

Quality Measurement

Applying an understanding of the basics

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Agenda

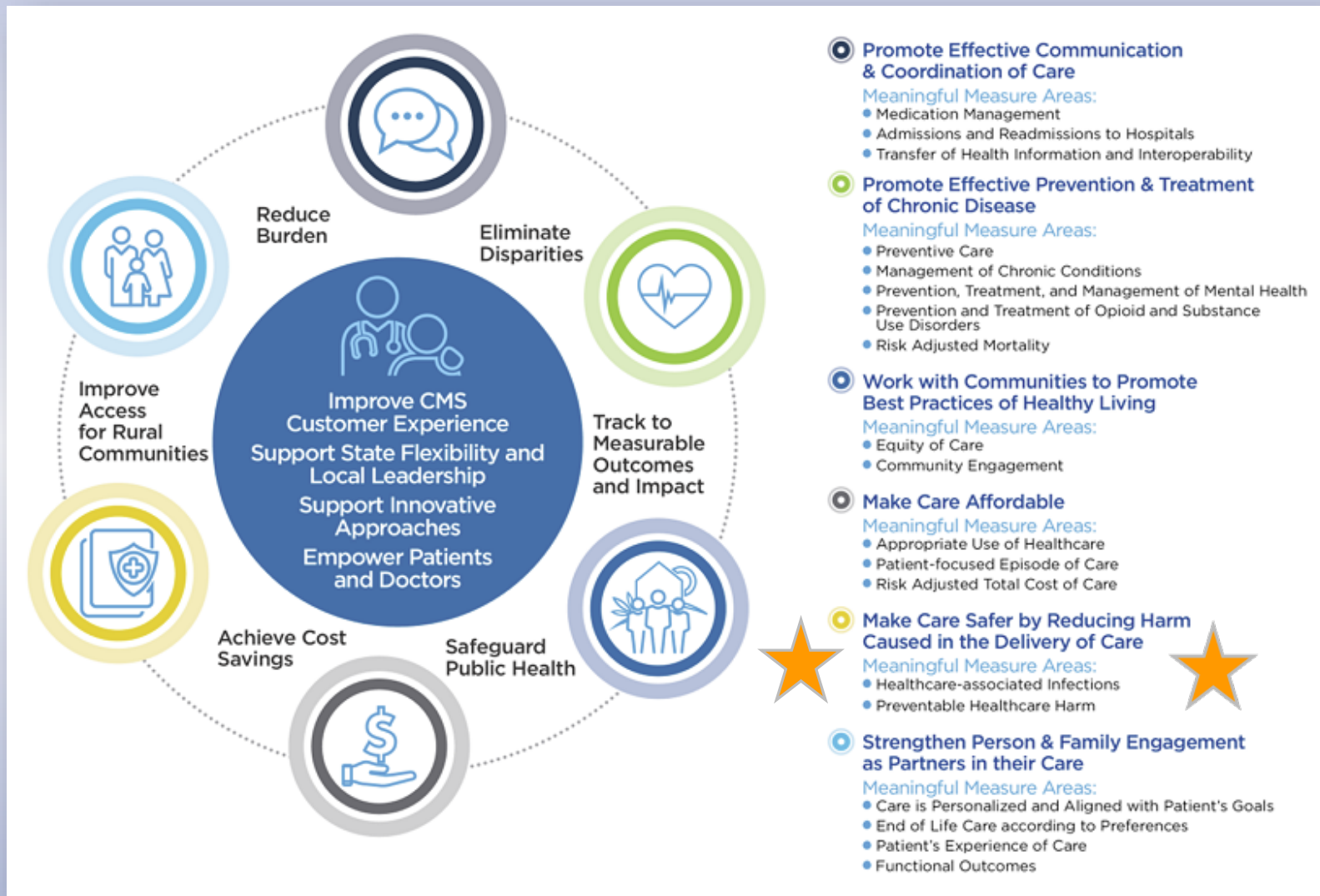
- A history of Quality Measurement (The Road to Value)
- Technically speaking...
- Specifics: Improvement in Function
- How does this apply to my residents?
- An interdisciplinary approach
- Q&A

Quality Measurement: a history lesson

- Quality Indicators... Anyone... Anyone?
- Current LTC Quality Reporting
 - CASPER QM Reports
 - [Quality Measures](#)
 - [Care Compare](#)
 - [5-Star Rating](#)
 - [Skilled Nursing Facility Value Based Purchasing \(SNF VBP\)](#)
 - [Skilled Nursing Facility Quality Reporting Program \(SNF QRP\)](#)
 - [Meaningful Measures](#)
- List of Current Publicly Reported Quality Measures (See handout)

Quality Measurement: a history lesson

- **“Meaningful Measures” framework** is the Centers for Medicare and Medicaid Services’ new initiative which identifies the highest priorities for quality measurement and improvement.
- It involves only assessing those core issues that are the most critical to providing high-quality care and improving individual outcomes.
- The Meaningful Measure Areas serve as the connectors between CMS strategic goals and individual measures/initiatives that demonstrate how high-quality outcomes for our beneficiaries are being achieved.
- They are concrete quality topics, which reflect core issues that are most vital/meaningful to high quality care and better patient outcomes.
- Meaningful Measures is not intended to replace any existing programs but will help programs identify and select individual measures.
- Meaningful Measure areas are intended to increase measure alignment across CMS programs and other public and private initiatives. Additionally, it will point to high priority areas where there may be gaps in available quality measures while helping guide CMS’s effort to develop and implement quality measures to fill those gaps.



