

CDPH SNF QAP: New Measure Recommendations

March 2012



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1. NEW MEASURE RECOMMENDATIONS

Background

The California legislation, AB 19, which was passed in June of 2011, requires the California Department of Public Health (CDPH) to incorporate additional clinical quality measures into to the Skilled Nursing Facility (SNF) Quality and Accountability Program (QAP) beginning in the 2013-2014 rate year. The purpose of this report is to recommend quality measures for future implementation in the program. As a first step, HSAG conducted an environmental scan of measures applicable for measuring quality in nursing homes. Subsequently, HSAG evaluated each individual measure found using a nationally established measure evaluation criteria. Measures that met the measure evaluation criteria were further evaluated using performance data reported by California nursing home facilities. This process resulted in a finalized list of recommended measures for 2013 QAP.

Methodology

To conduct a thorough environmental scan of existing and potential measures, HSAG used a variety of complementary sources and methodologies. These included a review of Internet and academic sources for specific content related to nursing home quality measurement. Only fully developed clinical quality measures are included in this report. Measures were categorized according to the following measure attributes listed in Table 1 and provided in Appendix A.

Table 1—Measure Attributes	
Source	Identifies the organization or program using the measure
Measure	Identifies the name of measure
Description	Provides a concise statement of specific aspects that the measure addresses
Numerator	Provides descriptive information that is the basis for inclusions and exclusions in the numerator
Denominator	Provides descriptive information that is the basis for inclusions and exclusions in the denominator
Exclusions	Describes the specific exclusion criteria used to refine the denominator or numerator
Risk Adjustment	Identifies any risk adjustment method used in calculating the measure
Measure Type	Process, outcome, structure, patient satisfaction, efficiency
Data Source	Identifies the data source needed to implement the measure
NQF ID	NQF-endorsed ID (if applicable)
Measure Owner	Entity responsible for maintaining the measure or entity who owns the copyright for the measure

Environmental Scan Results

A total of 177 measures used by various programs and organizations were identified as depicted in Table 2. Overlap and duplication of the Centers for Medicare & Medicaid Services (CMS) measures, in particular, exist within a few organizations but were left intentionally to present a full picture of what measures are being used by these entities.

Table 2—Number of Measures Identified by Source	
Source	Number of Measures
CMS Nursing Home Quality Initiative ¹	17
CMS Nursing Home Value-Based Purchasing Demonstration ^{2, 8}	2
Oklahoma Focus on Excellence ³	5
Iowa Nursing Facility Pay for Performance ^{4, 5}	8
Ohio Quality Add-on ^{6, 23}	8
Minnesota Quality Indicators ⁷	26
RAND ⁹	1
VA ¹⁰	1
Australian Council on Healthcare Standards ¹¹	1
Institute for Clinical Systems Improvement ¹²	1
American Geriatrics Society, Physician Consortium for Performance Improvement [®] , National Committee for Quality Assurance (NCQA) ¹³	4
Physician Consortium for Performance Improvement ¹⁴	1
CREcare ¹⁵	3
Arthritis Foundation ¹⁶	3
American Medical Directors Association ¹⁷	65
New York State Department of Health AIDS Institute ¹⁸	16
American Speech-Language-Hearing Association ¹⁹	14
Inouye, Sharon K., MD, MPH - Independent Author ²⁰	1

Measure Evaluation Process

HSAG used the quality measure evaluation criteria that were previously recommended for use by CDPH as the method for assessing the strength of each measure before it can be recommended for inclusion in the SNF QAP. The measure evaluation criteria are:

- a. Importance
- b. Scientific Acceptability
- c. Feasibility
- d. Usability
- e. Comparison to Related and Competing Measures

HSAG adapted the CMS Measures Blueprint V.8 measure evaluation tool to rate the measures based on the five measure selection criteria as outlined in Appendix B.²¹ The measure evaluation tool uses “pass” or “fail” ratings based how an individual measure meets each additional subcriteria. HSAG searched the literature and the internet to find information on the importance of the topic or condition each measure addressed, and published information on the reliability and validity testing of the measure. If no information was found, HSAG rated the criterion as “unable to rate.” A complete description of the criteria, subcriteria, and rating methodology is available in Appendix C.

Measure Evaluation Summary

This section provides a summary of the evaluation conducted for these measures. Measures were grouped into two categories: candidate and non-candidate measures.

Candidate Measures

Measures included in this section met four or more measure selection criteria. These are the CMS Minimum Data Set (MDS)-based measures, the Minnesota Quality Indicator MDS-based measures, and RAND’s physical therapy measure. These measures are considered candidate measures for future implementation in the QAP and are outlined in Table 3.

The 17 MDS-based measures developed for the Nursing Home Quality Initiative that were endorsed by NQF in 2011 met all five measure selection criteria.^{1,22} The CMS nursing home measure set encompasses topics including immunizations, pressure ulcers, restraints, pain, weight loss, UTI, falls, depression, and ADLs. The topics measured by the CMS nursing home measures are all high impact conditions affecting nursing home residents. Further, the CMS nursing home measures have been documented to be valid and reliable measures of quality in nursing homes. Given that they are derived from the MDS, the measures are feasible to collect and do not add undue data collection burden to the nursing home facilities. These measures are in current use for public reporting in the Nursing Home Compare website. Additionally, two of the measures (long-stay pressure and restraints) are currently being used in quality improvement initiatives by state quality improvement organizations (QIOs). The complete measure information form for each MDS

3.0 measure that contains evidence supporting each measure can be found on the NQF website’s [Nursing Home project page](#) .

The Minnesota Quality Indicators met four of the five measure selection criteria. The measures from the Minnesota Quality Indicators consist of 28 MDS-based measures used in Minnesota’s public reporting program.⁷ Six of the 28 measures are CMS measures but were revised to include additional exclusions and risk adjustors. The rest of the measures are “home-grown” outcome measures derived from MDS 3.0, and developed by the University of Minnesota (UMN) and/or Brown University. The Minnesota measures focus on outcomes not addressed by the CMS measures including improved function, range of motion, healed pressure ulcers (long-stay), and infections. All of the Minnesota measures meet the importance criterion. The NQF Measure Application Partnership considered the topics addressed by these measures as priority areas for measurement. HSAG did not find validity or reliability testing for these measures; therefore, HSAG was unable to rate the measures for scientific acceptability. However, these measures are feasible to collect since they are derived from the MDS. Furthermore, all of the Minnesota measures meet the usability criterion because they are currently used in public reporting.

Finally, RAND’s physical therapy or nursing rehabilitation measure is endorsed by NQF, and has met all five measure selection criteria.⁹ It is worth noting that this measure has been used for both measurement and quality improvement efforts in the community; however, the measure has never been implemented in the nursing home setting.

Source	Number of Measures	Evaluation Summary
CMS Nursing Home Quality Initiative	17	Each of the 17 measures met the 5 measure selection criteria
Minnesota Quality Indicators	26	Each of the 26 measures met 4 out of 5 measure selection criteria; Scientific acceptability was rated “unable to rate”
RAND	1	Met the 5 measure selection criteria

Non-Candidate Measures

A total of 134 measures that were evaluated using the measure selection criteria did not meet two or more of the following criteria: scientific acceptability; feasibility; usability; and comparison to related and competing measures criteria. All 134 measures met the importance criterion. These measures addressed topics/conditions that are of high impact in nursing homes identified by the NQF Measure Applications Partnership post-acute care and long-term care subcommittee including avoidable hospitalizations; person-centered care; falls; preventive care; functional status; rheumatoid arthritis; pressure ulcers; pain management; heart failure treatment and management; HIV treatment and management; stroke; and delirium.²⁴ Nevertheless, all of these measures fell short in meeting the rest of the measure selection criteria. Measures that did not meet the scientific acceptability and feasibility criteria include the person-centered measures used in Iowa’s Nursing Facility Pay for Performance program and similar measures used in Ohio’s Quality Add-on program. The measures from the Iowa Nursing Facility Pay for Performance program consist of

person-directed care measures that were developed by the State.⁵ The measures addressed menu options, access to food and beverage, activities, schedule, and bathing options offered to the residents. Meanwhile, the Ohio Quality Add-on measures consist of two person-centered care derived from the CMS Artifacts of Culture Change.⁶ However, validity and reliability testing for these measures were not found. Further, these measures are collected using state-developed tools that nursing homes need to complete and submit to the state, which could pose a burden for nursing homes. Similarly, the heart failure and pain management measures developed by the American Medical Directors Association (AMDA) have never been tested for reliability and validity (due to lack of funding).¹⁷ The speech and language function measures developed by the American Speech-Language-Hearing Association do not have documented validity and reliability testing. Both sets rely on chart abstraction for data.¹⁹

Although many of the measures not recommended have documented measure testing to a certain extent, these measures did not meet the feasibility and usability criteria. For instance, the HIV measures developed by the New York State Department of Health AIDS Institute have been pilot tested in New York State facilities.¹⁸ However, data for these measures are derived from the medical record, which can be time consuming and costly to implement. These measures have not been implemented in a public reporting program, and their usability in nursing homes is unclear.

**Table 4—Non-Candidate Measures
Measure Evaluation Summary**

Source	Number of Measures	Evaluation Summary
CMS Nursing Home Value-Based Purchasing Demonstration	2	Both measures did not meet 2 of 5 criteria
Oklahoma Focus on Excellence	5	Each of the 5 measures did not meet 3 of 5 criteria
Iowa Nursing Facility Pay for Performance	8	8 measures did not meet 3 of 5 criteria
Ohio Quality Add-on	8	4 measures did not meet 3 of 5 criteria; Each of the remaining 4 measures is a CMS MDS-based measure.
VA	1	Measure did not meet 3 of 5 criteria
Australian Council on Healthcare Standards	1	Measure did not meet 3 of 5 criteria
Institute for Clinical Systems Improvement	1	Measure did not meet 3 of 5 criteria
American Geriatrics Society, Physician Consortium for Performance Improvement [®] , NCQA	4	Each of the 4 measures did not meet 3 of 5 criteria
Physician Consortium for Performance Improvement	1	Measure did not meet 3 of 5 criteria
CREcare	3	Each of the 3 measures did not meet 3 of 5 criteria
Arthritis Foundation	3	Each of the 3 measures did not meet 3 of 5 criteria
American Medical Directors Association	65	Each of the 65 measures did not meet 3 of 5 criteria
New York State Department of Health AIDS Institute	16	Each of the 16 measures did not meet 3 of 5 criteria
American Speech-Language-Hearing Association	14	Each of the 14 measures did not meet 3 of 5 criteria
Inouye, Sharon K., MD, MPH - Independent Author	1	Measure did not meet 3 of 5 criteria

Eligible Measures for Recommendation

Out of the 44 candidate measures, only the 17 measures used by CMS in the Nursing Home Quality Initiative and publicly reported on Nursing Home compare met the first criteria. Since these measures have been publicly reported for at least a year, nursing homes are familiar with them and with any quality improvement efforts needed for improving their performance on these measures. Additionally, using the latest available MDS 2.0 data on these measures, HSAG examined the mean and standard deviation for each measure to assess variation in rates across the facilities and to determined that there are performance gaps and opportunities for improvement on

8 of the 17 measures, excluding the seven measures that are already in the current SNF QAP. The evaluation of the eight CMS measures are presented in the next section.

