator**       | Residents meeting any of the following criteria on the selected target assessment:  
1. Resident received the influenza vaccine during the current or most recent influenza season, either in the facility (O0250A = [1]) or outside the facility (O0250C = [2]); or  
2. Resident was offered and declined the influenza vaccine (O0250C = [4]); or  
3. Resident was ineligible due to contraindication(s) (O0250C = [3]) (e.g., anaphylactic hypersensitivity to eggs or other components of the vaccine, history of Guillain-Barre Syndrome within 6 weeks after a previous influenza vaccination, bone marrow transplant within the past 6 months). | Not applicable. |
| **Denominator**     | All long-stay residents with a selected target assessment, except those with exclusions. |
| **Exclusions**      | Resident was not in facility during the current or most recent influenza season (O0250C = [1]). |
**Logical Specifications**  
**Long Stay QM # 5**

**MDS 3.0 Measure:** Percent of Residents Assessed and Appropriately Given the Pneumococcal Vaccine (Long Stay)

<table>
<thead>
<tr>
<th>MEASURE DESCRIPTION</th>
<th>MEASURE SPECIFICATIONS</th>
<th>COVARIATES</th>
</tr>
</thead>
</table>
| CMS: N020.01  
NQF: 0683  
This measure reports the percent of long-stay residents whose pneumococcal polysaccharide vaccine status is up to date. | **Numerator**  
Residents meeting any of the following criteria on the selected target assessment:  
1. Have an up to date PNEUMOCOCCAL VACCINE status (O0300A = [1]); or  
2. Were offered and declined the vaccine (O0300B = [2]); or  
3. Were ineligible due to medical contraindication(s) (e.g., anaphylactic hypersensitivity to components of the vaccine; bone marrow transplant within the past 12 months; or receiving a course of chemotherapy within the past two weeks) (O0300B = [1]).  
**Denominator**  
All long-stay residents with a selected target assessment. | Not applicable. |
## MDS 3.0 Measure: Percent of Residents With a Urinary Tract Infection (Long Stay)

<table>
<thead>
<tr>
<th>MEASURE DESCRIPTION</th>
<th>MEASURE SPECIFICATIONS</th>
<th>COVARIATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMS: N024.01</td>
<td><strong>Numerator</strong>&lt;br&gt;Long-stay residents with a selected target assessment that indicates urinary tract infection within the last 30 days (I2300 = [1]).</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>NQF: 0684</td>
<td><strong>Denominator</strong>&lt;br&gt;All long-stay residents with a selected target assessment, except those with exclusions.</td>
<td></td>
</tr>
<tr>
<td>The measure reports the percentage of long stay residents who have a urinary tract infection</td>
<td><strong>Exclusions</strong>&lt;br&gt;1. Target assessment is an admission assessment (A0310A = [01]) or a PPS 5-day or readmission/return assessment (A0310B = [01, 06]).&lt;br&gt;2. Urinary tract infection value is missing (I2300 = [-]).</td>
<td></td>
</tr>
</tbody>
</table>
Logical Specifications
Long Stay QM # 7

MDS 3.0 Measure: Percent of Low Risk Residents Who Lose Control of Their Bowel or Bladder (Long Stay)

<table>
<thead>
<tr>
<th>MEASURE DESCRIPTION</th>
<th>MEASURE SPECIFICATIONS</th>
<th>COVARIATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMS: N025.01</td>
<td>Numerator</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>NQF: 0685</td>
<td>Long-stay residents with a selected target assessment that indicates frequently or always incontinence of the bladder (H0300 = [2, 3]) or bowel (H0400 = [2, 3]).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Denominator</td>
<td>All long-stay residents with a selected target assessment, except those with exclusions.</td>
</tr>
</tbody>
</table>
|                     | Exclusions             | 1. Target assessment is an admission assessment (A0310A = [01]) or a PPS 5-day or readmission/return assessment (A0310B = [01, 06]).
2. Resident is not in numerator and H0300 = [-] OR H0400 = [-].
3. Residents who have any of the following high risk conditions:
   a. Severe cognitive impairment on the target assessment as indicated by (C1000 = [3] and C0700 = [1]) OR (C0500 ≤ [7]).
   b. Totally dependent in bed mobility self-performance (G0110A1 = [4, 7, 8]).
   c. Totally dependent in transfer self-performance (G0110B1 = [4, 7, 8]).
   d. Totally dependent in locomotion on unit self-performance (G0110E1 = [4, 7, 8]).
4. Resident does not qualify as high risk (see #3 above) and both of the following two conditions are true for the target assessment:
   a. C0500 = [99, ^, -]. and
   b. C0700 = [^, -] or C1000 = [^, -].
5. Resident does not qualify as high risk (see #3 above) and any of the following three conditions are true:
   a. G0110A1 = [-]
   b. G0110B1 = [-]
   c. G0110E1 = [-].
6. Resident is comatose (B0100 = [1]) or comatose status is missing (B0100 = [-]) on the target assessment.
7. Resident has an indwelling catheter (H0100A = [1]) or indwelling catheter status is missing (H0100A = [-]) on the target assessment.
8. Resident has an ostomy (H0100C = [1]) or ostomy status is missing (H0100C = [-]) on the target assessment.
# Logical Specifications
## Long Stay QM # 8