Quality Measurement: a history lesson

Quality Measurement Future

MUC ID	Measure Title	Description	Measure Type	Measure Steward	CMS Program(s)
MUC20-0002	Skilled Nursing Facility Healthcare-Associated Infections Requiring Hospitalization	This measure will estimate the risk-adjusted rate of healthcare-associated infections (HAIs) that are acquired during skilled nursing facility (SNF) care and result in hospitalizations. The measure is risk adjusted to “level the playing field” and to allow comparison of measure performance based on residents with similar characteristics between SNFs. It is important to recognize that HAIs in SNFs are not considered “never-events.” The goal of this risk-adjusted measure is to identify SNFs that have notably higher rates of HAIs that are acquired during SNF care and result in hospitalization, when compared to their peers.	Outcome	Centers for Medicare & Medicaid Services	SNF QRP
MUC20-0044	SARS-CoV-2 Vaccination Coverage among Healthcare Personnel	This measure tracks SARS-CoV-2 vaccination coverage among healthcare personnel (HCP) in IPPS hospitals, inpatient rehabilitation facilities (IRFs), long-term care hospitals (LTCHs), inpatient psychiatric facilities, ESRD facilities, ambulatory surgical centers, hospital outpatient departments, skilled nursing facilities , and PPS-exempt cancer hospitals.	Process	Centers for Disease Control & Prevention	ASCQR; ESRD QIP; Hospital IQR Program; Hospital OQR Program; IPFQR; IRF QRP; LTCH QRP; PCHQR; SNF QRP

Quality Measurement Future

Don't forget the QRP measure and SPADES that were to begin reporting Oct. 2020 but have been delayed due to the delay in RAI Manual and MDS 3.0 Revisions.

- **Transfer of Health Information to the Provider–Post-Acute Care (PAC);** assesses for the timely transfer of health information, specifically a reconciled medication list. This measure evaluates for the transfer of information when a patient is transferred or discharged from their current setting to a subsequent provider. *
- **Transfer of Health Information to the Patient–Post-Acute Care (PAC).** This proposed measure assesses for and reports on the timely transfer of health information, i.e., a current reconciled medication list, to the patient/resident when discharged from their current setting of post-acute care. *

Quality Measurement Future

- 3 SPADEs for Cognitive Function. *
- 15 SPADEs to Assess for Special Services, Treatments, and Interventions. *
- 1 SPADE to Assess for Medical Conditions and Co-Morbidities. *
- 2 SPADEs to Assess for Impairments
- 5 SPADEs to assess for a new category: Social Determinants of Health. *

* New MDS items

Quality Measure Definitions

- **Target period:** The span of time that defines the QM reporting period (e.g., a calendar quarter).
- **Influenza Season:** Influenza season is July 1 of the current year to June 30 of the following year (e.g., July 1, 2019 through June 30, 2020 for the 2019 – 2020 influenza season).
- **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, thus defined, may include interrupted stays lasting 3 calendar days or less. 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

Quality Measure Definitions

- **Interrupted Stay:** During a stay, the resident had an interruption in their stay and resumed the same stay within three consecutive calendar days. Interrupted stays apply only to Medicare-covered stays and pertain to both short- and long-stay resident episodes.
- **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 within 30 days of discharge, or
 - A death in facility tracking record (A0310F = [12]), or
 - The end of the target period.

Quality Measure Definitions

- **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.

Quality Measure Definitions

- **Cumulative days in facility (CDIF):** The total number of days within an episode during which the resident was in the facility. It is the sum of the number of days within each stay included in an episode. If an episode consists of more than one stay separated by periods of time outside the facility (e.g., hospitalizations), and/or one or more stays with interruptions lasting 3 calendar days or less, only those days within the facility would count towards CDIF. Any days outside of the facility (e.g., hospital, home, etc.) would not count towards the CDIF total. The following rules are used when computing CDIF:
 - When counting the number of days until the end of the episode, 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.

Quality Measure Definitions

- **Cumulative days in facility (cont.):**

- When counting the duration of each stay within an episode, 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.
 - For example: if a resident is admitted on Monday and discharged the following day (Tuesday), the duration of that episode would be 1 day.
- While death in facility records (A0310F = [12]) end CDIF counting, these records are not used as target records because they contain only tracking information and do not include clinical information necessary for QM calculation.

Quality Measure Definitions

- **Cumulative days in facility (cont.):**
 - **Special rules for influenza vaccination measures.** Influenza vaccination measures are calculated only once per 12-month influenza season, which begins July 1 of a given year and ends on June 30 of the subsequent year. For these measures, the target period begins on October 1 and ends on March 31. This means that the end-of-episode date will be March 31 for an episode that is ongoing at the end of the influenza season and that March 31 should be used as the end date when computing CDIF and for classifying stays as long or short for the influenza vaccination measures.
 - Note, the target period (i.e., October 1 – March 31) is different than the selection period, which begins October 1 and ends June 30 of the following year. The selection period for the influenza vaccination measures is discussed more in Sections 3 and 4 below.

Quality Measure Definitions

- **Short stay:** An episode with CDIF less than or equal to 100 days as of the end of the target period. Short stays may include one or more interruptions, indicated by Interrupted Stay (A0310G1 = [1]).
- **Long stay:** An episode with CDIF greater than or equal to 101 days as of the end of the target period. Long stays may include one or more interruptions, indicated by Interrupted Stay (A0310G1 = [1]).
- **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 (ARD, A2300).

Quality Measure Sample Selection

- 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.

Note that all residents who are selected in Step 1 above will be placed in either the short- or long-stay sample and that the two samples are mutually exclusive. If a resident has multiple episodes within the target period, only the latest episode is used.

Quality Measure Record Definitions

Within each sample, **certain key records are identified** which are used for calculating individual measures.

- Short Stay Records

ASSESSMENT SELECTED	PROPERTY	SELECTION SPECIFICATIONS
Target assessment	Selection period	Most recent 6 months (the short stay target period).
	Qualifying RFAs ²	A0310A = [01, 02, 03, 04, 05, 06] or A0310B = [01] or A0310F = [10, 11]
	Selection logic	Latest assessment that meets the following criteria: (a) it is contained within the resident's selected episode, (b) it has a qualifying RFA, and (c) its target date is no more than 120 days ³ before the end of the episode.
	Rationale	Records with a qualifying RFA contain all of the items needed to define the QMs. The target assessment need not have a target date within the target period, but it must occur within 120 days before the end of the resident's selected episode (either the target date of a discharge assessment or death in facility record that is the last record in the target period or the end of the target period if the episode is ongoing). 120 days allows 93 days between quarterly assessments plus an additional 27 days to allow for late assessments. The target assessment represents the resident's status at the end of the episode.

Quality Measure Record Definitions

Within each sample, **certain key records are identified** which are used for calculating individual measures.

