California Department of Public Health Center for Health Care Quality

Skilled Nursing Facility Quality and Accountability Supplemental Payment Program:

Using All Assessments Instead of the Target Assessment Methodology Overview

August 2021

Introduction

The California Department of Public Health (CDPH) requested Health Services Advisory Group, Inc (HSAG) assess the impact of using all assessments within the Minimum Data Set (MDS) data to calculate quality measure rates rather than only using the target assessment. Historically, HSAG has followed the quality measure methodology outlined in the MDS 3.0 Quality Measures User's Manual, v12.1[1],which uses the most recent qualifying assessment as the target assessment to calculate quarterly measure rates. However, because only the most recent qualifying target assessment is used to calculate measure rates, clinical events that occurred throughout the quarter may not necessarily be captured on the target assessment. Due to the nature of the skilled nursing facility (SNF) population, any adverse event may have a large impact in the quality of care that each resident receives. To ensure all events during the quarter are captured in the quality measure rates, HSAG developed an alternative quality measure methodology to use all assessments within the resident's latest episode that were completed within the selection period for the Quality and Accountability Supplemental Payment (QASP) Program quality measure calculations.

Using All Assessments Methodology Overview

Historically, HSAG has followed the MDS stay logic and measure specifications outlined in the MDS 3.0 Quality Measures User's Manual[2] to identify resident stays within SNFs. Based on these guidelines, a stay is a period between a resident's entry into a facility and either a discharge, death, or the end of the measurement period. An episode consists of one or more stays, beginning with admission and ending with either a discharge assessment where a return is not anticipated, a discharge assessment with return anticipated but the resident did not return within 30 days, death, or the end of the target period. Short- and long-stay determination is based on the number of cumulative days in a facility from the resident's most recent episode. Once the most recent episode has been identified and stay length has been assigned, HSAG identifies the target assessment, which is the latest assessment in the most recent episode with a qualifying reason for assessment (A0310A = [01,02,03,04,05,06], or A0310B = [01,02,03,04,05,06], or A0310F = [10,11]) which has a target date that is no more than 120 days before the end of the episode. The selection period for target assessments to

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include in each quarter is the most recent three months for long-stay measures and the most recent six months for short-stay measures. The *Use of Physical Restraints*, *Facility-Acquired Pressure Ulcer Incidence*, *Received an Antipsychotic Medication*, *Influenza Vaccination*, *Pneumococcal Vaccination*, *Urinary Tract Infection*, *Loss of Bowel or Bladder Control*, *Self-Report Moderate to Severe Pain*, and *Increased Need for Help with Activities of Daily Living* measures evaluate SNF performance using the target assessment.

To capture a more complete picture of resident quality of care, HSAG modified the MDS data preparation to select all assessments during the selection period within the resident's most recent episode (i.e., the episode which determines whether the resident is long-stay or short-stay) instead of only the target assessment. However, HSAG still excluded entry assessments, identified by A0310F = [01], since clinical events on entry may not reflect quality of care within the control of the SNF. Residents with only an entry assessment during the latest episode were excluded from measure calculations.

HSAG reviewed the MDS clinical measures in the SFY 2019–20 Annual Report and evaluated whether using all assessments could capture additional process or outcome events and provide a more complete picture of resident quality of care. For measures where using all assessments could improve the evaluation of the quality of care, HSAG provided modified measure specifications in the Appendix. While the measure specifications still calculate numerators and denominators at the resident level, the modified measure specifications applied exclusions at the assessment level for each measure. If an assessment met an exclusion criterion, then HSAG excluded that assessment from the measure calculation. However, HSAG still included the resident in the denominator if they had any non-excluded assessments during the selection period. To determine numerator compliance for each resident, if the resident had any non-excluded assessment during the selection period that met the numerator criteria for a measure, then that resident was considered numerator compliant for that measure. Please refer to the Appendix for the detailed modifications to measure specifications and an explanation for the measures for which the all assessments methodology was not appropriate (i.e., *Facility-Acquired Pressure Ulcer Incidence*, *Influenza Vaccination*, *Pneumococcal Vaccination*, *Increased Need for Help with Activities for Daily Living*, and *Loss of Bowel or Bladder Control*).