### MDS 3.0 Measure: Percent of Residents Who Have/Had a Catheter Inserted and Left in Their Bladder (Long Stay)

<table>
<thead>
<tr>
<th>MEASURE DESCRIPTION</th>
<th>MEASURE SPECIFICATIONS</th>
<th>COVARIATES</th>
</tr>
</thead>
</table>
| CMS: N026.01 NQF: 0686 | **Numerator**<br>Long-stay residents with a selected target assessment that indicates the use of indwelling catheters (H0100A = [1]).<br><br>**Denominator**<br>All long-stay residents with a selected target assessment, except those with exclusions.<br><br>**Exclusions**<br>1. Target assessment is an admission assessment (A0310A = [01]) or a PPS 5-day or readmission/return assessment (A0310B = [01, 06]).<br>2. Target assessment indicates that indwelling catheter status is missing (H0100A = [-]).<br>3. Target assessment indicates neurogenic bladder (I1550 = [1]) or neurogenic bladder status is missing (I1550 = [-]).<br>4. Target assessment indicates obstructive uropathy (I1650 = [1]) or obstructive uropathy status is missing (I1650 = [-]). | 1. Frequent bowel incontinence on prior assessment (H0400 = [2, 3]).<br>Covariate = [1] if H0400 = [2, 3]<br>Covariate = [0] if H0400 = [0, 1, 9, -].
2. Pressure ulcers at stages II, III, or IV on prior assessment:<br>Covariate = [1] if any of the following are true:<br>a. M0300B1 = [1, 2, 3, 4, 5, 6, 7, 8, 9], or<br>b. M0300C1 = [1, 2, 3, 4, 5, 6, 7, 8, 9], or<br>c. M0300D1 = [1, 2, 3, 4, 5, 6, 7, 8, 9]<br>Covariate = [0] if M0300B1 = [0, -] and M0300C1 = [0, -] and M0300D1 = [0, -].
3. All covariates are missing if no prior assessment is available. |
Logical Specifications
Long Stay QM # 9

MDS 3.0 Measure: Percent of Residents Who Were Physically Restrained (Long Stay)

<table>
<thead>
<tr>
<th>MEASURE DESCRIPTION</th>
<th>MEASURE SPECIFICATIONS</th>
<th>COVARIATES</th>
</tr>
</thead>
</table>
| CMS: N027.01 NQF: 0687 | **Numerator**
Long-stay residents with a selected target assessment that indicates daily physical restraints, where:
- trunk restraint used in bed (P0100B = [2]), OR
- limb restraint used in bed (P0100C = [2]), OR
- trunk restraint used in chair or out of bed (P0100E = [2]), OR
- limb restraint used in chair or out of bed (P0100F = [2]), OR
- chair prevents rising used in chair or out of bed (P0100G = [2]).

**Denominator**
All long-stay residents with a target assessment, except those with exclusions.

**Exclusions**
Resident is not in numerator and any of the following is true:
- P0100B = [-], OR
- P0100C = [-], OR
- P0100E = [-], OR
- P0100F = [-], OR
- P0100G = [-].