- Short Stay Records

Initial assessment	Selection period	First assessment following the admission entry record at the beginning of the resident's selected episode.
	Qualifying RFAs	A0310A = [01] or A0310B = [01] or A0310F = [10, 11]
	Selection logic	Earliest assessment that meets the following criteria: (a) it is contained within the resident's selected episode, (b) it has a qualifying RFA, (c) it has the earliest target date that is greater than or equal to the admission entry date starting the episode, and (d) its target date is no more than 130 days prior to the target date of the target record. 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.
	Rationale	Records with a qualifying RFA contain all of the items needed to define the QMs. The initial assessment need not have a target date within the target period. The initial assessment represents the resident's status as soon as possible after the admission that marks the beginning of the episode. If the initial assessment is more than 130 days prior to the target assessment, it is not used and the initial record is considered to be missing. This prevents the use of an initial assessment for a short stay in which a large portion of the resident's episode was spent outside the facility. 130 days allows for as many as 30 days of a 100-day stay to occur outside of the facility.

Quality Measure Record Definitions

Within each sample, **certain key records are identified** which are used for calculating individual measures.

- Short Stay Records

ASSESSMENT SELECTED	PROPERTY	SELECTION SPECIFICATIONS
Look-back Scan	Selection period	Scan all qualifying RFAs within the current episode.
	Qualifying RFAs	A0310A = [01, 02, 03, 04, 05, 06] <i>or</i> A0310B = [01] <i>or</i> A0310F = [10, 11]
	Selection logic	Include the target assessment and qualifying earlier assessments in the scan. Include an earlier assessment in the scan if it meets all of the following conditions: (a) it is contained within the resident's episode, (b) it has a qualifying RFA, and (c) 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. These events and conditions are specified in the definitions of measures that utilize the look-back scan.
	Rationale	Some measures utilize MDS items that record events or conditions that occurred since the prior assessment was performed. The purpose of the look-back scan is to determine whether such events or conditions occurred during the look-back period. All qualifying RFAs with target dates within the episode are examined to determine whether the event or condition of interest occurred at any time during the episode.

Quality Measure Record Definitions

Within each sample, **certain key records are identified** which are used for calculating individual measures.

- Short Stay Records

Influenza vaccination assessment	Selection period ⁴	All assessments with target dates on or after October 1 of the most recently completed influenza season (i.e., the target date must be on or between October 1 of the current year and June 30 of the following year).
	Qualifying RFAs	A0310A = [01, 02, 03, 04, 05, 06] <i>or</i> A0310B = [01] <i>or</i> A0310F = [10, 11]
	Selection logic	Select the record with the latest target date that meets all of the following conditions: a) It has a qualifying RFA, <i>and</i> b) Target date is on or after October 1 of the most recently completed influenza season (i.e., the target date must fall on or between October 1 and June 30), <i>and</i> c) A1600 (entry date) is on or before March 31 of the most recently completed influenza season.
	Rationale	The selection logic defined above is intended to identify the latest assessment that reports the influenza vaccine status for a resident who was in the facility for at least one day from October 1 through March 31.

Quality Measure Record Definitions

Within each sample, **certain key records are identified** which are used for calculating individual measures.

- Long Stay Records

ASSESSMENT SELECTED	PROPERTY	SELECTION SPECIFICATIONS
Target assessment	Selection period	Most recent 3 months (the long stay target period).
	Qualifying RFAs	A0310A = [01, 02, 03, 04, 05, 06] <i>or</i> A0310B = [01] <i>or</i> A0310F = [10, 11]
	Selection logic	Latest assessment that meets the following criteria: (a) it is contained within the resident's selected episode, (b) it has a qualifying RFA, and (c) its target date is no more than 120 before the end of the episode.
	Rationale	Records with a qualifying RFA contain all of the items needed to define the QMs. The target assessment need not have a target date within the target period, but it must occur within 120 days of the end of the resident's episode (either the last discharge in the target period or the end of the target period if the episode is ongoing). 120 days allows 93 days between quarterly assessments plus an additional 27 days to allow for late assessments. The target assessment represents the resident's status at the end of the episode.

Quality Measure Record Definitions

Within each sample, **certain key records are identified** which are used for calculating individual measures.

- Long Stay Records

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] or A0310F = [10, 11]
	Selection logic	Latest assessment that meets the following criteria: (a) it is contained within the resident's episode, (b) it has a qualifying RFA, and (c) 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.
	Rationale	<p>Records with a qualifying RFA contain all of the items needed to define the QMs. The prior assessment need not have a target date within the target period, but it must occur within the defined window.</p> <p>The window covers 120 days, which allows 93 days between quarterly assessments plus an additional 27 days to allow for late assessments. Requiring a 45-day gap between the prior assessment and the target assessment insures that the gap between the prior and target assessment will not be small (gaps of 45 days or less are excluded).</p>

Quality Measure Record Definitions

Within each sample, **certain key records are identified** which are used for calculating individual measures.

- Long Stay Records

ASSESSMENT SELECTED	PROPERTY	SELECTION SPECIFICATIONS
Look-back Scan	Selection period	Scan all qualifying RFAs 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] <i>or</i> A0310B = [01] <i>or</i> A0310F = [10, 11]
	Selection logic	Include the target assessment and all qualifying earlier assessments in the scan. Include an earlier assessment in the scan, if it meets all of the following conditions: (a) it is contained within the resident's episode, (b) it has a qualifying RFA, (c) its target date is on or before the target date for the target assessment, and (d) 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. These events and conditions are specified in the definitions of measures that utilize the look-back scan.
	Rationale	Some measures utilize MDS items that record events or conditions that occurred since the prior assessment was performed. The purpose of the look-back scan is to determine whether such events or conditions occurred during the look-back period. These measures trigger if the event or condition of interest occurred any time during a one year period. A 275-day time period is used to include up to three quarterly OBRA assessments. The earliest of these assessments would have a look-back period of up to 93 days, which would cover a total of about one year. All qualifying RFAs with target dates in this time period are examined to determine whether the event or condition of interest occurred at any time during the time interval.

Quality Measure Record Definitions

Within each sample, **certain key records are identified** which are used for calculating individual measures.

- Long Stay Records

ASSESSMENT SELECTED	PROPERTY	SELECTION SPECIFICATIONS
Influenza vaccination assessment	Selection period ⁵	All assessments with target dates on or after October 1 of the most recently completed influenza season (i.e., the target date must be on or between October 1 of the current year and June 30 of the following year).
	Qualifying RFAs	A0310A = [01, 02, 03, 04, 05, 06] <i>or</i> A0310B = [01] <i>or</i> A0310F = [10, 11]
	Selection logic	Select the record with the latest target date that meets all of the following conditions: a) It has a qualifying RFA, <i>and</i> b) Target date is on or after October 1 of the most recently completed influenza season (i.e., the target date must fall on or between October 1 and June 30), <i>and</i> c) A1600 (entry date) is on or before March 31 of the most recently completed influenza season.
	Rationale	The selection logic defined above is intended to identify the latest assessment that reports the influenza vaccine status for a resident who was in the facility for at least one day from October 1 through March 31.