Among the 17 NQF endorsed MDS 3.0 measures developed by CMS for public reporting, seven out of the 17 CMS measures are already being implemented in the first year of the QAP. These measures include long-stay pressure ulcer, restraints, influenza and pneumococcal immunization measures, and short-stay pressure ulcer, influenza and pneumococcal immunization measures. The measure that focused on long-stay residents experiencing one of more falls with major injury is not eligible for recommendation because of the unavailability of performance data for analysis. Although this measure is equivalent to the Quality Indicator/Quality Measure “prevalence of falls within past 30 days”, HSAG does not have adequate information to assess variation in performance across California facilities for this measure. The measure focusing on short-stay residents on a scheduled pain medication regimen on admission who self-report a decrease in pain intensity or frequency was withdrawn by CMS. This measure is not included in the final set of measures for public reporting on the Nursing Home Compare website, therefore, this measure is not eligible for recommendation for the QAP.

Although the physical therapy measure developed by RAND and the 28 measures developed by Minnesota are derived from the MDS and met most of the measure evaluation criteria, HSAG did not select them for the QAP for a number of reasons. Six of the 28 Minnesota measures are modified versions of the CMS MDS 3.0 measures. As such, they have additional exclusion criteria and adjustors that are not included in the original CMS measure and that are not familiar to California nursing homes. Therefore, implementation of these measures at the state level could create confusion in the way California nursing home facilities interpret their rates for similar measures being used for public reporting by CMS through the Nursing Home Compare website. The RAND physical rehabilitation measure and the remaining 22 Minnesota measures have never been used for measurement in California nursing homes. As a result, there are no available data that provide baseline performance data for these measures that can be used to justify the need to include them in an incentive payment program.

MDS 2.0 Measures Performance Rates

To further narrow the list of eight CMS measures, HSAG examined California nursing home facilities’ performance rates on these measures using MDS 2.0 data obtained from the Nursing Home Compare website. The mean and standard deviation for each measure was examined to identify variation in the performance rates across facilities and identify opportunities for improving performance. The eight MDS 2.0 measures, and their corresponding MDS 3.0 revised measure names, as well as the MDS 2.0 average performance rate, standard deviation, 10th and 90th percentile rates from Quarter 1 to Quarter 3 2010 are outlined in Table 5.

Table 5. California Nursing Homes MDS 3.0 and Corresponding MDS 2.0 Measures Performance Data Q1 to Q3 2010

MDS 3.0 Measure Name	MDS 2.0 Measure Name	Mean	Standard Deviation	10th Percentile	90th Percentile
Percent of Low Risk Residents Who Lose Control of Their Bowel or Bladder (Long-Stay)	Percent of Low-Risk Long-Stay Residents Who Lose Control of Their Bowels or Bladder	57.76	17.03	0%	9%
Percent of Residents Who Self-Report Moderate to Severe Pain	Percent of Short-Stay Residents Who Had Moderate to Severe Pain	22.66	14.22	5%	42.8%
Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (Long-Stay)	Percent of Long-Stay Residents Whose Need for Help with Daily Activities Has Increased	10.37	6.40	3.3%	19%
Percent of Residents Who Have Depressive Symptoms (Long-Stay)	Percent of Long-Stay Residents Who are More Depressed or Anxious	9.18	5.58	3%	17%
Percent of Residents with a Urinary Tract Infection (Long-Stay)	Percent of Long-Stay Residents Who had a Urinary Tract Infection	7.77	4.89	2%	14%
Percent of Residents Who Lose Too Much Weight (Long-Stay)	Percent of Long-Stay Residents Who Lose Too Much Weight	6.48	3.93	2%	11%
Percent of Residents Who Self-Report Moderate to Severe Pain (Long Stay)	Percent of Long-Stay Residents Who Have Moderate to Severe Pain	3.67	3.82	0%	8%
Percent of Residents Who Have/Had a Catheter Inserted and Left in Their Bladder (Long-Stay)	Percent of Long-Stay Residents Who Have/Had A Catheter Inserted and Left in their Bladder	4.26	3.42	0%	9%

Evaluation of Comparability between MDS 2.0 and 3.0 Measures

HSAG reviewed the similarities and differences between the old and revised MDS measures and used CMS’ comparability report on the prevalence data obtained from MDS 2.0 and MDS 3.0 measures. Nearly all eight measures have undergone minor changes due to the modifications in the MDS 3.0 tool. Many of the changes incorporated in the MDS 3.0 are claimed to lead to more accurate and more improved quality measures. Specifically, the MDS 3.0 measure on depression and pain contained major changes that are expected to improve accuracy for these measures.²⁵

The differences between the MDS 3.0 and MDS 2.0 measures, as well as the MDS 3.0 measures’ agreement or comparability with MDS 2.0 measures (measured by Kappa statistic) are summarized below. High agreement scores indicate that the rates obtained from the MDS 2.0 measures are

comparable with the rates obtained using the revised MDS 3.0 measure. On the other hand, low agreement scores indicate that the rates obtained from the MDS 2.0 measures are not comparable with the rates obtained using the revised MDS 3.0 measure. Therefore, performance rates when derived from MDS 2.0 or MDS 3.0 will be different when calculated using MDS 3.0 specifications.

Percent of Low Risk Residents Who Lose Control of Their Bowel or Bladder (Long-Stay)

Although this measure is only slightly different from the MDS 2.0 bowel and bladder measure, it addresses several coding limitations of the MDS 2.0 measure. With MDS 2.0, residents with catheters were incorrectly coded as “continent”, and raters found the “usually continent” category confusing. With the MDS 3.0, residents with catheter and ostomy received a new rating response (i.e. “not rated”). Further, urinary continence frequency ratings eliminated the “usually continent” rating, which simplified the response categories.²⁵ The agreement between MDS 2.0 and MDS 3.0 rates on incontinence is good ($K = 0.81$).²⁵ Therefore, the MDS 2.0 measure is comparable with the revised MDS 3.0 measure. For Q1 to Q3 2010, the mean rate for low risk residents who lose control of their bladder is 57.56 with a standard deviation of 17.03. This indicates wide variation in the performance rates across California nursing facilities. HSAG recommends that this measure be included in the 2013 QAP.

Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (Long-Stay)

There are significant changes in the MDS 3.0 ADL measure when compared to the MDS 2.0 ADL measure. The MDS 3.0 measure has included toilet transfer as a separate item from toilet use. It also uses a different scale for scoring the resident’s need for help with ADL activities that includes a score based on total self-performance or based on the amount of person(s) needed to assist with an activity. Coding is based on the resident’s most dependent episode over a 5-day period. This measure calculates the change in each ADL item (bed mobility, transferring, eating, and toileting) between the target MDS assessment and a previous assessment. Because prior assessments were not available during testing of this measure, sensitivity to change in the MDS 3.0 is unknown.²⁵ As a result, the rates observed when calculated using the MDS 2.0 will differ from the rates calculated using the MDS 3.0 measure specifications. For Q1 to Q3 2010, the mean rate for residents whose need for help with activities of daily living has increased is 10.37 with a standard deviation of 6.40. This indicates wide variation in the performance rates across California nursing facilities. HSAG recommends that this measure be included in the 2013 QAP, however, further analysis of the variation in performance rates should be conducted for this measure when the MDS 3.0 data is available.

Percent of Residents Who Have Depressive Symptoms (Long-Stay)

The targeted focus on major depression is a significant change in the MDS 3.0 measure. The MDS 3.0 includes the PHQ-9 depression instrument, which has been shown to be more sensitive in detecting depression. A national field trial validation was conducted and established validity of the PHQ-9 for use in nursing home residents. In addition, the validity of the PHQ-9 Resident Interview was assessed and shown to have higher agreement with two gold standard measures for mood

disorder compared to MDS 2.0 and an alternative depression measurement scale. The previous MDS 2.0 measure combined two separate conditions (depression and anxiety), as well as situations that may result from other causes entirely: distress, crying/tearfulness, motor agitation, leaves food uneaten, repetitive health complaints, repetitive/recurrent verbalizations, negative statements, and mood symptoms not easily altered. Further, the MDS 2.0 items for this measure had been shown to have low sensitivity for detecting depression. The agreement between the MDS 2.0 and MDS 3.0 rates on depression (chronic sample) is low ($K = 0.18$).²⁵ Therefore, the MDS 2.0 measure is not comparable with the revised MDS 3.0 measure. Because the revised MDS 3.0 measure is expected to have better sensitivity for detecting depression, the performance rates when obtained from MDS 3.0 is expected to be higher, indicating worse performance. CMS' comparative analysis of data for this measure resulted in a greater than two-fold increase (12.1% to 27.2%) in the average rate when calculated using MDS 3.0 measure specifications.²⁵ For Q1 to Q3 2010, the mean rate for residents who have depressive symptoms is 9.18 with a standard deviation of 5.58. This indicates wide variation in the performance rates across California nursing facilities. HSAG recommends that this measure be included in the 2013 QAP, however, further analysis of the variation in performance rates should be conducted for this measure when the MDS 3.0 data is available.

Percent of Residents with a Urinary Tract Infection (Long-Stay)

The MDS 3.0 measure contains additional specific information to define urinary tract infection, which are consistent with the CDC and geriatrics literature recommendations. The instruction was enhanced to improve specificity compared to the MDS 2.0 measure. The agreement between the MDS 2.0 and MDS 3.0 rates on UTI is good ($K = 0.70$).²⁵ Therefore, the MDS 2.0 measure is comparable with the revised MDS 3.0 measure. For Q1 to Q3 2010, the mean rate for residents with a urinary tract infection is 7.77 with a standard deviation of 4.89. This indicates wide variation in the performance rates across California nursing facilities. HSAG recommends that this measure be included in the 2013 QAP.

Percent of Residents Who Self-Report Moderate to Severe Pain (Long Stay and Short Stay)

There are major content changes on the pain items in the revised MDS 3.0 instrument. The MDS 2.0 measure on pain in both long-stay and short-stay residents have been shown to have low accuracy. Saliba & Buchanan cited multiple studies that report lower pain prevalence rates using the MDS 2.0 pain items compared to using self-reported measures. Therefore, the new MDS 3.0 measure was changed to include a formal interview for pain assessment, which improved pain detection in residents. This has resulted in higher rates of moderate to severe pain with the MDS 3.0 measure in both long-stay and short-stay residents.²⁵ The agreement between the long-stay MDS 2.0 and MDS 3.0 rates on pain is low ($K = 0.36$), and the agreement between the short-stay MDS 2.0 and MDS 3.0 rates on pain is low ($K = .49$).²⁵ Therefore, the MDS 2.0 measure is not comparable with the revised MDS 3.0 measure.

For Q1 to Q3 2010, the mean rate for short-stay residents who self-report moderate to severe pain 22.66 with a standard deviation of 14.22. This indicates variability across facilities. Although the mean rate (3.67) and standard deviation (3.82) for the long-stay pain measure indicate limited variability across facilities, HSAG recommends that this measure be included in the 2013 QAP. Because the revised MDS 3.0 measure is expected to have better sensitivity for detecting pain, the

performance rates when calculated using the MDS 3.0 will be higher, indicating worse overall performance in nursing home facilities. CMS' comparative analysis of data for the long-stay measure resulted in a two-fold increase in the mean rate (11.1% to 23.5%) when calculated using MDS 3.0 measure specifications.²⁵ However, further analysis of the variation in performance rates should be conducted for this measure when the MDS 3.0 data is available.