Table 1, on the next page, displays the SFY 2019–20 aggregate statewide average and 75th percentile for each quality measure using the original methodology, which evaluates the target assessment, and the proposed methodology, which evaluates all assessments, for the facilities included in the SFY 2019–20 Annual Report. For these quality measures, a lower rate indicates better performance. Summary statistic calculations exclude rates which did not meet the minimum denominator criteria (i.e., 30 and 20 for long-stay and short-stay measures, respectively).

Table 1—Impact on SFY 2019–20 Annual Report Measure Rates

*The *Use of Physical Restraints (Long Stay)* measure is a monitoring-only measure and is not used to determine scoring for incentive payments.

Measure	Target Assessment		All Assessments	
	Statewide Average	75th Percentile	Statewide Average	75th Percentile
*Use of Physical Restraints (Long Stay)**	0.22%	0.00%	0.25%	0.00%
Received an Antipsychotic Medication (Long Stay)	2.72%	0.00%	3.26%	0.43%
Urinary Tract Infection (Long Stay)	1.34%	0.00%	2.12%	0.54%
Self-Report Moderate to Severe Pain (Short Stay)	3.67%	0.00%	6.06%	0.09%
Self-Report Moderate to Severe Pain (Long Stay)	1.92%	0.00%	2.04%	0.00%

Table 2 through Table 6 on the subsequent pages show the summary statistics using the original target assessment methodology and the proposed all assessment methodology for the facilities included in the SFY 2019–20 Annual Report.

Table 2—Use of Physical Restraints (Long Stay)

Methodology	Number of Facilities	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile	Mean	Minimum Rate	Maximum Rate
Target Assessment	1,040	0.31%	0.00%	0.00%	0.00%	0.00%	0.22%	0.00%	21.92%
All Assessments	1,038	0.43%	0.00%	0.00%	0.00%	0.00%	0.25%	0.00%	24.11%
Difference	-2	0.12%	0.00%	0.00%	0.00%	0.00%	0.03%	0.00%	2.19%

Table 3—Received an Antipsychotic Medication (Long Stay)

Methodology	Number of Facilities	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile	Mean	Minimum Rate	Maximum Rate
Target Assessment	1,012	7.47%	3.76%	0.95%	0.00%	0.00%	2.72%	0.00%	60.87%
All Assessments	1,023	7.92%	4.59%	1.79%	0.43%	0.00%	3.26%	0.00%	42.59%
Difference	11	0.45%	0.83%	0.84%	0.43%	0.00%	0.54%	0.00%	-18.28%

Table 4—Urinary Tract Infection (Long Stay)

Methodology	Number of Facilities	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile	Mean	Minimum Rate	Maximum Rate
Target Assessment	1,038	3.64%	1.88%	0.77%	0.00%	0.00%	1.34%	0.00%	14.29%
All Assessments	1,038	4.94%	3.08%	1.53%	0.54%	0.00%	2.12%	0.00%	14.00%
Difference	0	1.30%	1.20%	0.76%	0.54%	0.00%	0.78%	0.00%	-0.29%

Table 5—Self-Report Moderate to Severe Pain (Short Stay)

Methodology	Number of Facilities	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile	Mean	Minimum Rate	Maximum Rate
Target Assessment	1,026	11.41%	4.84%	0.94%	0.00%	0.00%	3.67%	0.00%	48.39%
All Assessments	1,038	18.36%	8.45%	2.35%	0.09%	0.00%	6.06%	0.00%	51.14%
Difference	12	6.95%	3.61%	1.41%	0.09%	0.00%	2.39%	0.00%	2.75%

Table 6—Self-Report Moderate to Severe Pain (Long Stay)

Methodology	Number of Facilities	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile	Mean	Minimum Rate	Maximum Rate
Target Assessment	1,025	6.02%	1.90%	0.00%	0.00%	0.00%	1.92%	0.00%	33.33%
All Assessments	1,031	5.88%	2.17%	0.34%	0.00%	0.00%	2.04%	0.00%	34.72%
Difference	6	-0.14%	0.27%	0.34%	0.00%	0.00%	0.12%	0.00%	1.39%

Annual Report Implementation

The CDPH SNF QASP SFY 2020–21 Annual Report measurement period (i.e., July 1, 2020–June 30, 2021) will not include the implementation of the all assessments methodology.