Table 2-11
Percent of Residents Who Made Improvements in Function (SS)¹⁴
(CMS ID: N037.03) (NQF: None)

Measure Description
This measure reports the percentage of short-stay residents who were discharged from the nursing home that gained more independence in transfer, locomotion, and walking during their episodes of care.
Measure Specifications
<p>NOTE:</p> <ol style="list-style-type: none"> 1. A "valid preceding PPS 5-Day assessment or OBRA Admission assessment" refers to the date of the earliest assessment if a resident has both a PPS 5-Day assessment (A0310B = [01]) and an OBRA Admission assessment (A0310A = [01]). 2. A "valid discharge assessment" refers to a discharge assessment with a date closest to the valid preceding PPS 5-Day assessment or OBRA Admission assessment where a return is not anticipated (A0310F = [10]). 3. The PPS 5-Day assessment or OBRA Admission assessment should be used to calculate the tercile cutoffs. If resident has both a PPS 5-Day assessment and an OBRA Admission assessment, calculate covariate using the assessment with the earlier date. Terciles are recalculated in each quarter. <p><i>Numerator</i></p> <p>Short-stay residents who:</p> <ol style="list-style-type: none"> 1. Have a change in performance score that is negative ([valid discharge assessment] - [valid preceding PPS 5-Day assessment or OBRA Admission assessment] < [0]). <p>Performance is calculated as the sum of G0110B1 (transfer: self-performance), G0110E1 (locomotion on unit: self-performance), and G0110D1 (walk in corridor: self-performance), with 7's (activity occurred only once or twice) and 8's (activity did not occur) recoded to 4's (total dependence).</p> <p><i>Denominator</i></p> <p>Short-stay residents who meet all of the following conditions, except those with exclusions:</p> <ol style="list-style-type: none"> 1. Have a valid discharge assessment (A0310F = [10]), and 2. Have a valid preceding PPS 5-Day assessment (A0310B = [01]) or OBRA Admission assessment (A0310A = [01]).

¹⁴ This measure is used in the Five-Star Quality Rating System.

Measure Specifications Continued

Exclusions

1. Residents satisfying any of the following conditions:
 - 1.1. Comatose (B0100 = [1]) on the PPS 5-Day assessment or OBRA Admission assessment, whichever was used in the QM.
 - 1.2. Life expectancy of less than 6 months (J1400 = [1]) on the PPS 5-Day assessment or OBRA Admission assessment, whichever was used in the QM.
 - 1.3. Hospice (O0100K2 = [1]) on the PPS 5-Day assessment or OBRA Admission assessment, whichever was used in the QM.
 - 1.4. Information on Transfer: self-performance, walk in corridor: self-performance, or locomotion on unit: self-performance is missing on any of the assessments used to calculate the QM (G0110B1, G0110D1, or G0110E1 = [-]) (i.e., valid discharge assessment, and PPS 5-Day assessment or OBRA Admission assessment, whichever was used in the QM).
 - 1.5. Residents with no impairment (sum of G0110B1, G0110D1 and G0110E1 = [0]) on the PPS 5-Day assessment or OBRA Admission assessment, whichever was used in the QM.
 - 1.6. Residents with an unplanned discharge on any assessment during the care episode (A0310G = [2])

Covariates

All covariates used throughout this measure are calculated using the valid preceding PPS 5-Day assessment or OBRA Admission assessment described in the NOTE at the top of the measure specifications.

1. Age on the PPS 5-Day assessment (A0310B = [01]) or OBRA Admission assessment (A0310A = [01]) as calculated by subtracting date of birth (A0900) from the date of assessment (A2300)
If (MONTH(A2300) > MONTH(A0900)) or (MONTH(A2300) = MONTH(A0900) and DAY(A2300) >= DAY(A0900)) then Age = YEAR(A2300)-YEAR(A0900) else Age = YEAR(A2300)-YEAR(A0900)-1
 - 1.1 Covariate Age Category ≤ 54 = 1 if Age ≤ 54 and Covariate Age Category ≤ 54 = 0 if Age > 54
 - 1.2 Covariate Age Category 54 to 84 = 1 if Age > 54 and ≤ 84 and Covariate Age Category 54 to 84 = 0 if Age ≤ 54 or Age > 84 (reference)
 - 1.3 Covariate Age Category > 84 = 1 if Age > 84 and Covariate Age Category > 84 = 0 if Age ≤ 84
2. Gender
 - 2.1 Covariate = 1 if (A0800 = [2]) (Female)
 - 2.2 Covariate = 0 if (A0800 = [1]) (Male)
3. Severe cognitive impairment
 - 3.1 Covariate = 1 if (C1000 = [3] and C0700 = [1]) or BIMS summary score (C0500) ≤ [7]
 - 3.2 Covariate = 0 if (C1000 = [0, 1, 2, ^, -]) or C0700 = [0, ^, -] and (C0500 = [>7, ^, -, 99])
 If Covariate has not been set to 1 or 0 based on logic in 3.1 and 3.2, then Covariate = [0].
4. Long Form ADL (LFADL) Scale (G0110A1 + G0110B1 + G0110E1 + G0110G1 + G0110H1 + G0110I1 + G0110J1). If any (G0110A1, G0110B1, G0110E1, G0110G1, G0110H1, G0110I1, G0110J1) = [7, 8], recode the item to equal [4].