Percent of Residents Who Lose Too Much Weight (Long-Stay)

The MDS 3.0 distinguishes planned weight loss from unplanned weight loss, however, the MDS 2.0 and 3.0 measures are very comparable. The agreement between the MDS 2.0 and MDS 3.0 rates on weight is high ($K = 0.74$).²⁵ Therefore, the MDS 2.0 measure is comparable with the revised MDS 3.0 measure. For Q1 to Q3 2010, the mean rate for residents who lose too much weight is 6.48 with a standard deviation of 3.93. This indicates limited variability in the performance rates across California nursing facilities. As such, HSAG does not recommend that this measure be included for 2013 QAP.

Percent of Residents Who Have/Had a Catheter Inserted and Left in Their Bladder (Long-Stay)

The new MDS 3.0 measure uses 5-day look back period compared to the 14-day look back period used in the previous MDS 2.0 measure. Although the rate obtained from the MDS 3.0 measure may differ from the rate obtained from the MDS 2.0 measure, the agreement between the MDS 2.0 and MDS 3.0 rates on catheter is good ($K = 0.78$).²⁵ Therefore, the MDS 2.0 measure is comparable with the revised MDS 3.0 measure. For Q1 to Q3 2010, the mean rate for residents who have/had a catheter inserted and left in their bladder is 4.26 with a standard deviation of 3.42. This indicates limited variability in the performance rates across California nursing facilities. As such, HSAG does not recommend that this measure be included for 2013 QAP.

Final CY 2013 Recommended Measures

Out of the remaining eight measures, HSAG selected six measures with the most variation in MDS 2.0 performance across California nursing home facilities and/or measures that are expected to demonstrate overall poor performance due to improvements in the revised MDS 3.0 instrument.

The six CMS MDS 3.0-based measures recommended for inclusion in the 2013 measure set are listed below:

1. Percent of Low Risk Residents Who Lose Control of Their Bowel or Bladder (Long-Stay)
2. Percent of Residents Who Self-Report Moderate to Severe Pain (Short-stay)
3. Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (Long-Stay)
4. Percent of Residents Who Have Depressive Symptoms (Long-Stay)
5. Percent of Residents with a Urinary Tract Infection (Long-Stay)
6. Percent of Residents Who Self-Report Moderate to Severe Pain (Long Stay)

Limitations

Strict rules were applied when rating the measures for feasibility and usability. Measures that require additional data collection (i.e., non-MDS-based and non-claims-based measures) are considered burdensome and were rated as “fail” on the feasibility criterion. Measures that were documented as having never been used in any public reporting programs or performance measurement are rated “fail” on the usability criterion. It is possible that measures that are non-MDS-based have a certain degree of feasibility for implementation. It is also possible that measures that have never been publicly reported have some degree of usability to the nursing homes. When competing measures were found, HSAG gave higher ratings to those measures that are NQF-endorsed. Endorsement of measures involves voluntary submission of measures for NQF review. Therefore, there is possibility that the measures not submitted for NQF endorsement may be as good as the NQF-endorsed measures; however, there is no publicly available information to assess their suitability for the QAP.

The conclusions drawn were limited by the method used to examine the performance rates, and by the data source used to obtain performance rates. HSAG used descriptive statistics to examine variation in performance across nursing home facilities. Identification of statistically significant and meaningful differences in performance were not conducted. The data is obtained from Nursing Home Compare website’s most recently available downloadable database, which is the average of three quarters of data (from Quarter 1 to Quarter 3 in 2010). In these data, CMS excludes reporting for agencies with small numbers of cases (less than 30).

By narrowing the recommended measures to only include CMS measures, local priorities relevant to California nursing homes and stakeholders are not addressed. Further, HSAG’s recommendations do not address the number of measures feasible to add to the 2013 payment year. It would be prudent to limit the total number of measures per year to a standardized number to promote parsimony and efficiency. In narrowing down the list above, HSAG recommends that the state consider aligning selected measures with current quality improvement activities being conducted in the state. For example, two measures listed above (catheter left in bladder and UTI) are aligned with the QIO’s 10th scope of work (SOW).

Conclusion

There are six CMS MDS-based quality measures that are recommended for the QAP based on the measure recommended selection criteria and evaluation of California nursing home performance data. These measures were selected because they were NQF endorsed, hence meeting the five well established measure evaluation criteria. They also met the second set of criteria of having been publicly reported for at least a year, and have performance gaps and opportunities for improvement based on the most recently available data.

- ¹Centers for Medicare & Medicaid Services. (2012). MDS 3.0 MDS Quality Measures Users Manual. <https://www.cms.gov/NursingHomeQualityInits/Downloads/MDS30QM-Manual.pdf>
- ²Centers for Medicare & Medicaid Services. (No date). Risk adjustment for hospitalization measures: Nursing home value based purchasing (NHVBP) demonstration.
- ³Oklahoma Focus on Excellence: Independent evaluation. (2009) Prepared for State of Oklahoma Health Care Authority. www.okhca.org
- ⁴Iowa Medicaid Enterprise. (2009). Nursing Facility Medicaid Pay-for-Performance Self Certification Report. <http://www.ime.state.ia.us>
- ⁵Iowa's Nursing Facility Accountability Measure Program Review. (2009). [Workgroup Review (Senate File 2425, Section 33). Draft recommendation matrix. https://www.legis.iowa.gov/DOCS/LSA/SC_MaterialsDist/2009/SDJRB004.PDF
- ⁶Unified Long-Term Care System Advisory Group. (2011) Report to the Ohio General Assembly. Nursing Facility Quality Measurement Subcommittee. http://aging.ohio.gov/resources/publications/ULTCS_2011-09-08_NFQualityRpt.PDF
- ⁷Minnesota Department of Human Services. (2011). Minnesota quality indicators: Revisions using MDS 3.0. <http://mn.gov/dhs/>
- ⁸Centers for Medicare & Medicaid Services. (2009). Nursing home value-based purchasing demonstration: Design refinements. Baltimore, MD. <http://www.cms.gov/demoprojectsevalrpts/>
- ⁹RAND.(2009). Physical Therapy or Nursing Rehabilitation/Restorative Care for Long-stay Patients with New Balance Problem. In National Quality Forum. National Voluntary Consensus Standard for Nursing Homes. <http://www.qualityforum.org>
- ¹⁰National Quality Measures Clearinghouse (NQMC). U.S. Department of Veterans Affairs, Health Services Research and Development Service, Center for Health Quality, Outcomes and Economic Research (CHQOER) Measure Summary: Percent time in therapeutic INR range (TTR): mean TTR achieved among patients who received prescriptions for warfarin and had sufficient INR values to calculate TTR. In: National Quality Measures Clearinghouse (NQMC) [Web site]. Rockville (MD): Agency for Healthcare Research and Quality (AHRQ); Available: <http://www.qualitymeasures.ahrq.gov>
- ¹¹National Quality Measures Clearinghouse (NQMC). Australian Council on Healthcare Standards. Measure Summary: Aged care: percentage of patients admitted to geriatric medicine or geriatric rehabilitation unit for whom there is documented objective assessment of physical function on admission and at least once more during the inpatient stay, during the 6 month time period In: National Quality Measures Clearinghouse (NQMC) [Web site]. Rockville (MD): Agency for Healthcare Research and Quality (AHRQ); Available: <http://www.qualitymeasures.ahrq.gov>

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APPENDIX A: CANDIDATE MEASURE LIST

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
CMS Nursing Home Quality Initiative	Percent of Residents Assessed and Appropriately Given the Seasonal Influenza Vaccine (Long-Stay)	<p>This measure is based on data from the MDS 3.0 assessment of long-stay nursing facility residents and reports the percentage of all long-stay residents who were assessed and appropriately given the seasonal influenza vaccine during the influenza season. The measure reports on the percentage of residents who were assessed and appropriately given the seasonal influenza vaccine (MDS items O0250A and O250C) on the target MDS assessment (which may be an admission, annual, quarterly, significant change or correction assessment).</p> <p>Long-stay residents are those residents who have been in the nursing facility at least 100 days. The measure is restricted to the population with long-term care needs and does not include the short-stay population who are discharged within 100 days of admission.</p> <p>This specification of the proposed measure mirrors the harmonized measure endorsed by the National Quality Forum (Measure</p>	The numerator is the number of long-stay residents in the facility with an MDS OBRA admission, annual, quarterly, significant change, correction, or discharge assessment who meet any of the any of the following criteria for the most recently completed influenza season: (1) those who received the influenza vaccine during the most recent influenza season, either in the facility or outside the facility, (2) the number who were offered and declined the influenza vaccine, or (3) the number who were ineligible due to contraindication(s) (i.e., anaphylactic hypersensitivity to eggs or other components of the vaccine, history of Guillain-Barré Syndrome within 6 weeks after a previous influenza vaccination, or bone marrow transplant within the past 6 months).	The denominator consists of all residents in the long-stay sample with a MDS 3.0 assessment (which may be an OBRA admission, annual, quarterly, significant change, significant correction or discharge assessment) during the vaccination reporting period defined as October 1 through June 30. This measure is based on the NQF's National Voluntary Standards for Influenza and Pneumococcal Immunizations. The NQF standard includes resident refusal and ineligibility in both the denominator and the numerator. This is a change from the currently used nursing home quality measure.	Residents are excluded from the denominator if they were not in the facility (item O0250.C =1) during the annual influenza season (as defined by the Centers for Disease Control and Prevention). Facilities with fewer than 20 residents are excluded from public reporting due to small sample size.	None listed	Process	MDS	0681	CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
		number 0432: Influenza Vaccination of Nursing Home/Skilled Nursing Facility Residents.) The NQF standard specifications were developed to provide a uniform approach to measurement across settings and populations. The measure harmonizes who is included in the target denominator population, who is excluded, who is included in the numerator population, and time windows for measurement and vaccinations.								
CMS Nursing Home Quality Initiative	Percent of Residents Who Were Assessed and Appropriately Given the Pneumococcal Vaccine (Long-Stay)	This measure is based on data from MDS 3.0 assessments of long-stay nursing facility residents. The measure reports the percentage of all long-stay residents who were assessed and appropriately given the Pneumococcal Vaccination (PPV) as reported on the target MDS assessment (which may be an admission, annual, quarterly, significant change or correction assessment) during the 12-month reporting period.	The numerator will be harmonized with NQF-endorsed measures. Residents are counted if they are short-stay residents defined as residents whose length of stay less than or greater 100 days. Residents are counts if they meet any of the following criteria on the most recent MDS 3.0 assessment which may be a OBRA Admission (30310A=01), 5-day PPS (30310B = 01, 02, 03, 04, 05, 06, 07) or discharge assessment during (A0310F = 10, 11) during the 12 month reporting period. The following numerator components will be computed and reported	The denominator consists of all long-stay residents in the pneumococcal vaccination sample with an MDS 3.0 OBRA admission assessment (which may be an annual, quarterly, significant change or significant correction) or discharge assessment during the 12-month reporting period. This measure is based on the NQF's National Voluntary Standards for Influenza and Pneumococcal Immunizations, which include resident refusal and ineligibility in the numerator and denominator. This is a change from the currently used nursing home quality measure.	There are no resident level exclusions. Only facilities with fewer than 30 residents are excluded from public reporting due to small sample size.	None listed	Process	MDS	0683	CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
			separately: 1. Up-to-date vaccine status (O0300.A=1) 2. Ineligible due to medical contraindications (O0300.B=1) 3. Offered and declined vaccine (O0300.B=2)							