The CDPH SNF QASP SFY 2021–22 Annual Report measurement period (i.e., July 1, 2021–June 30, 2022) will include the all assessments methodology for the following quality measures if approved for inclusion:

- *Use of Physical Restraints (Long Stay)*
- *Received an Antipsychotic Medication (Long Stay)*
- *Urinary Tract Infection (Long Stay)*
- *Self-Report Moderate to Severe Pain (Short Stay)*
- *Self-Report Moderate to Severe Pain (Long Stay)*

This Appendix presents the measure specification modifications for each quality measure included in the SFY 2019–20 Annual Report.

Use of Physical Restraints (Long Stay)

The *Use of Physical Restraints (Long Stay)* measure is defined as the percentage of long-stay residents who are physically restrained on a daily basis.

The **numerator** criteria for this measure include long-stay residents with any assessment during the latest episode that meets any of the following criteria:

- Trunk restraint for beds used daily (P0100B = [2]).
- Limb restraint for beds used daily (P0100C = [2]).
- Trunk restraint in chair or out of bed used daily (P0100E = [2]).
- Limb restraint in chair or out of bed used daily (P0100F = [2]).
- Device preventing rising from chair used daily (P0100G = [2]).

The **denominator** criteria for this measure include all long-stay residents with any assessment during the latest episode except assessments with the following exclusion:

- The resident is not in the numerator and a missing value is entered when indicating the use of trunk or limb restraints in a bed or chair (P0100B = [-], P0100C = [-], P0100E = [-], P0100F = [-], P0100G = [-]).

Facility-Acquired Pressure Ulcer Incidence (Long Stay)

The *Facility-Acquired Pressure Ulcer Incidence (Long Stay)* measure is designed to capture the number of pressure ulcers on the latest assessment and compare it to the number of pressure ulcers on admission and on the previous assessment. Since the measure specifications compare two points in time, using the all assessments methodology would not be appropriate for this measure. Therefore, HSAG did not modify these measure specifications for the all assessments methodology.

Received an Antipsychotic Medication (Long Stay)

The *Received an Antipsychotic Medication (Long Stay)* measure specification is defined as the percentage of long-stay residents who are inappropriately receiving antipsychotic drugs in the target period.

The **numerator** criteria for this measure include long-stay residents with any assessment during the latest episode who received antipsychotic medications for one or more days during the last seven days as defined by:

- N0410A = [1,2,3,4,5,6,7].

The **denominator** criteria for this measure include long-stay residents with any assessment during the latest episode. Exclude assessments from the latest episode which meet any of the following criteria:

- The assessment did not qualify for the numerator and the assessment is missing antipsychotic medication information as indicated by N0410A = [-].
- Any of the following related conditions are present on the assessment (unless otherwise indicated):
  - Schizophrenia (I6000 = [1]).
  - Tourette's syndrome (I5350 = [1]).
  - Huntington's disease (I5250 = [1]).
  - Traumatic Brain Injury (TBI) (I5500= [1]).
  - Manic Depression (I5900= [1]).
  - Psychotic Disorder (I5950= [1]).

Influenza Vaccination (Short Stay)

The all assessments methodology would not be meaningful for the *Influenza Vaccination (Short Stay)* measure because the measure evaluates MDS fields O0250A and O0250C, which assess whether the resident received the influenza vaccine during the current or most recent influenza season. Since these fields already assess the resident's clinical history instead of a snapshot in time, using all assessments within the latest episode would not capture additional vaccination events. Therefore, HSAG did not modify these measure specifications with the all assessments methodology.

Pneumococcal Vaccination (Short Stay)

The all assessments methodology would not be meaningful for the *Pneumococcal Vaccination (Short Stay)* measure because the measure evaluates MDS field O0300A, which assesses

whether the resident has an up to date pneumococcal polysaccharide vaccine (PPV) status. Since this field already assesses the resident's clinical history instead of a snapshot in time, using all assessments within the latest episode would not capture additional vaccination events. Therefore, HSAG did not modify these measure specifications with the all assessments methodology.

Urinary Tract Infection (Long Stay)

The *Urinary Tract Infection (Long Stay)* measure is defined as the percentage of long-stay residents who have a urinary tract infection.

The **numerator** criterion for this measure includes long-stay residents with any assessment during the latest episode that meets the following criteria:

- The resident had a urinary tract infection within the last 30 days (I2300 = [1]).