Covariates Continued

- 4.1 Covariate = 0 if LFADL = (middle tercile¹⁵ or highest tercile) *or* if any (G0110A1, G0110B1, G0110E1, G0110G1, G0110H1, G0110I1, G0110J1) = [-]
Covariate = 1 if LFADL = lowest tercile
- 4.2 Covariate = 0 if (lowest tercile *or* highest tercile)
Covariate = 1 if LFADL = middle tercile (reference)
- 4.3 Covariate = 0 if (lowest tercile *or* middle tercile)
Covariate = 1 if LFADL = highest tercile
- 5. Heart failure
 - 5.1 Covariate = 1 if (I0600 = [1])
Covariate = 0 if (I0600 = [0, -])
- 6. CVA, TIA, or Stroke
 - 6.1 Covariate = 1 if (I4500 = [1])
Covariate = 0 if (I4500 = [0, -])
- 7. Hip Fracture
 - 7.1 Covariate = 1 if (I3900 = [1])
Covariate = 0 if (I3900 = [0, -])
- 8. Other Fracture
 - 8.1 Covariate = 1 if (I4000 = [1])
Covariate = 0 if (I4000 = [0, -])

Quality Measure Example

Measure Description	CMS ID	Data	Num	Denom	Facility Observed Percent	Facility Adjusted Percent	Comparison Group State Average	Comparison Group National Average	Comparison Group National Percentile
Excess Wt Loss (L)	N029.02	C	7	43	18.3%	18.3%	10.9%	8.3%	89 ^
Incr ADL Help (L)	N028.02	C	11	57	19.3%	19.3%	21.0%	17.5%	61
Move Indep Worsens (L)	N035.03	C	8	26	30.8%	34.2%	38.5%	27.9%	69
Improvement in Function (S)	N037.03	C	13	21	61.9%	66.3%	69.8%	70.3%	34

Resident Name	Resident ID	A0310A/B/F	Hi-risk/Unstageable Pres Ulcer (L)	Phys restraints (L)	Falls (L)	Falls w/Maj Injury (L)	Antipsych Med (S)	Antipsych Med (L)	Antianxiety/Hypnotic Prev (L)	Antianxiety/Hypnotic (L)	Behav Sx Affect Others (L)	Depress Sx (L)	UTI (L)	Cath Insert/Left Bladder (L)	Lo-Risk Lose B/B Con (L)	Excess Wt Loss (L)	Incr ADL Help (L)	Move Indep Worsens (L)	Improvement in Function (S)	Quality Measure Count
Data			C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	0
Discharged Residents																				
Jane Doe	XXXXXXX	99/99/10	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	X	1
John Smith	XXXXXXX	99/99/10	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	0
Bill Jones	XXXXXXX	99/99/10	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	X	1

Quality Measure Example

Admission

A. Bed mobility - how resident moves to and from lying position, turns side to side, and positions body while in bed or alternate sleep furniture	1	2
B. Transfer - how resident moves between surfaces including to or from: bed, chair, wheelchair, standing position (excludes to/from bath/toilet)	2	2
C. Walk in room - how resident walks between locations in his/her room	2	2
D. Walk in corridor - how resident walks in corridor on unit	3	2
E. Locomotion on unit - how resident moves between locations in his/her room and adjacent corridor on same floor. If in wheelchair, self-sufficiency once in chair	3	2

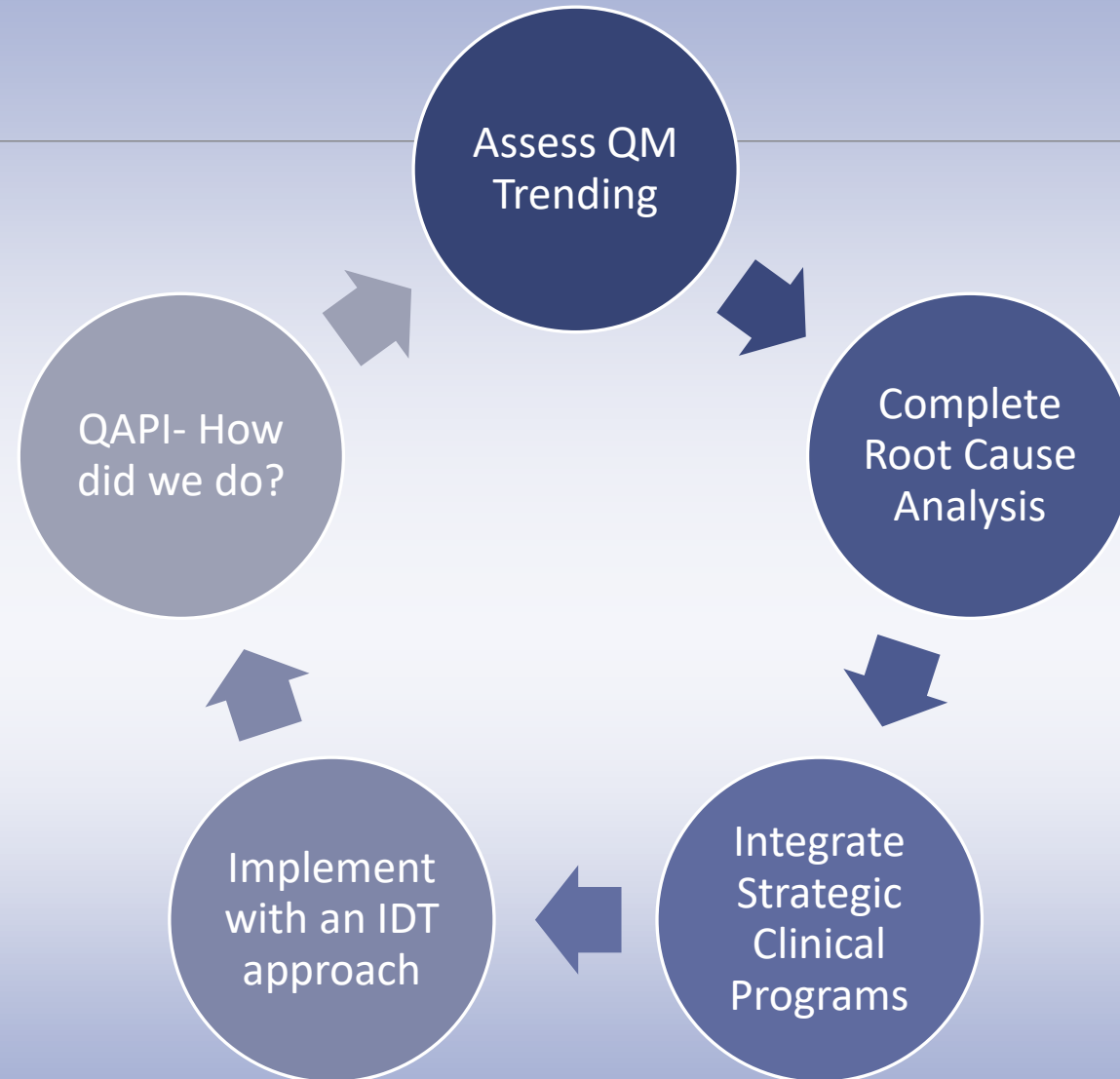
APS = 8

Discharge

A. Bed mobility - how resident moves to and from lying position, turns side to side, and positions body while in bed or alternate sleep furniture	2	
B. Transfer - how resident moves between surfaces including to or from: bed, chair, wheelchair, standing position (excludes to/from bath/toilet)	2	
C. Walk in room - how resident walks between locations in his/her room	2	
D. Walk in corridor - how resident walks in corridor on unit	2	
E. Locomotion on unit - how resident moves between locations in his/her room and adjacent corridor on same floor. If in wheelchair, self-sufficiency once in chair	2	