Not applicable.
Logical Specifications
Long Stay QM # 10

MDS 3.0 Measure: Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (Long Stay)

<table>
<thead>
<tr>
<th>MEASURE DESCRIPTION</th>
<th>MEASURE SPECIFICATIONS</th>
<th>COVARIATES</th>
</tr>
</thead>
</table>
| CMS: N028.01 NQF: 0688 | **Numerator**<br>Long-stay residents with selected target and prior assessment assessments that indicate the need for help with late-loss Activities of Daily Living (ADLs) has increased when the selected assessments are compared. The four late-loss ADL items are self-performance bed mobility (G0110A1), self-performance transfer (G0110B1), self-performance eating (G0110H1), and self-performance toileting (G0110I1).<br>An increase is defined as an increase in two or more coding points in one late-loss ADL item or one point increase in coding points in two or more late-loss ADL items. Note that for each of these four ADL items, if the value is equal to [7, 8] on either the target or prior assessment, then recode the item to equal [4] to allow appropriate comparison..<br>Residents meet the definition of increased need of help with late-loss ADLs if either of the following are true<br>1. **At least two** of the following are true (note that in the notation below, [t] refers to the target assessment, and [t-1] refers to the prior assessment):<br>   1. Bed mobility: \([\text{Level at target assessment (G0110A1[t])} - \text{Level at prior assessment (G0110A1[t-1])}] > 0\), or<br>   2. Transfer: \([\text{Level at target assessment (G0110B1[t])} - \text{Level at prior assessment (G0110B1[t-1])}] > 0\), or<br>   3. Eating: \([\text{Level at target assessment (G0110H1[t])} - \text{Level at prior assessment (G0110H1[t-1])}] > 0\), or<br>   4. Toileting: \([\text{Level at target assessment (G0110I1[t])} - \text{Level at prior assessment (G0110I1[t-1])}] > 0\).
2. **At least one** of the following is true:<br>   1. Bed mobility: \([\text{Level at target assessment (G0110A1[t])} - \text{Level at prior assessment (G0110A1[t-1])}] > 1\), or<br>   2. Transfer: \([\text{Level at target assessment (G0110B1[t])} - \text{Level at prior assessment (G0110B1[t-1])}] > 1\), or<br>   3. Eating: \([\text{Level at target assessment (G0110H1[t])} - \text{Level at prior assessment (G0110H1[t-1])}] > 1\), or<br>   4. Toileting: \([\text{Level at target assessment (G0110I1[t])} - \text{Level at prior assessment (G0110I1[t-1])}] > 1\). | Not applicable. |
Logical Specifications
Long Stay QM # 10 Cont’d

MDS 3.0 Measure: Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (Long Stay) (continued)

<table>
<thead>
<tr>
<th>MEASURE DESCRIPTION</th>
<th>MEASURE SPECIFICATIONS</th>
<th>COVARIATES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Denominator</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All long-stay residents with a selected target and prior assessment except those with exclusions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Exclusions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. All four of the late-loss ADL items indicate total dependence on the prior assessment, as indicated by:</td>
<td>Bed Mobility (G0110A1) = [4, 7, 8] AND</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transferring (G0110B1) = [4, 7, 8] AND</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eating (G0110H1) = [4, 7, 8] AND</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Toileting (G0110I1) = [4, 7, 8].</td>
<td></td>
</tr>
<tr>
<td>2. Three of the late-loss ADLs indicate total dependence on the prior assessment, as in #1 AND the fourth late-loss ADL indicates extensive assistance (value 3) on the prior assessment.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. If resident is comatose (B0100 = [1, -]) on the target assessment.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Prognosis of life expectancy is less than 6 month (J1400 = [1, -]) on the target assessment.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Hospice care (G0100K2 = [1, -]) on the target assessment.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. The resident is not in the numerator AND</td>
<td>Bed Mobility (G0110A1) = [ - ] on the prior or target assessment, OR</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transferring (G0110B1) = [ - ] on the prior or target assessment, OR</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eating (G0110H1) = [ - ] on the prior or target assessment, OR</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Toileting (G0110I1) = [ - ] on the prior or target assessment.</td>
<td></td>
</tr>
</tbody>
</table>
MDS 3.0 Measure: Percent of Residents Who Lose Too Much Weight (Long Stay)

<table>
<thead>
<tr>
<th>MEASURE DESCRIPTION</th>
<th>MEASURE SPECIFICATIONS</th>
<th>COVARIATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMS: N029.01</td>
<td>Numerator</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>NQF: 0689</td>
<td>Long-stay nursing home residents with a selected target assessment which indicates a weight loss of 5% or more in the last month or 10% or more in the last 6 months who were not on a physician prescribed weight-loss regimen (K0300 = [2]).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Denominator</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Long-stay nursing home residents with a selected target assessment except those with exclusions.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exclusions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Target assessment is an OBRA admission assessment (A0310A = [01]) OR a PPS 5-day or readmission/return assessment (A0310B = [01, 06]).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Weight loss item is missing on target assessment (K0300 = [-]).</td>
<td></td>
</tr>
</tbody>
</table>
## Logical Specifications
### Long Stay QM # 12