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
CMS Nursing Home Quality Initiative	Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (Long-Stay)	This measure reports the percentage of all long-stay residents in a nursing facility whose need for help with late-loss Activities of Daily Living (ADLs), as reported in the target quarterly assessment, increased when compared with a previous assessment. The four late-loss ADLs are: bed mobility, transferring, eating, and toileting. This measure is calculated by comparing the change in each item between the target MDS assessment (which may be an annual, quarterly or significant change or correction assessment) and a previous assessment (which may be an admission, annual, quarterly or significant change or correction assessment).	The numerator is the number of long-stay residents who have an MDS assessment (which may be an annual, quarterly, significant change, or significant correction) reporting a defined amount of decline when compared with a previous assessment (which may be an admission, annual, quarterly, significant change, or significant correction MDS 3.0 assessment). This would indicate an increase, when compared with a previous assessment, in the resident's need for help with a late-loss item as indicated by a higher score (coding convention is such that a higher score indicates the need for more help with a task). The need for increased assistance (suggesting decline in function) is identified if the score for at least one late-loss ADL item increases by two or more points or if the score for two or more of the late-loss ADLs items increase by one point; late-loss ADL items are bed mobility, transferring, eating, and toileting.	The denominator includes all long-stay residents who received an annual, quarterly or significant change or correction MDS 3.0 assessment during the quarter and who did not meet the exclusion criteria.	These are the two types of assessments that might be completed upon admission. OBRA regulations require a full assessment within 14 days of admission. Medicare SNF payments require a Prospective Payment System (PPS) assessment. Newly admitted residents (identified by having either of these two types of admission assessments) are not included in the denominator as this represents their baseline status, not whether they have declined since admission. Denominator exclusion criteria include the following: <ul style="list-style-type: none"> • an OBRA admission assessment is the target assessment, • the resident is totally dependent in all four late-loss ADL items, • the resident is comatose, • the resident is receiving hospice care, or • the resident does not meet the criteria for decline in late-loss ADLs (an increase by two or more points in one late-loss ADL, or increase of one point in two or more late-loss ADLs) based on the ADL data available, AND there is missing data on any of the four late-loss ADL items . 	None listed	Outcome	MDS	0688	CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
					Long-stay facilities are excluded from public reporting if their sample includes fewer than 30 residents.					