DPS = 6
6 - 8 = -2

Interdisciplinary Role in Quality Measurement



Quality Measure Management

Resident	Identifier	Date
Section M Skin Conditions \$\$ CATs QMs ★ QRP		
M0300. Current Number of Unhealed Pressure Ulcers/Injuries at Each Stage - Continued \$\$ CATs QMs ★ QRP		
Enter Number	E. Unstageable - Non-removable dressing/device: Known but not stageable due to non-removable dressing/device	
Enter Number	1. Number of unstageable pressure ulcers/injuries due to non-removable dressing/device - If 0 → Skip to M0300F, Unstageable - Slough and/or eschar CAA: *12, *16, N015.03 ★, S038.02	
Enter Number	2. Number of these unstageable pressure ulcers/injuries that were present upon admission/entry or reentry - enter how many were noted at the time of admission/entry or reentry S038.02	
Enter Number	F. Unstageable - Slough and/or eschar: Known but not stageable due to coverage of wound bed by slough and/or eschar	
Enter Number	1. Number of unstageable pressure ulcers due to coverage of wound bed by slough and/or eschar - If 0 → Skip to M0300G, Unstageable - Deep tissue injury CAA: *12, *16, N015.03 ★, S038.02	
Enter Number	2. Number of these unstageable pressure ulcers that were present upon admission/entry or reentry - enter how many were noted at the time of admission/entry or reentry S038.02	
Enter Number	G. Unstageable - Deep tissue injury:	
Enter Number	1. Number of unstageable pressure injuries presenting as deep tissue injury - If 0 → Skip to M1030, Number of Venous and Arterial Ulcers CAA: *12, *16, N015.03 ★, S038.02	
Enter Number	2. Number of these unstageable pressure injuries that were present upon admission/entry or reentry - enter how many were noted at the time of admission/entry or reentry S038.02	
M1030. Number of Venous and Arterial Ulcers \$\$		

Care Area Assessment Key / Quality Measures / QRP Key

Care Area Assessments Key:

- AA 1 - Delirium
- AA 2 - Cognitive Loss/Dementia
- AA 3 - Visual Function
- AA 4 - Communication
- AA 5 - Activity of Daily Living (ADL) Functional / Rehabilitation Potential
- AA 6 - Urinary Incontinence and Indwelling Catheter
- AA 7 - Psychosocial Well-Being
- AA 8 - Mood State
- AA 9 - Behavioral Symptoms
- AA 10 - Activities
- AA 11 - Falls
- AA 12 - Nutritional Status
- AA 13 - Feeding Tubes
- AA 14 - Dehydration/Fluid Maintenance
- AA 15 - Dental Care
- AA 16 - Pressure Ulcer
- AA 17 - Psychotropic Medication Use
- AA 18 - Physical Restraints
- AA 19 - Pain
- AA 20 - Return to Community Referral

Long Stay QMs (cont.)

- N024.02 (C) (N) ★ - Percent of residents with a urinary tract infection
- N025.02 (C) (N) ★ - Percent of low risk residents who lose control of their bowel or bladder (Still on CASPER and NHC, withdrawn from NQF submission)
- N026.02 (C) (N) ★ - Percent of residents who have/had a catheter inserted and left in their bladder
- N027.02 (C) (N) ★ - Percent of residents who were physically restrained
- N028.02 (C) (N) ★ - Percent of residents whose need for help with activities of daily living has increased
- N029.02 (C) (N) ★ - Percent of residents who lose too much weight
- N030.02 (C) (N) ★ - Percent of residents who have depressive symptoms (Still on CASPER and NHC, withdrawn from NQF submission)
- N031.02 (C) (N) ★ - Percent of residents who received an antipsychotic medication
- N035.02 (C) (N) ★ - Percent of Residents Whose Ability to Move Independently Worsened
- N036.02 (C) (N) ★ - Percent of Residents Who Used Antianxiety or Hypnotic Medication
- Claims (N) ★ - Number of Hospitalizations per 1,000 Long-Stay Resident Days
- Claims (N) ★ - Number of ED visits per 1,000 Long-Stay Resident Days

Quality Measures Key

Short Stay QMs:

- I003.03 (N) - Percent of residents who were assessed and appropriately given the seasonal influenza vaccine
- I004.03 - Percent of residents who received the seasonal influenza vaccine
- I005.03 - Percent of residents who were offered and declined the seasonal influenza vaccine
- I006.03 - Percent of residents who did not receive, due to medical contraindications, the seasonal influenza vaccine
- I007.02 (N) - Percent of residents assessed and appropriately given the pneumococcal vaccine (Still on NHC, withdrawn from NQF submission)
- I011.02 (C) (N) ★ - Percent of residents who newly received an antipsychotic medication
- I037.03 (C) (N) ★ - Percent of Residents Who Made Improvements in function
- Claims (N) ★ - Percentage of residents who were rehospitalized after a nursing home admission
- Claims (N) ★ - Percentage of residents who have had an outpatient emergency department visit

Long Stay QMs:

- I013.02 (C) (N) ★ - Percent of residents experiencing one or more falls with major injury
- I015.03 (C) (N) ★ - Percent of high risk residents with pressure ulcers
- I016.03 (N) - Percent of residents who were assessed and appropriately given the seasonal influenza vaccine
- I017.03 - Percent of residents who received the seasonal influenza vaccine
- I018.03 - Percent of residents who were offered and declined the seasonal influenza vaccine
- I019.03 - Percent of residents who did not receive, due to medical contraindications, the seasonal influenza vaccine
- I020.02 (N) - Percent of residents assessed and appropriately given the pneumococcal vaccine (Still on NHC, withdrawn from NQF submission)