The **denominator** criteria for this measure include long-stay residents with any assessment during the latest episode. Exclude assessments from the latest episode which meet any of the following exclusions:

- The assessment is an admission assessment (A0310A = [01]) or a PPS five day or readmission/return assessment (A0310B = [01, 06]).
- The urinary tract infection value is missing (I2300 = [-]).

Loss of Bowel or Bladder Control (Long Stay)

While the *Loss of Bowel or Bladder Control (Long Stay)* measure specifications could be modified to use the all assessments methodology, the assessments methodology had a large impact on the denominator, by including many residents who were previously excluded for being high risk on their target assessment, which resulted in a lower average measure rate. Therefore, the *Loss of Bowel or Bladder Control (Long Stay)* measure specifications would not be modified to use the all assessments methodology.

Self-Report Moderate to Severe Pain (Short Stay)

The *Self-Report Moderate to Severe Pain (Short Stay)* measure is defined as the percentage of short-stay residents with any assessment during the latest episode who have reported almost constant or frequent pain and at least one episode of moderate to severe pain, or any severe or horrible pain, in the five days prior to an MDS assessment.

The **numerator** criteria for this measure include short-stay residents where any assessment in the latest episode meets either or both of the following two conditions:

The resident reports daily pain with at least one episode of moderate/severe pain. Both of the following conditions must be met:

- The resident indicates almost constant or frequent pain (J0400 = [1, 2]) and
- At least one episode of moderate to severe pain (J0600A = [05, 06, 07, 08, 09] OR J0600B = [2, 3]).
- The resident reports very severe/horrible pain of any frequency (J0600A = [10] OR J0600B = [4]).

The **denominator** criteria for this measure includes short-stay residents with any assessment in the latest episode except assessments with the following exclusions:

- The pain assessment interview was not completed (J0200 = [0, -, ^])
- The pain presence item was not completed (J0300 = [9, -, ^]).

For the assessments indicating pain or hurting at any time within the last five days (J0300 = [1]), any of the following are true:

- The pain frequency item was not completed (J0400 = [9, -, ^]).
- Neither of the pain intensity items was completed (J0600A = [99, ^, -] and J0600B = [9, ^, -]).
- The numeric pain intensity item indicates no pain (J0600A = [00]).

Self-Report Moderate to Severe Pain (Long Stay)

The *Self-Report Moderate to Severe Pain (Long Stay)* measure is defined as the percentage of long-stay residents who reported almost constant or frequent pain, and at least one episode of moderate to severe pain, or any severe or horrible pain in the five days prior to an MDS assessment (OBRA, PPS, or discharge) on any assessment during the latest episode.

The **numerator** criteria for this measure include long-stay residents where any assessment meets either or both of the following two conditions:

- The resident reports almost constant or frequent moderate to severe pain in the last five days. Both of the following conditions must be met:
  – Almost constant or frequent pain (J0400 = [1, 2]) and
  – At least one episode of moderate to severe pain (J00600A = [05, 06, 07, 08, 09] OR J0600B = [2, 3]).

- The resident reports very severe/horrible pain of any frequency (J0600A = [10] OR J0600B = [4]).

The **denominator** criteria for this measure includes long-stay residents with any assessment in the latest episode except assessments with the following exclusions:

- The assessment is an admission assessment, a PPS 5-day assessment, or a PPS readmission/return assessment (A0310A = [01] or A0310B = [01, 06]).
- The assessment does not qualify for the numerator (the assessment did not meet the pain symptom conditions included for the numerator) AND any of the following conditions are true:
  - The pain assessment was not completed (J0200 = [0, -, ^]).
  - The pain presence item was not completed (J0300 = [9, -, ^])
  - For assessments indicating pain or hurting at any time in the last five days (J0300 = [1]), any of the following are true:
    o The pain frequency item was not completed (J0400 = [9, -, ^]).
    o Neither of the pain intensity items was completed (J0600A = [99, ^, -] and J0600B = [9, ^, -]).
    o The numeric pain intensity item indicates no pain (J0600A = [00]).

Need for Help with Activities of Daily Living (Long Stay)

The *Need for Help with Activities of Daily Living (Long Stay)* measure is designed to capture functional status on the latest assessment and compare it to the previous assessment. Since the measure specifications compare two points in time, using the all assessments methodology would not be appropriate for this measure. Therefore, HSAG did not modify these measure specifications for the all assessments methodology.