**MDS 3.0 Measure:** Percent of Residents Who Have Depressive Symptoms (Long Stay)

<table>
<thead>
<tr>
<th>MEASURE DESCRIPTION</th>
<th>MEASURE SPECIFICATIONS</th>
<th>COVARIATES</th>
</tr>
</thead>
</table>
| CMS: N030.01, NQF: 0690 | **Numerator**
Long-stay residents with a selected target assessment where the target assessment meets either of the following two conditions:

**CONDITION A** (The resident mood interview must meet Part 1 and Part 2 below)

**PART 1:**
- Little interest or pleasure in doing things half or more of the days over the last two weeks (D0200A2 = [2, 3])
  - OR
- Feeling down, depressed, or hopeless half or more of the days over the last two weeks (D0200B2 = [2, 3])

**PART 2:**
The resident interview total severity score indicates the presence of depression (D0300 ≥ [10] and D0300 ≤ [27]).

**CONDITION B:** (The staff assessment of resident mood must meet Part 1 and Part 2 below)

**PART 1:**
- Little interest or pleasure in doing things half or more of the days over the last two weeks (D0500A2 = [2, 3])
  - OR
- Feeling or appearing down, depressed, or hopeless half or more of the days over the last two weeks (D0500B2 = [2, 3])

**PART 2:**
The staff assessment total severity score indicates the presence of depression (D0600 ≥ [10] and D0600 ≤ [30]).

Not applicable.
MDS 3.0 Measure: Percent of Residents Who Have Depressive Symptoms (Long Stay) (continued)

<table>
<thead>
<tr>
<th>MEASURE DESCRIPTION</th>
<th>MEASURE SPECIFICATIONS</th>
<th>COVARIATES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Denominator</strong></td>
<td>All long-stay residents with a selected target assessment, except those with exclusions.</td>
<td></td>
</tr>
<tr>
<td><strong>Exclusions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Resident is comatose or comatose status is missing (B0100 = [1, -]).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Resident is not included in the numerator (the resident did not meet the depression symptom conditions for the numerator) AND both of the following are true:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. D0500A2 = [^, -] OR D0500B2 = [^, -] OR D0600=[-, ^].</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Logical Specifications
#### Long Stay QM # 13

#### MDS 3.0 Measure: Percent of Long-Stay Residents Who Received An Antipsychotic Medication

<table>
<thead>
<tr>
<th>MEASURE DESCRIPTION</th>
<th>MEASURE SPECIFICATIONS</th>
<th>COVARIATES</th>
</tr>
</thead>
</table>
| **Numerator**       | Long-stay residents with a selected target assessment where the following condition is true: antipsychotic medications received. This condition is defined as follows:  
  - For assessments with target dates on or before 03/31/2012: N0400A = [1].  
  - For assessments with target dates on or after 04/01/2012: N0410A=[1,2,3,4,5,6,7]. | Not applicable. |
| **Denominator**     | All long-stay residents with a selected target assessment, except those with exclusions. |
| **Exclusions**      | 1. The resident did not qualify for the numerator and any of the following is true:  
  1.1. For assessments with target dates on or before 03/31/2012: N0400A = [-].  
  1.2. For assessments with target dates on or after 04/01/2012: N0410A=[-].  
  2. **Any** of the following related conditions are present on the target assessment (unless otherwise indicated):  
  2.1. Schizophrenia (I6000 = [1]).  
  2.2. Tourette's Syndrome (I5350 = [1]).  
  2.3. Tourette's Syndrome (I5350 = [1]) on the prior assessment if this item is not active on the target assessment and if a prior assessment is available.  
  2.4. Huntington's Disease (I5250 = [1]). |
### MDS 3.0 QM Measure: Prevalence of Falls (Long Stay)