Additional Survey QMs:

- N032.02 (C) - Prevalence of falls (Long Stay)
- N033.02 (C) - Prevalence of antianxiety/hypnotic use (Long Stay)
- N034.02 (C) - Prevalence of behavior symptoms affecting others (Long Stay)

SNF Quality Reporting Program (SNF QRP) QMs:

- S001.03 (Q) (N) - Application of Percent of Long-Term Care Hospital Patient with an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function
- S007.02 (Q) (N) - Drug Regimen Review Conducted with Follow-Up for Identified Issues
- S013.02 (Q) (N) - Application of Percent of Residents Experiencing One or More Falls with Major Injury
- S022.03 (Q) (N) - SNF Functional Outcome Measure: Change in Self-Care Score for Nursing Facility Residents
- S023.03 (Q) (N) - SNF Functional Outcome Measure: Change in Mobility Score for Nursing Facility Residents
- S024.03 (Q) (N) - SNF Functional Outcome Measure: Discharge Self-Care Score for Nursing Facility Residents
- S025.03 (Q) (N) - SNF Functional Outcome Measure: Discharge Mobility Score for Nursing Facility Residents
- S038.02 (C) (Q) (N) ★ - Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury
- Claims S004.01 (Q) (N) - Potentially Preventable 30-Day Post-Discharge Readmission Measure - SNF QRP
- Claims S005.02 (Q) (N) ★ - Discharge to Community - PAC SNF QRP
- Claims S006.01 (Q) (N) - Medicare Spending per Beneficiary - PAC SNF QRP

Key:

- (C) = CASPER Report QMs
- (N) = Nursing Home Compare
- ★ = 5-Star Rating QMs
- (Q) = SNF Quality Reporting Program QRP


Measure Description	CMS ID	Data	Num	Denom	Facility Observed Percent	Facility Adjusted Percent	Comparison Group State Average	Comparison Group National Average	Comparison Group National Percentile
Hi-risk/Unstageable Pres Ulcer (L) ★	N015.03	C	2	48	4.2%	4.2%	9.9%	9.1%	23
Phys restraints (L)	N027.02	C	0	68	0.0%	0.0%	0.2%	0.2%	0
Falls (L)	N032.02	C	34	68	50.0%	50.0%	45.8%	46.3%	58
Falls w/Maj Injury (L) ★	N013.02	C	4	68	5.9%	5.9%	3.5%	3.6%	81 *
Antipsych Med (S) ★	N011.02	C	0	15	0.0%	0.0%	2.2%	2.2%	0
Antipsych Med (L) ★	N031.03	C	16	63	25.4%	25.4%	14.9%	14.4%	89 *
Antianxiety/Hypnotic Prev (L)	N033.02	C	1	21	4.8%	4.8%	8.1%	6.3%	51
Antianxiety/Hypnotic % (L)	N036.02	C	20	64	31.3%	31.3%	31.7%	19.7%	86 *
Behav Sx affect Others (L)	N034.02	C	10	57	17.5%	17.5%	20.1%	20.6%	51
Depress Sx (L)	N030.02	C	5	54	9.3%	9.3%	9.0%	7.5%	78 *
UTI (L) ★	N024.02	C	3	56	5.4%	5.4%	3.9%	2.8%	83 *
Cath Insert/Left Bladder (L) ★	N026.03	C	1	54	1.9%	1.6%	2.0%	2.1%	54
Lo-Risk Lose B/B Con (L)	N025.02	C	8	16	50.0%	50.0%	51.6%	47.3%	58
Excess Wt Loss (L)	N029.02	C	4	52	7.7%	7.7%	11.0%	8.5%	51
Incr ADL Help (L) ★	N028.02	C	9	64	14.1%	14.1%	20.3%	17.2%	40
Move Indep Worsens (L) ★	N035.03	C	8	30	26.7%	31.0%	36.0%	27.2%	63
Improvement in Function (S) ★	N037.03	C	8	18	44.4%	49.1%	70.3%	70.8%	11 *

Measure Description	CMS ID	Numerator	Denominator	Facility Observed Percent	Facility Adjusted Percent	National Average
Pressure Ulcer/Injury: SNF QRP ★	S038.02	5	41	12.2%	10.7%	2.9%

¹ The Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury (S038.02) measure is calculated using the SNF QRP measure specifications v3.0 addendum and is based on 12 months of data (01/01/2020 - 12/31/2020).

Assess QM
Trending
(Resident
Level)

Figure 11-7. MDS 3.0 Resident Level Quality Measure Report*



CMS
CENTERS FOR MEDICARE & MEDICAID SERVICES

CASPER Report
MDS 3.0 Resident Level Quality Measure Report

Page 21 of 498

Facility ID: [REDACTED]
Facility Name: [REDACTED]
CCN: [REDACTED]
City/State: [REDACTED]

Report Period: 04/01/2021 - 09/30/2021
Report Run Date: 10/07/2021
Data Calculation Date: 10/04/2021
Report Version Number: 3.03

Note: S = short stay, L = long stay; X = triggered, b = not triggered or excluded,
C = complete; data available for all days selected, I = incomplete; data not available for all days selected

Resident Name	Resident ID	A0310A/B/F	Hi-risk/Unstageable Pres Ulcer (L)	Phys restraints (L)	Falls (L)	Falls w/Maj Injury (L)	Antipsych Med (S)	Antipsych Med (L)	Antianxiety/Hypnotic Prev (L)	Antianxiety/Hypnotic (L)	Behav Sx Affect Others (L)	Depress Sx (L)	UTI (L)	Cath Insert/Left Bladder (L)	Lo-Risk Lose B/B Con (L)	Excess Wt Loss (L)	Incr ADL Help (L)	Move Indep Worsens (L)	Improvement in Function (S)	Quality Measure Count
Data			C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	0
Active Residents																				
[REDACTED]	48207520	04/99/99	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	0
[REDACTED]	48207523	05/99/99	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	0
[REDACTED]	48207526	02/99/99	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	0
[REDACTED]	48207529	06/99/99	b	b	b	b	b	X	X	X	b	X	b	b	b	X	b	b	b	5
[REDACTED]	48207532	99/01/99	b	b	b	b	b	X	X	X	b	X	b	b	b	b	b	b	b	4
[REDACTED]	48207535	01/99/99	b	b	b	b	b	X	X	X	b	X	b	b	b	b	b	b	b	4
[REDACTED]	48207538	03/99/99	b	b	b	b	b	X	X	X	b	X	b	b	b	X	b	b	b	5
[REDACTED]	48207541	04/99/99	b	b	b	b	b	X	X	X	b	X	b	b	b	X	b	b	b	5
[REDACTED]	48207544	05/99/99	b	b	b	b	b	X	X	X	b	X	b	b	b	X	b	b	b	5
[REDACTED]	48207547	02/99/99	b	b	b	b	b	X	X	X	b	X	b	b	b	X	b	b	b	5
[REDACTED]	48207550	06/99/99	b	b	b	b	b	X	X	X	b	X	b	b	b	X	b	b	b	5
[REDACTED]	48207553	99/01/99	b	b	b	b	b	X	X	X	b	X	b	b	b	b	b	b	b	4
[REDACTED]	48207556	01/99/99	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	0
[REDACTED]	48207559	03/99/99	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	0