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
CMS Nursing Home Quality Initiative	Percent of Residents Who Self-Report Moderate to Severe Pain (Long Stay)	<p>The proposed long-stay pain measure reports the percent of long-stay residents of all ages in a nursing facility 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 5 days prior to the MDS assessment (which may be an annual, quarterly, significant change or significant correction MDS) during the selected quarter.</p> <p>Long-stay residents are those who have had at least 100 days of nursing facility care. This measure is restricted to the long stay population because a separate measure has been submitted for the short-stay residents (those who are discharged within 100 days of admission)."</p>	<p>The numerator is the number of long-stay residents with an MDS assessment (which may be an annual, quarterly, significant change or significant correction assessment) during the selected quarter and who self-report (v200=1) almost constant or frequent pain on a scale of 1 to 4 (J0400 =1 or 2) AND at least one episode of moderate to severe pain (item J0600A = 5, 6, 7, 8, or 9 on a scale of 1–10, with 10 being the worst pain you can imagine, OR item J0600B = 2 or 3 on a scale of 0–4, with 4 being very severe, horrible pain) OR very severe/horrible pain of any frequency (item J0600A = 10 on a scale of 1 to 10 OR item J0600B = 4 on a scale of 0–4) in the 5 days prior to the assessment.</p>	<p>The denominator is the total of all long-stay residents in the nursing facility who have an MDS assessment which may be an annual, quarterly, significant change or significant correction assessment during the selected quarter and who do not meet the exclusion criteria.</p>	<p>A resident is excluded from the denominator if the MDS assessment was conducted within 14 days of admission or if there are missing data in the responses to the relevant questions in the MDS assessment. If the facility sample includes fewer than 30 residents, then the facility is excluded from public reporting because of small sample size.</p>	None listed	Outcome	MDS	0677	CMS
CMS Nursing Home Quality Initiative	Percent of Residents Who Were Physically Restrained (Long Stay)	<p>The measure reports the percentage of all long-stay residents in nursing facilities with an annual, quarterly, significant change, or significant correction MDS 3.0 assessment during the selected quarter (3-month period) who were physically restrained daily during the 7 days prior to the MDS assessment (which may be annual, quarterly, significant change, or</p>	<p>The numerator is the number of long-stay residents (those who have been in the facility for over 100 days) who have been assessed with annual, quarterly, significant change or significant correction MDS 3.0 assessments during the selected time window and who have experienced restraint usage during the 7 days prior to the assessment, as indicated by MDS 3.0, Section P,</p>	<p>The denominator is the total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.</p>	<p>An MDS assessment may, on occasion, have incomplete data due to human error in collecting or recording the data. Those records are excluded from the quality calculation because it is not possible to perform the needed calculations when data are missing. A resident is excluded from the denominator if the selected MDS 3.0 assessment was conducted</p>	None listed	Outcome	MDS	0687	CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
		significant correction MDS 3.0 assessment).	Item 100, sub items b (P0100B – Trunk restraint used in bed), c (P0100C – Limb restraint used in bed), e (P0100E – Trunk restraint used in chair or out of bed), f (P0100F – limb restraints used in chair or out of bed), or g (P0100G – Chair prevents rising).		within 14 days of admission or if there is missing data in the responses to the relevant questions in the MDS. Long-stay facilities are excluded from public reporting if their samples include fewer than 30 residents.					
CMS Nursing Home Quality Initiative	Percent of Residents with a Urinary Tract Infection (Long-Stay)	This measure updates CMS' current QM on Urinary Tract Infections in the nursing facility populations. It is based on MDS 3.0 data and measures the percentage of long-stay residents who have a urinary tract infection on the target MDS assessment (which may be an annual, quarterly, or significant change or correction assessment). In order to address seasonal variation, the proposed measure uses a 6-month average for the facility. Long-stay nursing facility residents are those whose stay in the facility is over 100 days. The measure is limited to the long-stay population because short-stay residents (those who are discharged within 100 days of admission) may have developed their urinary tract infections in the hospital rather than the nursing facility.	The numerator is the number of long-stay nursing facility residents who have an annual, quarterly, or significant change or correction assessment during the selected time window with reported urinary tract infections in the last 30 days (Item I2300 of the MDS 3.0 is checked).	All MDS target assessments (which may be an annual, quarterly, significant change or significant correction assessment) over the last two quarters. The total number of assessments is then divided by two to report an average quarter count.	There is one exclusion for the denominator. A resident is excluded from the denominator if the selected MDS OBRA assessment was conducted within 14 days of admission (an "admission assessment"). An OBRA admission assessment is identified if item A0310A = 01 (admission assessment) is checked. Assessments of residents with only an admission assessment are excluded because these residents may have developed their urinary tract infections in the hospital rather than the nursing home. It would be unfair to hold the nursing facility accountable for care received in the hospital.	None listed	Outcome	MDS	0684	CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
CMS Nursing Home Quality Initiative	Percent of High Risk Residents with Pressure Ulcers (Long Stay)	<p>The measure reports the percentage of all long-stay residents in a nursing facility with an annual, quarterly, significant change or significant correction MDS assessment during the selected quarter (3-month period) who were identified as high risk and who have one or more Stage 2-4 pressure ulcer(s). High risk populations are those who are comatose, or impaired in bed mobility or transfer, or suffering from malnutrition.</p> <p>Long-stay residents are those who have been in nursing facility care for more than 100 days. This measure is restricted to the population that has long-term needs; a separate pressure ulcer measure is being submitted for short-stay populations. These are defined as having a stay that ends with a discharge within the first 100 days. "</p>	The numerator is the number of long-stay residents who have been assessed with annual, quarterly, significant change or significant correction MDS 3.0 assessments during the selected time window and who are defined as high risk with one or more Stage 2-4 pressure ulcer(s). High risk populations are those who are comatose, or impaired in bed mobility or transfer, or suffering from malnutrition.	The denominator includes all long-stay residents who received an annual, quarterly, or significant change or significant correction assessment during the target quarter and who did not meet exclusion criteria.	A long-stay resident is excluded from the denominator if the MDS assessment in the current quarter is an OBRA admission assessment or a 5-day PPS assessment or if there is missing data in the relevant sections of the MDS. The OBRA admission assessment and a 5-day PPS assessment are excluded because pressure ulcers identified on them reflect care received in the previous setting and does not reflect the quality of care provided in the nursing facility. Nursing facilities with fewer than 30 residents in the sample are excluded from public reporting because of small sample size.	None listed	Outcome	MDS	0679	CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
CMS Nursing Home Quality Initiative	Percent of Residents Who Have Depressive Symptoms (Long-Stay)	Either a resident interview measure or a staff assessment measure will be reported. The preferred version is the resident interview measure. The resident interview measure will be used unless either there are three or more missing sub-items needed for calculation or the resident is rarely or never understood, in which cases the staff assessment measure will be calculated and used. These measures use those questions in MDS 3.0 that comprise the Patient Health Questionnaire (PHQ-9) depression instrument. The PHQ-9 is based on the diagnostic criteria for a major depressive disorder in the DSM-IV.	Using the PHQ-9 items in the MDS 3.0, for the Resident Interview Measure (Item D0200), the numerator is based on the total sum severity score (D0300) on the most recent MDS assessment in the selected quarter (which may be an annual, quarterly, significant change, or significant correction assessment). The total severity score reflects resident responses to questions asking about the frequency of nine symptoms over the last 2 weeks, including interest, mood, energy, appetite, self-value, ability to concentrate, change in responsiveness, or patience. The Staff Assessment Measure (Item D0500) is similar, except the judgment is being made by observers rather than the residents themselves. The numerator is calculated by using data from item D0300, the total self-reported depression severity score. While the self-report data are preferred, if data from D0300 are incomplete or unavailable then the numerator will be calculated using data from item D0600.	The denominator is the total number of all long-stay residents in the nursing facility who have received an MDS assessment (which may be an annual, quarterly, significant change or significant correction assessment) during the selected quarter (3-month period) and who do not meet the exclusion criteria.	A long-stay resident is excluded from the denominator if the MDS assessment is an admission assessment (OBRA) or a 5-day PPS scheduled assessment, if the resident is comatose, or if there are too many missing data in the relevant section of the MDS. Facilities are excluded from public reporting if they have fewer than 30 residents.	None listed	Outcome	MDS	0690	CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
CMS Nursing Home Quality Initiative	Percent of Residents Who Have/Had a Catheter Inserted and Left in Their Bladder (Long-Stay)	This measure captures the percentage of long-stay residents who have had an indwelling catheter in the last 7 days noted on the most recent MDS 3.0 assessment, which may be annual, quarterly, significant change or significant correction during the selected quarter (3-month period).	The numerator statement refers to a catheter that was inserted and left in the bladder by the facility during the assessment period. The numerator is the number of long-stay residents who have/had a urinary catheter in the last 7 days (H0100A is checked).	The denominator is the total of all long-stay residents in the nursing home who have been assessed with an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter (3-month period) and who do not meet the exclusion criteria.	A resident is excluded from the denominator if the MDS assessment was conducted within 14 days of admission or if there is missing data in the responses to the relevant questions in the MDS assessment. Other exclusions include residents with neurogenic bladder or obstructive uropathy. Residents with diagnoses of neurogenic bladder (item I1550) or obstructive uropathy (item I1650) are excluded because these are conditions in which the person is unable to empty the bladder voluntarily or effectively, putting the person at risk of complications, such as overflow incontinence, recurrent infection, vesicoureteral reflux, or autonomic dysreflexia. Facilities are excluded from public reporting if they have fewer than 30 residents due to small sample size.	None listed	Outcome	MDS	0686	CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
CMS Nursing Home Quality Initiative	Percent of Low Risk Residents Who Lose Control of Their Bowel or Bladder (Long-Stay)	This measure reports the percent of long-stay residents who are frequently or almost always bladder or bowel incontinent as indicated on the target MDS assessment (which may be an annual, quarterly, significant change or significant correction assessment) during the selected quarter (3-month period).	The numerator is the number of long-stay residents who have been assessed with an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the selected time window and who are frequently or almost always incontinent of bowel or bladder.	The denominator is the total of all long-stay residents in the nursing facility who have been assessed with an annual, quarterly, significant change or significant correction MDS assessment during the quarter and who do not meet the exclusion criteria.	A resident is excluded from the denominator if the selected MDS 3.0 assessment was conducted within 14 days of admission (A0310A = 01) or if there is missing data in the response fields for the relevant questions in the MDS. Other exclusions include residents with severe cognitive impairment, total dependence in mobility, comatose, or with an indwelling catheter	None listed	Outcome	MDS	0685	CMS
CMS Nursing Home Quality Initiative	Percent of Residents Who Lose Too Much Weight (Long-Stay)	This measure captures the percentage of long-stay residents who had 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 noted on an MDS assessment (which may be an annual, quarterly, significant change or significant correction MDS assessment) during the selected quarter (3-month period). In order to address seasonal variation, the proposed measure uses a two-quarter average for the facility. Long-stay residents are those who have been in nursing care at least 100	The numerator is the number of nursing home residents with an MDS assessment (which may be an annual, quarterly, significant change or significant correction MDS assessment) that indicate a weight loss of 5% or more of resident's body weight in the last 30 days or 10% or more in the last 6 months that is not a result of a physician-prescribed weight-loss regimen.	The denominator uses MDS assessments (which may be an annual, quarterly, significant change or significant correction assessments), except for residents with only an admission (OBRA) assessment and residents for whom data on weight loss is missing. Residents with only an admission (OBRA) assessment are excluded because they have not been in the facility long enough to have had weight loss assessed or attributed to care in the facility.	An assessment is excluded from the denominator if the MDS assessment was conducted within 14 days of admission (OBRA) (A0310 = 01) or if there is missing data in the responses to K0300 (weight loss) of the MDS 3.0. Facilities with fewer than 30 residents are excluded from public reporting because of small sample size.	None listed	Outcome	MDS	0689	CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
		days. The measure is restricted to this population, which has long-term care needs, rather than the short-stay population who are discharged within 100 days of admission.								
CMS Nursing Home Quality Initiative	Percent of Nursing Home Residents Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine (Short-Stay)	<p>The measure reports the percent of short-stay nursing facility residents who are assessed and appropriately given the seasonal influenza vaccination during the influenza season as reported on the target MDS assessment (which may be an OBRA admission, 5-day PPS, 14-day PPS, 30-day PPS, 60-day PPS, 90-day PPS or discharge assessment) during the selected quarter.</p> <p>Short-stay residents are those residents who are discharged within the first 100 days of the stay. The measure is restricted to the population that has short-term needs and does not include the population of residents with stays longer than 100 days. A separate quality measure has been</p>	The numerator is the number of residents in the denominator who meet any of the following criteria for the most recently completed influenza season: (1) those who received the influenza vaccine during the most recent influenza season, either in the facility or outside the facility; (2) the number who were offered and declined the influenza vaccine; or (3) the number who were ineligible due to contraindication(s) (i.e., anaphylactic hypersensitivity to eggs or other components of the vaccine, history of Guillain-Barré Syndrome within 6 weeks after a previous influenza vaccination, or bone marrow transplant within the past 6 months).	Residents are counted if they are short-stay residents, defined as residents whose length of stay is less than or equal to 100 days. The short-stay seasonal influenza vaccination sample includes residents meeting any of the following conditions: (1) the resident has an OBRA admission assessment (A0310.A=01) or PPS assessment (A0310.B=1,2,3,4,5,6,7) with an entry date (A1600) during the influenza season; or (2) the resident has a discharge assessment (A0310.F-10 or 11) with a discharge date (A2000) during the influenza season and an entry date (A1600) before or equal to 100 days.	Residents are excluded from the denominator if they were not in the facility (item O0250.C =1) during the annual influenza season (as defined by the Centers for Disease Control and Prevention). Facilities with fewer than 20 residents are excluded from public reporting due to small sample size.	None listed	Process	MDS	0680	CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
		submitted for the long-stay population. The specifications of the proposed measure mirror those of the harmonized measure endorsed by the National Quality Forum under measure number 0432 Influenza Vaccination of Nursing Home/Skilled Nursing Facility Residents. The NQF standard specifications were developed to achieve a uniform approach to measurement across settings and populations addressing who is included in the target denominator population, who is excluded, who is included in the numerator population, and time windows for measurement and vaccinations.								
CMS Nursing Home Quality Initiative	Percent of Residents Who Were Assessed and Appropriately Given the Pneumococcal Vaccine (Short-Stay)	This measure is based on data from MDS 3.0 assessments of nursing facility residents. The measure reports the percentage of short-stay nursing facility residents who were assessed and appropriately given the Pneumococcal Vaccine (PPV) as reported on the target MDS 3.0 assessment (which may be an OBRA admission, 5-day PPS, 14-day PPS, 30-day PPS, 60-day PPS, 90-day PPS or discharge assessment) during the 12-month	Residents are counted if they are short-stay residents defined as residents whose length of stay less than or equal to 100 days. Residents are counted if they meet any of the following criteria on the most recent MDS 3.0 assessment which may be a an OBRA Admission (30310.A=01), 5-day PPS (30310.B = 01, 02, 03, 04, 05, 06, 07) or discharge assessment during (A0310.F = 10, 11) during the 12 month reporting period. The following numerator components will be	The denominator consists of all short-stay residents in the pneumococcal vaccination sample with a MDS 3.0 assessment (which may be an OBRA admission, 5-day PPS, 14-day PPS, 30-day PPS, 60-day PPS, 90-day PPS or discharge assessment) within the 12-month period.	There are no resident level exclusions. Only facilities with fewer than 20 residents are excluded from public reporting due to small sample size	None listed	Process	MDS	0682	CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
		reporting period.	computed and reported separately: 1. Up-to-date vaccine status (O0300.A=1) 2. Ineligible due to medical contraindications (O0300.B=1) 3. Offered and declined vaccine (O0300.B=2)							
CMS Nursing Home Quality Initiative	Percent of Residents Who Self-Report Moderate to Severe Pain (Short-Stay)	This measure updates CMS's current QM on pain severity for short-stay residents (people who are discharged within 100 days of admission). This updated measure is based on data from the Minimum Data Set (MDS 3.0) 14-day PPS assessments. This measure reports the percentage of short-stay residents with a 14-day PPS assessment during a selected quarter (3 months) 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 5 days prior to the 14-day PPS assessment.	The numerator is the number of short-stay residents who are able to self-report (item J200=1), who have a 14-day PPS assessment during the preceding 6 months, who report almost constant or frequent pain (item J0400 = 1 or 2) AND at least one episode of moderate to severe pain (item J0600A = 5, 6, 7, 8, or 9 on a scale of 1-10, with 10 being the worst pain you can imagine, OR item J0600B = 2 or 3 on a scale of 0-4, with 4 being very severe, horrible pain) OR very severe/horrible pain of any frequency (item J0600A = 10 on a scale of 1 to 10 OR item J0600B = 4 on a scale of 0 to 4) in the 5 days prior to the 14-day PPS assessment.	The denominator is the total of all short-stay residents in the nursing facility who have received an MDS 3.0 14-day PPS assessment during the preceding 6 months from the selected quarter and who do not meet the exclusion criteria.	A resident is excluded from the denominator if they cannot self-report or there is missing data in the relevant questions in the target MDS assessment. Short-stay facilities with fewer than 20 residents are excluded from public reporting because of small sample size.	None listed	Outcome	MDS	0676	CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
CMS Nursing Home Quality Initiative	Percent of Residents with Pressure Ulcers That Are New or Worsened (Short-Stay)	<p>This measure updates CMS's current QM pressure ulcer measure which currently includes Stage 1 ulcers. The measure is based on data from the MDS 3.0 assessment of short-stay nursing facility residents and reports the percentage of residents who have Stage 2-4 pressure ulcers that are new or have worsened. The measure is calculated by comparing the Stage 2-4 pressure ulcer items on the discharge assessment and the previous MDS assessment (which may be an OBRA admission or 5-day PPS assessment).</p> <p>The quality measure is restricted to the short-stay population defined as those who are discharged within 100 days of admission. The quality measure does not include the long-stay residents who have been in the nursing facility for longer than 100 days. A separate measure has been submitted for them.</p>	The numerator is the number of short-stay residents with a discharge MDS 3.0 assessment during the selected time window who have one or more Stage 2-4 pressure ulcer(s) that are new or that have worsened on the discharge assessment compared to the previous OBRA admission or 5-day PPS assessment.	All short-stay nursing facility residents except those who meet the exclusion criteria.	A short-stay resident is excluded from the denominator if there is no discharge assessment or if missing data precludes calculation of the measure. Short-stay facilities are excluded from public reporting if they have fewer than 20 residents due to small sample size.	None listed	Outcome	MDS	0678	CMS
CMS Nursing Home Quality Initiative	Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay)	This measure is based on data from all non-admission MDS 3.0 assessments of long-stay nursing facility residents which may be annual, quarterly, significant change, significant correction, or discharge assessment. It	The numerator is based on the number of long-stay nursing facility residents who experienced one or more falls that resulted in major injury (J1900c = 1 or 2) on any non-admission MDS assessment in the last 12 months which may be an	The denominator is the total number of long-stay residents in the nursing facility who were assessed during the selected time window and who did not meet the exclusion criteria.	Residents with MDS admission assessments (OBRA or a 5-day PPS assessment) from the current quarter are excluded. Also excluded are residents for whom data from the relevant section of the MDS are missing.	None listed	Outcome	MDS	0674	CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
		reports the percent of residents who experienced one or more falls with major injury (e.g., bone fractures, joint dislocations, closed head injuries with altered consciousness, and subdural hematoma) in the last year (12-month period). The measure is based on MDS 3.0 item J1900C, which indicates whether any falls that occurred were associated with major injury.	annual, quarterly, significant change, significant correction or discharge assessment. In the MDS 3.0, major injury is defined as bone fractures, joint dislocations, closed head injuries with altered consciousness, or subdural hematoma.		Residents must be present for at least 100 days to be included in long-stay measures. Long-stay facilities are excluded from the public reporting if their sample includes fewer than 30 residents.					
CMS Nursing Home Quality Initiative	The Percentage of Residents on a Scheduled Pain Medication Regimen on Admission Who Self-Report a Decrease in Pain Intensity or Frequency (Short-stay)	This measure is based on data from the MDS 3.0 assessment of short-stay nursing facility residents and reports the percentage of those short-stay residents who can self-report and who are on a scheduled pain medication regimen at admission (5-day PPS MDS assessment) and who report lower levels of pain on their discharge MDS 3.0 PPS MDS assessment (whichever comes first) when compared with the 5-day PPS MDS assessment.	The numerator is the number of short-stay residents who have a 14-day PPS assessment or discharge assessment (whichever comes first), who can self-report, (MDS 3.0 item J200=1) and who are on a scheduled pain medication regimen (MDS 3.0 item J0100A = 1), reporting a defined reduction in pain when compared to their earlier assessment (a 5-day PPS assessment). Reduced pain is indicated, when compared to the prior assessment, there is a decrease in pain frequency (MDS 3.0 item J0400) or a decrease in pain intensity (as reported in MDS 3.0 item J0600A = 0–10, with 10 being the worst pain you can imagine, or a decrease in the verbal description of pain (MDS 3.0 item J0600B	The denominator is the total of all short-stay residents in the nursing facility who have a 5-day PPS MDS 3.0 assessment and either a 14-day PPS MDS 3.0 assessment or a discharge MDS 3.0 assessment (whichever comes first); who have been on a scheduled pain medication regimen (MDS 3.0 item J0100A = 1) and who do not meet the exclusion criteria.	A resident is excluded from the denominator if there are missing data in the relevant MDS questions. If the short-stay facility has fewer than 20 residents in the sample, they are excluded from public reporting because of small sample size.	None listed	Outcome	MDS	0675	CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
			= 1–4, with 4 being very severe, horrible pain).							
Minnesota Quality Indicators	Incidence of Worsening Resident Behavior (long-stay)	None listed	Verbal behavior symptoms directed toward others (E0200B>0) Physical behavioral symptoms directed toward others (E0200A>0) Other behavioral symptoms not directed toward others (E0200C>0)	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	Verbal behavior symptoms directed toward others (E0200B>0) at [t-1] or =missing at [t] or [t-1] Physical behavioral symptoms directed toward others (E0200A>0) at [t-1] or =missing at [t] or [t-1] Other behavioral symptoms not directed toward others (E0200C>0) at [t-1] or =missing at [t] or [t-1] Comatose (B0100=1 or missing) Federal OBRA Reasons for Assess (A0310A=01 in previous 12 months)	BIMs score (C0500) or CPS score ((C0700 +C1000 + B0700 + G0110H1) CVA/TIA/Stroke (I4500) Depression (I5800) Manic depression (I5900) Alzheimer's (I4200) Non-Alzheimer's dementia (I4800) Makes self-understood (B0700) Ability to understand others (B0800) Gender (A0800) Age (A0900)	Outcome	MDS		CMS/UMN