<table>
<thead>
<tr>
<th>MEASURE DESCRIPTION</th>
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<th>COVARIATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMS: N032.01</td>
<td><strong>Numerator</strong>&lt;br&gt;Long-stay residents with one or more look-back assessments that indicate the occurrence of a fall (J1800 = [1]).&lt;br&gt;<strong>Denominator</strong>&lt;br&gt;All long-stay nursing home residents with one or more look-back scan assessments except those with exclusions.&lt;br&gt;<strong>Exclusions</strong>&lt;br&gt;Resident is excluded if the following is true for all of the look-back scan assessments:&lt;br&gt;  The occurrence of falls was not assessed (J1800 = [ ]).</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>NQF: none</td>
<td></td>
<td></td>
</tr>
<tr>
<td>This measure reports the percentage of long-stay residents who have had a fall during their episode of care.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Logical Specifications**  
**Survey Only QM # 2**

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**MDS 3.0 Measure: Prevalence of Antianxiety/Hypnotic Use (Long Stay)**

<table>
<thead>
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<th>COVARIATES</th>
</tr>
</thead>
</table>
| **Numerator**       | Long-stay residents with a selected target assessment where any of the following conditions are true:  
1. For assessments with target dates on or before 03/31/2012:  
   1.1. Antianxiety medications received \((N0400B = 1)\), or  
   1.2. Hypnotic medications received \((N0400D = 1)\).  
2. For assessments with target dates on or after 04/01/2012:  
   2.1. Antianxiety medications received \((N0410B = 1,2,3,4,5,6,7)\), or  
   2.2. Hypnotic medications received \((N0410D = 1,2,3,4,5,6,7)\). | Not applicable. |
| **Denominator**     | All long-stay residents with a selected target assessment, except those with exclusions. |
| **Exclusions**      | 1. The resident did not qualify for the numerator and any of the following is true:  
   1.1. For assessments with target dates on or before 03/31/2012: \(N0400B = -\) or \(N0400D = -\)  
   1.2. For assessments with target date on or after 04/01/2012: \(N0410B = -\) or \(N0410D = -\).  
2. Any of the following related conditions are present on the target assessment (unless otherwise indicated):  
   2.1. Schizophrenia \((I6000 = 1)\).  
   2.2. Psychotic disorder \((I5950 = 1)\).  
   2.3. Manic depression (bipolar disease) \((I5900 = 1)\).  
   2.4. Tourette’s Syndrome \((I5350 = 1)\).  
   2.5. Tourette’s Syndrome \((I5350 = 1)\) on the prior assessment if this item is not active on the target assessment and if a prior assessment is available.  
   2.6. Huntington’s Disease \((I5250 = 1)\).  
   2.7. Hallucinations \((E0100A = 1)\).  
   2.8. Delusions \((E0100B = 1)\).  
   2.9. Anxiety disorder \((I5700 = 1)\).  
   2.10. Post traumatic stress disorder \((I6100 = 1)\).  
   2.11. Post traumatic stress disorder \((I6100 = 1)\) on the prior assessment if this item is not active on the target assessment and if a prior assessment is available. |
**Logical Specifications**  
**Survey Only QM # 3**

### MDS 3.0 Measure: Prevalence of Behavior Symptoms Affecting Others (Long Stay)

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<th>COVARIATES</th>
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</table>
| **Numerator**        | Long-stay residents with a selected target assessment where any of the following conditions are true:  
1. The presence of physical behavioral symptoms directed towards others (E0200A = [1,2,3]), or  
2. The presence of verbal behavioral symptoms directed towards others (E0200B = [1,2,3]), or  
3. The presence of other behavioral symptoms not directed towards others (E0200C = [1,2,3]), or  
4. Rejection of care (E0800 = [1,2,3]), or  
5. Wandering (E0900 = [1,2,3]). | Not applicable. |
| **Denominator**      | All residents with a selected target assessment, except those with exclusions. |
| **Exclusions**       | Resident is not in numerator and any of the following is true:  
1. The target assessment is a discharge (A0310F=[10,11].  
2. E0200A is equal to [-^].  
3. E0200B is equal to [-^].  
4. E0200C is equal to [-^].  
5. E0800 is equal to [-^].  
6. E0900 is equal to [-^]. |
Summary

- CMS provides QM information to raise public awareness of the quality of nursing home care as well as provide information to facilities for quality improvement purposes.
- QMs classify into Short and Long Stay measures, which represents two distinct resident population types.
- Logic specifications use three types of risk adjustment measures to balance QM scores so that facilities with unique resident populations might be compared fairly across all facilities.
We thank you for your time today.
To learn more about this or to discuss services please contact Robin A. Bleier at robin@rbhealthpartners.com or visit our web at www.rbhealthpartners.com