This report may contain privacy protected data and should not be released to the public.
Any alteration to this report is strictly prohibited.

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* Fictitious, sample data are depicted.

Complete
Root Cause
Analysis
5 WHYS?



High-Risk/Unstageable Pressure Ulcers (L)	• Physical Restraints (L)	• Falls (L)	• Falls with Major Injury (L)	• Residents Who Newly Received an Antipsychotic Medication (S)	• Residents Who Received an Antipsychotic Medication (L)
• Prevalence of Antianxiety/Hypnotic Medication Use (L)	• Antianxiety/Hypnotic Medication Use % (L)	• Behavior Symptoms Affecting Others (L)	• Depressive Symptoms (L)	• Urinary Tract Infection (L)	• Catheter Inserted and Left in Bladder (L)*
• Low-Risk Residents Who Lose Bowel/Bladder Control (L)	• Excessive Weight Loss (L)	• Need for Help with ADLs Has Increased (L)	• Percent of Residents Whose Ability to Move Independently Worsened (L)*	• Percent of Residents Who Made Improvements in Function (S)*	• Changes in Skin Integrity Post-Acute Care Pressure Ulcer/Injury* (SNF)

- Excessive Weight Loss (L)

- Root Cause Analysis Reveals that Weight Loss is caused by:
 - Limited community dining, poor positioning during meals, and reduced sensory environment
- Strategic Clinical Programs could include:
 - Walk to Dine; Integrating More Natural Setting in the Dining Environment; Improved Lighting and Contrast
 - Learn from CMS- Integrate Critical Element Pathways in Program Development

- Falls with Major Injury (L)

- Root Cause Analysis Reveals that Fall with Major Injury is caused by:
 - Reduced opportunity for out of bed movement; physical barriers in room environment, ineffective toileting program
- Strategic Clinical Programs could include:
 - Walk to Dine; Planned out of bed activities, Toileting Program
 - Learn from CMS- Integrate Critical Element Pathways in Program Development

Implement
with an IDT
approach

- Consider Implementation of Interprofessional Practice and Education as Defined by the [World Health Organization](#)
- Interprofessional Education & Interprofessional Collaborative Practice
 - IPP occurs when multiple service providers from different professional backgrounds provide comprehensive healthcare or educational services by working with individuals and their families, caregivers, and communities- to deliver the highest quality of care across settings.

QAPI- How
did we do?

QAPI Quality Assurance & Performance Improvement (CMS)

Effective QAPI programs are critical to improving the quality of life, and quality of care and services delivered in nursing homes.

5 Elements

- Design and Scope
- Governance and Leadership
- Feedback, Data Systems and Monitoring
- Performance Improvement Projects (PIPs)
- Systematic Analysis and Systemic Action

QAPI- How
did we do?
Case Study

- **The Issue:** During the monthly QAPI meeting at Whistling Pines, staff discovered a trend of unexplained weight loss among several residents over the last two months. During the discussion, a representative from dining services noted that there had been an increase in the amount of food left on plates, as well as an increase in the amount of supplements being ordered. Although other issues and opportunities for improvement were identified at the meeting, the QAPI Steering Committee decided to launch a Performance Improvement Project (PIP) on the weight loss trend because unexplained weight loss posed a high-risk problem for residents.
- **What Whistling Pines did:** The QAPI Steering Committee chartered a PIP team composed of a certified nursing assistant (CNA), charge nurse, social worker, dietary worker, registered dietitian, and a nurse practitioner. The team studied the issue, and then performed a root cause analysis (RCA) to help direct a plan of action. The RCA revealed several underlying factors, which included: • No process existed for identifying and addressing risks for weight loss such as dental condition, diagnosis, or use of appetite suppressing medications; • No system existed to ensure resident preferences are honored; • Staff lacked an understanding of how to document food intake percentages; and • Residents reported the food was not appetizing. Based on the identified underlying causes, the PIP team recommended the following interventions: • Development of a protocol for identifying residents at risk for weight loss to be done on admission and with each care plan. This protocol included a review of medications (appetite suppressants), new diagnoses, and resident assessments, including dental issues; • Development of standing orders for residents identified as “at risk” for weight loss. These would include bi-weekly weights, referral to attending physician and dietitian for assessment, and documentation of meal percentages; • Development of a new program for CNAs to be “Food Plan Leads” for at risk residents. The program would include identification of food preferences and accurate documentation of meals - laminated badge cards with pictures of meal percentages were distributed to all CNAs; and • Revision of the menu to focus on favorite foods, adding finger foods and increasing choices outside of mealtimes. The interventions were implemented in one area of the building that was home to 25 residents.

- The PIP team collected data from dietary (food wasted and supplement use), CNAs (observation of resident satisfaction and meal percentages), residents (satisfaction surveys), and weights. After 3 months, they found that 5 residents gained weight, 15 remained stable, and 5 lost weight, but the weight loss was not unexpected and consistent with their clinical condition.
- Food costs did not increase and supplement costs decreased by 12%.
- Whistling Pines decided to adopt and expand the changes to other areas of the facility. They received no deficiencies in the areas of nutrition on their annual survey. Using QAPI allowed them to identify and correct developing issues before they escalated to larger problems.

Find out More

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[Broad River Rehab Reflections](#) are the third Thursday of each month. March 2021 topic - **Part II of Series: Quality Measurement and Falls**

QUESTIONS?