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
						Nursing home LOS (A2300)				
Minnesota Quality Indicators	Percent of Residents Who Have Depressive Symptoms (Long-Stay)	None listed	When the Resident Mood Interview is conducted, the resident must have score of two or greater for either D0200A or D0200B AND a score of two or more for five of the following items D0200A-I. When the Staff Assessment for Resident Mood is necessary, the resident must have score of two or greater for either D0200A or D0200B AND a score of two or more for five of the following items D0200A-I.	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	Comatose (B0100=1 or missing) Federal OBRA Reasons for Assess (A0310A=01 in previous 12 months)	MN Risk Adjustors: BIMs score (C0500) or CPS score ((C0700 +C1000 + B0700 + G0110H1) CVA/TIA/Stroke (I4500) Eating ADL Assistance (G0110H1) Makes self-understood (B0700) Alzheimer's (I4200) Non-Alzheimer's	Outcome	MDS		CMS/UMN

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
						dementia (I4800) Gender (A0800) Age (A0900) Nursing home LOS (A2300)				
Minnesota Quality Indicators	Prevalence of Physical Restraints (long-stay) Long stay=greater than 100 days	None listed	Trunk restraint used in bed (P0100B) =2 Limb restraint used in bed (P0100C) =2 Trunk restraint used in chair or out of bed (P0100E) =2 Limb restraints used in chair or out of bed (P0100F) =2 Chair prevents rising (P0100G)=2	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	A resident is excluded from the denominator if the selected MDS 3.0 assessment was conducted within 14 days of admission or if there is missing data in the responses to the relevant questions in the MDS.	Physical behavioral symptoms directed toward others (E0200A>0) Gender (A0800) Age (A0900) Nursing home LOS (A2300)	Outcome	MDS		CMS/UM N

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
Minnesota Quality Indicators	Incidence of worsening bladder incontinence (long stay)	None listed	Bladder incontinence (H0300 greater than target assessment)	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	H0300= missing or =9 Always incontinent (H0300=3) Comatose (B0100=1 or missing) Prognosis (J1400=1 or missing) Hospice care (O0100K1 or O0100K2) Ostomy (H0100C)	MN Risk Adjustors: BIMs score (C0500) or CPS score ((C0700 +C1000 + B0700 + G0110H1) Bed mobility ADL (G0110A1) Transfer ADL (G0110B1) Locomotion on unit (G0110E1) Gender (A0800) Age (A0900) Nursing home LOS (A2300)	Outcome	MDS		CMS/ Brown University/ Abt Associates
Minnesota Quality Indicators	Incidence of worsening bowel incontinence (long stay)	None listed	Bowel incontinence (H0400 greater than target assessment)	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	H0400= missing or =9 Always incontinent (H0400=3) Comatose (B0100=1 or missing) Prognosis (J1400=1 or missing) Hospice care (O0100K1 or O0100K2) Ostomy (H0100C)	MN Risk Adjustors: BIMs score (C0500) or CPS score ((C0700 +C1000 + B0700 + G0110H1) Bed mobility ADL (G0110A1) Transfer ADL (G0110B1) Locomotion on unit (G0110E1) Gender	Outcome	MDS		CMS/ Brown University/ Abt Associates

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
						(A0800) Age (A0900) Nursing home LOS (A2300)				
Minnesota Quality Indicators	Incidence of improved bladder incontinence (long stay)	None listed	Bladder incontinence (H0300 less than target assessment)	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	H0300= missing or =9 Always incontinent (H0300=3) Comatose (B0100=1 or missing) Prognosis (J1400=1 or missing) Hospice care (O0100K1 or O0100K2) Ostomy (H0100C)	MN Risk Adjustors: BIMs score (C0500) or CPS score ((C0700 +C1000 + B0700 + G0110H1) Bed mobility ADL (G0110A1) Transfer ADL (G0110B1) Locomotion on unit (G0110E1) Gender (A0800) Age (A0900) Nursing home LOS (A2300)	Outcome	MDS		UMN

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
Minnesota Quality Indicators	Incidence of improved bowel incontinence (long stay)	None listed	Bowel incontinence (H0400 less than target assessment)	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	H0400= missing or =9 Always incontinent (H0400=3) Comatose (B0100=1 or missing) Prognosis (J1400=1 or missing) Hospice care (O0100K1 or O0100K2) Ostomy (H0100C)	MN Risk Adjustors: BIMs score (C0500) or CPS score ((C0700 +C1000 + B0700 + G0110H1) Bed mobility ADL (G0110A1) Transfer ADL (G0110B1) Locomotion on unit (G0110E1) Gender (A0800) Age (A0900) Nursing home LOS (A2300)	Outcome	MDS		UMN
Minnesota Quality Indicators	Prevalence of occasional to full bladder incontinence without a toileting plan. (long-stay)	None listed	Current urinary toileting program or trial (H0200A=0 or H0200C=0) Urinary incontinence (H0300=1, 2 or 3)	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	Toilet use (G0110I=0) H0200A or C=1	MN Risk Adjustors: Gender (A0800) Age (A0900) Nursing home LOS (A2300)	Outcome	MDS		UMN

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
Minnesota Quality Indicators	Prevalence of occasional to full Bowel incontinence without a toileting plan. (long stay)	None listed	Current bowel toileting program (H0500C=0) Bowel incontinence (H0400=1, 2 or 3)	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	Toilet use (G0110I=0)	MN Risk Adjustors: Gender (A0800) Age (A0900) Nursing home LOS (A2300)	Outcome	MDS		UMN
Minnesota Quality Indicators	Prevalence of Indwelling catheter (long stay)	None listed	Indwelling bladder catheter (H0100A)	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	Prognosis (J1400=1 or missing) Hospice care (O0100K1 or O0100K2) Neurogenic bladder (I1550) Obstructive uropathy (I1650)	MN Risk Adjustors: CVA/TIA/Stroke (I4500) Paraplegia (I5000) Quadriplegia (I5100) Gender (A0800) Age (A0900) Nursing home LOS (A2300)	Outcome	MDS		CMS/ Brown University/ Abt Associates
Minnesota Quality Indicators	Prevalence of urinary tract infections (long stay)	None listed	UTI (I2300)	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	Prognosis (J1400=1 or missing) Hospice care (O0100K1 or O0100K2)	MN Risk Adjustors: CVA/TIA/Stroke (I4500) Paraplegia (I5000) Quadriplegia (I5100) Locomotion on unit (G0110E1) Gender (A0800) Age (A0900) Nursing home LOS (A2300)	Outcome	MDS		CMS/ Brown University/ Abt Associates

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
Minnesota Quality Indicators	Prevalence of infections (long stay)	None listed	MDRO ((I1700) Pneumonia (I2000) Septicemia (I2100) Viral Hepatitis (I2400) Wound infection other than foot (I2500) UTI last 30 days (I2300)	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	Prognosis (J1400=1 or missing) Hospice care (O0100K1 or O0100K2) Resident is not in numerator and I1700 or I2000 or I2100 or I2400 or I2500 or J!5550A or I2300 is missing)	MN Risk Adjustors: CVA/TIA/Stroke (I4500) Paraplegia (I5000) Quadriplegia (I5100) Locomotion on unit (G0110E1) Gender (A0800) Age (A0900) Nursing home LOS (A2300)	Outcome	MDS		CMS/ Brown University/ Abt Associates
Minnesota Quality Indicators	Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay)	None listed	One or more fall with major injury, or two or more falls with major injury. J1900=1 or 2	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.		MN Risk Adjustors: BIMs score (C0500) or CPS score ((C0700 +C1000 + B0700 + G0110H1) Prior ADL status: 1. Bed mobility assistance (G0110A1) 2. Transfer assistance (G0110B1) 3. Dressing assistance (G0110G1) 4. Eating assistance (G0110H1) 5. Toilet use (G0110I1)	Outcome	MDS		CMS/ Brown University/ Abt Associates

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
						6. Personal hygiene (G0110J1) 7. Bathing (G0120A) 8. Walk in room (G0110C1) 9. Walk in corridor (G0110D1) 10. Locomotion on unit (G0110E1) 11. Locomotion off unit (G0110F1) Orthostatic hypotension (I0800) CVA/TIA/Stroke (I4500) Hemiplegia/hemiparesis (I4900) Paraplegia (I5000) Parkinson's disease (I5300) Seizure disorder or epilepsy (I5400) Cataracts, glaucoma, or macular degeneration (I6500) Comatose (B0100=1)				

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
						Gender (A0800) Age (A0900) Nursing home LOS (A2300)				
Minnesota Quality Indicators	Prevalence of unexplained weight loss (long stay)	None listed	Weight loss (K0300=2)	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	Prognosis (J1400=1 or missing) Hospice care (O0100K1 or O0100K2) Weight loss (K0300=0 or missing) Weight loss planned (K0300=1 or missing)	MN Risk Adjustors: BIMs score (C0500) or CPS score ((C0700 +C1000 + B0700 + G0110H1) Comatose (B0100=1) Cancer (I0100) Gender (A0800) Age (A0900) Nursing home LOS (A2300)	Outcome	MDS		CMS/ Brown University/ Abt Associates

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
Minnesota Quality Indicators	Incidence of healed pressure ulcers (long stay)	None listed	Healed pressure ulcers (M0900A=1 and M0900B and/or M0900C and/or M0900D \geq 1)	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	Healed pressure ulcers (M0900A= missing)	None listed	Outcome	MDS		UMN

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
Minnesota Quality Indicators	Prevalence of residents with pressure ulcers that are new or worsened (short stay)	None listed	One or more Stage 2-4 pressure ulcer(s) that are new or have worsened comparing the discharge assessment (A0310.F=10, 11) and the prior OBRA admission (A0310.A=01) or the 5-day PPS assessment (A0310.B=01). On the discharge assessment, item M0800A>0 or M0800B>0 or M0800C>0: M0800=Worsening in Pressure Ulcer Status Since Prior Assessment (Indicate the number of current pressure ulcers that were not present or were are a lesser stage on the prior assessment: A. Stage 2, B. Stage 3, and C. Stage 4) OR The pressure ulcers are new or fail to improve. This is indicated by comparing the discharge assessment with the prior OBRA admission or 5-day PPS assessment on item M0300 (current number of unhealed [non-epithelialized] pressure ulcers at each stage). If M0300 is equivalent or greater in the discharge assessment than in the OBRA admission or 5-day PPS assessment for each stage of ulcer, including B1 (Stage 2) OR C1 (Stage 3), or D1 (Stage 4) then they are included as having a pressure ulcer that failed to improve or is a new	Number of short-stay residents who have been assessed with MDS 3.0 discharge assessments during the selected time window and whose date of discharge is less than or equal to 100 days since their most recent entry date (A1600) for the OBRA admission or 5-day PPS assessment, except for those meeting the exclusion criteria.	A short-stay resident is excluded from the denominator if there is no discharge assessment or if missing data precludes calculation of the measure.	MN Risk Adjustors: Comatose (B0100=1) Current ADL Status: 1. Bed mobility (G0110A1) 2. Transfer (G0110B1) Malnutrition (I5600) Prognosis (J1400=1 or missing) History of resolved ulcers (M0900=1, M0900B>0 or M0900C>0 or M0900D>0) Gender (A0800) Age (A0900) Nursing home LOS (A2300)	Outcome	MDS		UMN

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
			pressure ulcer.							

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
Minnesota Quality Indicators	Percent of high risk residents with pressure ulcers (long-stay)	None listed	One or more stage 2-4 pressure ulcer(s) M0300 (current number of unhealed [non-epithelialized] pressure ulcers at each stage)	Number of long-stay residents who have been assessed with annual, quarterly, significant change or significant correction MDS 3.0 assessments (A0310.A=02, 03, 04, 05, 06) during the selected time window and who are defined as high risk by meeting one of the following criteria on the assessment: 1. Impaired in bed mobility (G011A.1=3, 4, or 8) or transfer (G0110B.1=3,4, 0r 8) OR 2. Comatose (B0100=1) OR 3. Malnutrition (I5600)	A short-stay resident is excluded from the denominator if there is no discharge assessment or if missing data precludes calculation of the measure.	MN Risk Adjustors: Comatose (B0100=1) Prognosis (J1400=1 or missing) History of resolved ulcers (M0900=1, M0900B>0 or M0900C>0 or M0900D>0) Gender (A0800) Age (A0900) Nursing home LOS (A2300)	Outcome	MDS		UMN
Minnesota Quality Indicators	Prevalence of antipsychotics without a dx of psychosis (long stay)	None listed	Antipsychotic medications received in last 7 days (N0400A)	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	Schizophrenic disorder, delusional disorder, or non-organic psychosis (I6000) Schizophrenia (I6000) Tourette's Syndrome (I5350) Huntington's Disease (I5250) Acute manic or mixed bipolar disorder (I5900; and/or I8000A:296.40, 296.41, 296.42, 296.43, 296.44, 296.45, 296.60, 296.61, 296.62, 296.63, 296.64, 296.65) Mood disorder not elsewhere classified (I8000A=293.83) Affective psychosis (I8000A=296.34) Borderline Personality	MN Risk Adjustors: Gender (A0800) Age (A0900) Nursing home LOS (A2300)	Outcome	MDS		UMN

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
					Disorder (I8000A=301.83) Post traumatic stress disorder (I6100) Hallucinations (E0100A) Prognosis (J1400=1 or missing) Hospice care (O0100K1 or O0100K2) Type of Assessment/ Federal OBRA Reasons for Assess (A0310A=01 in previous 12 months)					
Minnesota Quality Indicators	Improved ability to function (long stay)	None listed	More independence in: Bed mobility (G0110A1) Transfer (G0110B1) Locomotion on unit (G0110E1) Dressing (G0110G1) Eating (G0110H1) Toilet use (G0110I1) Personal hygiene (G0110J1) All at target assessment relative to prior assessment	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	ADLLF [t]=missing ADLLF [t-1]=missing and ADLLF [t] <28 ADLLF [t-1]=0 Prognosis (J1400=1 or missing) Hospice care (O0100K1 or O0100K2)	MN Risk Adjustors: BIMs score (C0500) or CPS score ((C0700 +C1000 + B0700 + G0110H1) Alzheimer's (I4200) Comatose (B0100=1 or missing) CVA/TIA/Stroke (I4500) Hemiplegia/hemiparesis (I4900) Paraplegia (I5000) Parkinson's disease (I5300) Gender (A0800)	Outcome	MDS		UMN

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
						Age (A0900) Nursing home LOS (A2300)				

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
Minnesota Quality Indicators	Incidence of increased need for help with daily activities (long stay)	None listed	One step or greater decline in at least two of the following or a two step or greater decline in at least one of the following at target assessment relative to prior assessment Bed mobility (G0110A1) Transfer (G0110B1) Eating (G0110H1) Toilet use (G0110I1)	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	Bed mobility, transfer, toilet use & eating = 4 or 7 or 8 (G0110A1, G0110B1, G0110I1 & G0110H1=4 or 7 or 8) Resident is not in numerator and data are missing for any of the following: Bed mobility, transfer, toilet use & eating (G0110A1, G0110B1, G0110I1 & G0110H1=missing) Comatose (B0100=1 or missing) Prognosis (J1400=1 or missing) Hospice care (O0100K1 or O0100K2)	MN Risk Adjustors: BIMs score (C0500) or CPS score ((C0700 +C1000 + B0700 + G0110H1) CVA/TIA/Stroke (I4500) Hemiplegia/hemiparesis (I4900) Paraplegia (I5000) Parkinson's disease (I5300) Alzheimer's (I4200) Gender (A0800) Age (A0900) Nursing home LOS (A2300)	Outcome	MDS		UMN
Minnesota Quality Indicators	Incidence of walking as well or better than previous assessment. (long stay)	None listed	Same or improved independence in walking in coordinator at target assessment relative to prior assessment: Walk in corridor (G0110D1)	All residents with a valid non-admission target assessment and a valid prior assessment and one of the following: Balance while walking (G0300B=0 or 1) Walk in corridor (G0110D1=0,1,2, or 3)	G0110D1=missing Prognosis (J1400=1 or missing) Hospice care (O0100K1 or O0100K2)	MN Risk Adjustors: Arthritis (I3700) Paraplegia (I5000) Hemiplegia/hemiparesis (I4900) CVA/TIA/Stroke (I4500) Parkinson's disease (I5300) Hip fracture	Outcome	MDS		CMS/ Brown University/ Abt Associates

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
						(I3900) Gender (A0800) Age (A0900) Nursing home LOS (A2300)				
Minnesota Quality Indicators	Incidence of worsening ability to move in and around room. (long stay)	None listed	More dependence in movement on unit at target assessment relative to prior assessment: Locomotion on unit (G0110E)	All residents with a valid non-admission target assessment	Locomotion on unit (G0110E=missing or G0110E[t-1]=4 or 8 OR G0110E[t-1]=missing and G0110EA {t}>0) Comatose (B0100=1 or missing) Prognosis (J1400=1 or missing) Hospice care (O0100K1 or O0100K2)	MN Risk Adjustors: Arthritis (I3700) Paraplegia (I5000) Hemiplegia/hemiparesis (I4900) CVA/TIA/Stroke (I4500) Parkinson's disease (I5300) Hip fracture (I3900) Gender (A0800) Age (A0900) Nursing home LOS (A2300)	Outcome	MDS		CMS/ Brown University/ Abt Associates

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
Minnesota Quality Indicators	Incidence of decline in range of motion. (long stay)	None listed	Functional Limitation in ROM: Upper Extremity (G0400A) Functional Limitation in ROM: Lower Extremity (G0400B) Sum of ROM limitations greater than at target assessment relative to prior assessment. (G0400A +G0400B) (Range is 0-4)	All residents with a valid non-admission target assessment .	G0400A [t-1] +G0400B {t-1}=4	MN Risk Adjustors: BIMs score (C0500) or CPS score ((C0700 +C1000 + B0700 + G0110H1) Arthritis (I3700) Paraplegia (I5000) Quadriplegia (I5100) Hemiplegia/hemiparesis/ (I4900) CVA/TIA/ Stroke (I4500) Parkinson's disease (I5300) MS (I5200) Comatose (B0100=1 Gender (A0800) Age (A0900) Nursing home LOS (A2300)	Outcome	MDS		CMS/ Brown University/ Abt Associates

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
Minnesota Quality Indicators	Percent of residents on a scheduled pain medication regimen on admission who report a decrease in pain intensity or frequency (short stay)	None listed	Resident on a scheduled pain medication regimen (J0100A=1), who self-report a reduction in pain. A reduction in pain is defined as one of the followings: 1) reduced frequency of pain between the two assessments (J0400) or reduced intensity of pain (J0600A) or reduced verbal descriptor of pain (J0600B). Higher scores of these items reflect more frequent or severe pain, and so a reduction in pain is calculated if the score on any of these items is lower compared to the score of the previous assessment	All residents whose length of stay is 100 days or less.	Missing data	MN Risk Adjustors: Need to be determined	Outcome	MDS		CMS
Minnesota Quality Indicators	Percent of residents who self-report moderate to severe pain (short stay)	None listed	Number of short-stay residents able to self-report (item J200=1) and who report almost constant or frequent pain on a scale of 1 to 4. These numeric ratings were defined as the following: 1=the pain is almost constantly (item J0400=1 or 2) AND at least one episode of moderate to severe pain (item J0600A=5, 6, 7, 8, or 9 on a scale of 1-10, with 10 being the worst pain you can imagine OR item J0600B=2 or 3 on a	All residents whose length of stay is 100 days or less.	Missing data	MN Risk Adjustors: Need to be determined	Outcome	MDS		CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
			scale of 0-4, with 4 being very severe, horrible pain) OR very severe/horrible pain of any frequency (item J0600A=10 on a scale of 1 to 10 OR item J0600B=4 on a scale of 0 to 4) in the 5 days prior to the assessment.							
Minnesota Quality Indicators	Percent of residents who self-report moderate to severe pain (long stay)	None listed	Number of long-stay residents able to self-report (item J200=1) and who report almost constant or frequent pain on a scale of 1 to 4. These numeric ratings were defined as the following: 1=the pain is almost constantly (item J0400=1 or 2) AND at least one episode of moderate to severe pain (item J0600A=5, 6, 7, 8, or 9 on a scale of 1-10, with 10 being the worst pain you can imagine OR item J0600B=2 or 3 on a scale of 0-4, with 4 being very severe, horrible pain) OR very severe/horrible pain of any frequency (item J0600A=10 on a scale of 1 to 10 OR item J0600B=4 on a scale of 0 to 4) in the 5 days prior to the assessment.	All residents whose length of stay is more than 100 days.	Missing data	MN Risk Adjustors: Need to be determined NQF risk adjustment: Resident-level limited covariate risk adjustment was used for persons with independence or modified independence in daily decision making on prior MDS assessments (Item C1000—made decisions regarding tasks of daily life=0 [independent—decisions consistent/ reasonable] or 1	Outcome	MDS		CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
						[modified independence—some difficulty in new situations only).				
RAND	NH-003-10 Physical therapy or nursing rehabilitation/restorative care for long stay patients with new balance problem	Percentage of nursing home patients 65 years old or older who have a new balance problem who receive physical therapy or nursing rehabilitation/restorative care	Patients in the denominator who received physical therapy or nursing rehabilitation/restorative	Nursing home patients 65 years or older with a new balance problem	Patients are excluded from the denominator if they are short-stay or have advanced dementia or a poor prognosis.	None listed	Process	MDS	0673	RAND
CMS Nursing Home Quality Initiative	Percent of Residents Assessed and Appropriately Given the Seasonal Influenza Vaccine (Long-Stay)	This measure is based on data from the MDS 3.0 assessment of long-stay nursing facility residents and reports the percentage of all long-stay residents who were assessed and appropriately given the seasonal influenza vaccine during the influenza season. The measure reports on the percentage of residents who were assessed and appropriately given the seasonal influenza vaccine (MDS items O0250A and O250C) on the target MDS assessment (which may be an admission, annual, quarterly, significant change or correction assessment). Long-stay residents are those residents who have been in the nursing facility	The numerator is the number of long-stay residents in the facility with an MDS OBRA admission, annual, quarterly, significant change, correction, or discharge assessment who meet any of the any of the following criteria for the most recently completed influenza season: (1) those who received the influenza vaccine during the most recent influenza season, either in the facility or outside the facility, (2) the number who were offered and declined the influenza vaccine, or (3) the number who were ineligible due to contraindication(s) (i.e., anaphylactic hypersensitivity to eggs or other components of the vaccine, history of Guillain-	The denominator consists of all residents in the long-stay sample with a MDS 3.0 assessment (which may be an OBRA admission, annual, quarterly, significant change, significant correction or discharge assessment) during the vaccination reporting period.	Residents are excluded from the denominator if they were not in the facility (item O0250.C =1) during the annual influenza season (as defined by the Centers for Disease Control and Prevention). Facilities with fewer than 20 residents are excluded from public reporting due to small sample size.	None listed	Process	MDS	0681	CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
		<p>at least 100 days. The measure is restricted to the population with long-term care needs and does not include the short-stay population who are discharged within 100 days of admission.</p> <p>This specification of the proposed measure mirrors the harmonized measure endorsed by the National Quality Forum (Measure number 0432: Influenza Vaccination of Nursing Home/Skilled Nursing Facility Residents.) The NQF standard specifications were developed to provide a uniform approach to measurement across settings and populations. The measure harmonizes who is included in the target denominator population, who is excluded, who is included in the numerator population, and time windows for measurement and vaccinations.</p>	<p>Barré Syndrome within 6 weeks after a previous influenza vaccination, or bone marrow transplant within the past 6 months).</p>							

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
CMS Nursing Home Quality Initiative	Percent of Residents Who Were Assessed and Appropriately Given the Pneumococcal Vaccine (Long-Stay)	This measure is based on data from MDS 3.0 assessments of long-stay nursing facility residents. The measure reports the percentage of all long-stay residents who were assessed and appropriately given the Pneumococcal Vaccination (PPV) as reported on the target MDS assessment (which may be an admission, annual, quarterly, significant change or correction assessment) during the 12-month reporting period.	The numerator will be harmonized with NQF-endorsed measures. Residents are counted if they are short-stay residents defined as residents whose length of stay less than or greater 100 days. Residents are counts if they meet any of the following criteria on the most recent MDS 3.0 assessment which may be a (30310A=01), 5-day PPS (30310B = 01, 02, 03, 04, 05, 06, 07) or discharge assessment during (A0310F = 10, 11) during the 12 month reporting period. The following numerator components will be computed and reported separately: 1. Up-to-date vaccine status (O0300.A=1) 2. Ineligible due to medical contraindications (O0300.B=1) 3. Offered and declined vaccine (O0300.B=2)	The denominator consists of all long-stay residents in the pneumococcal vaccination sample with an MDS 3.0 OBRA admission assessment (which may be an annual, quarterly, significant change or discharge assessment during the 12-mo	There are no resident level exclusions. Only facilities with fewer than 30 residents are excluded from public reporting due to small sample size.	None listed	Process	MDS	0683	CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
CMS Nursing Home Quality Initiative	Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (Long-Stay)	This measure reports the percentage of all long-stay residents in a nursing facility whose need for help with late-loss Activities of Daily Living (ADLs), as reported in the target quarterly assessment, increased when compared with a previous assessment. The four late-loss ADLs are: bed mobility, transferring, eating, and toileting. This measure is calculated by comparing the change in each item between the target MDS assessment (which may be an annual, quarterly or significant change or correction assessment) and a previous assessment (which may be an admission, annual, quarterly or significant change or correction assessment).	The numerator is the number of long-stay residents who have an MDS assessment (which may be an annual, quarterly, significant change, or significant correction) reporting a defined amount of decline when compared with a previous assessment (which may be an admission, annual, quarterly, significant change, or significant correction MDS 3.0 assessment). This would indicate an increase, when compared with a previous assessment, in the resident's need for help with a late-loss item as indicated by a higher score (coding convention is such that a higher score indicates the need for more help with a task). The need for increased assistance (suggesting decline in function) is identified if the score for at least one late-loss ADL item increases by two or more points or if the score for two or more of the late-loss ADLs items increase by one point; late-loss ADL items are bed mobility, transferring, eating, and toileting.	The denominator includes all long-stay residents who received an annual, quarterly or significant change or correction MDS 3.0 assessment during the quarter and who did not meet the exclusion criteria.	These are the two types of assessments that might be completed upon admission. OBRA regulations require a full assessment within 14 days of admission. Medicare SNF payments require a Prospective Payment System (PPS) assessment. Newly admitted residents (identified by having either of these two types of admission assessments) are not included in the denominator as this represents their baseline status, not whether they have declined since admission. Denominator exclusion criteria include the following: <ul style="list-style-type: none"> • an OBRA admission assessment is the target assessment, • the resident is totally dependent in all four late-loss ADL items, • the resident is comatose, • the resident is receiving hospice care, or • the resident does not meet the criteria for decline in late-loss ADLs (an increase by two or more points in one late-loss ADL, or increase of one point in two or more late-loss ADLs) based on the ADL data available, AND there is missing data on any of the four late-loss ADL items . 	None listed	Outcome	MDS	0688	CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
					Long-stay facilities are excluded from public reporting if their sample includes fewer than 30 residents.					

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
CMS Nursing Home Quality Initiative	Percent of Residents Who Self-Report Moderate to Severe Pain (Long Stay)	<p>The proposed long-stay pain measure reports the percent of long-stay residents of all ages in a nursing facility 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 5 days prior to the MDS assessment (which may be an annual, quarterly, significant change or significant correction MDS) during the selected quarter.</p> <p>Long-stay residents are those who have had at least 100 days of nursing facility care. This measure is restricted to the long stay population because a separate measure has been submitted for the short-stay residents (those who are discharged within 100 days of admission)."</p>	<p>The numerator is the number of long-stay residents with an MDS assessment (which may be an annual, quarterly, significant change or significant correction assessment) during the selected quarter and who self-report (v200=1) almost constant or frequent pain on a scale of 1 to 4 (J0400 =1 or 2) AND at least one episode of moderate to severe pain (item J0600A = 5, 6, 7, 8, or 9 on a scale of 1–10, with 10 being the worst pain you can imagine, OR item J0600B = 2 or 3 on a scale of 0–4, with 4 being very severe, horrible pain) OR very severe/horrible pain of any frequency (item J0600A = 10 on a scale of 1 to 10 OR item J0600B = 4 on a scale of 0–4) in the 5 days prior to the assessment.</p>	<p>The denominator is the total of all long-stay residents in the nursing facility who have an MDS assessment which may be an annual, quarterly, significant change or significant correction assessment during the selected quarter and who do not meet the exclusion criteria.</p>	<p>A resident is excluded from the denominator if the MDS assessment was conducted within 14 days of admission or if there are missing data in the responses to the relevant questions in the MDS assessment. If the facility sample includes fewer than 30 residents, then the facility is excluded from public reporting because of small sample size.</p>	None listed	Outcome	MDS	0677	CMS
CMS Nursing Home Quality Initiative	Percent of Residents Who Were Physically Restrained (Long Stay)	<p>The measure reports the percentage of all long-stay residents in nursing facilities with an annual, quarterly, significant change, or significant correction MDS 3.0 assessment during the selected quarter (3-month period) who were physically restrained daily during the 7 days prior to the MDS assessment (which may be annual, quarterly, significant change, or</p>	<p>The numerator is the number of long-stay residents (those who have been in the facility for over 100 days) who have been assessed with annual, quarterly, significant change or significant correction MDS 3.0 assessments during the selected time window and who have experienced restraint usage during the 7 days prior to the assessment, as indicated by MDS 3.0, Section P,</p>	<p>The denominator is the total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.</p>	<p>An MDS assessment may, on occasion, have incomplete data due to human error in collecting or recording the data. Those records are excluded from the quality calculation because it is not possible to perform the needed calculations when data are missing. A resident is excluded from the denominator if the selected MDS 3.0 assessment was conducted</p>	None listed	Outcome	MDS	0687	CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
		significant correction MDS 3.0 assessment).	Item 100, sub items b (P0100B – Trunk restraint used in bed), c (P0100C – Limb restraint used in bed), e (P0100E – Trunk restraint used in chair or out of bed), f (P0100F – limb restraints used in chair or out of bed), or g (P0100G – Chair prevents rising).		within 14 days of admission or if there is missing data in the responses to the relevant questions in the MDS. Long-stay facilities are excluded from public reporting if their samples include fewer than 30 residents.					
CMS Nursing Home Quality Initiative	Percent of Residents with a Urinary Tract Infection (Long-Stay)	This measure updates CMS' current QM on Urinary Tract Infections in the nursing facility populations. It is based on MDS 3.0 data and measures the percentage of long-stay residents who have a urinary tract infection on the target MDS assessment (which may be an annual, quarterly, or significant change or correction assessment). In order to address seasonal variation, the proposed measure uses a 6-month average for the facility. Long-stay nursing facility residents are those whose stay in the facility is over 100 days. The measure is limited to the long-stay population because short-stay residents (those who are discharged within 100 days of admission) may have developed their urinary tract infections in the hospital rather than the nursing facility.	The numerator is the number of long-stay nursing facility residents who have an annual, quarterly, or significant change or correction assessment during the selected time window with reported urinary tract infections in the last 30 days (Item I2300 of the MDS 3.0 is checked).	All MDS target assessments (which may be an annual, quarterly, significant change or significant correction assessment) over the last two quarters. The total number of assessments is then divided by two to report an average quarter count.	There is one exclusion for the denominator. A resident is excluded from the denominator if the selected MDS OBRA assessment was conducted within 14 days of admission (an "admission assessment"). An OBRA admission assessment is identified if item A0310A = 01 (admission assessment) is checked. Assessments of residents with only an admission assessment are excluded because these residents may have developed their urinary tract infections in the hospital rather than the nursing home. It would be unfair to hold the nursing facility accountable for care received in the hospital.	None listed	Outcome	MDS	0684	CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
CMS Nursing Home Quality Initiative	Percent of High Risk Residents with Pressure Ulcers (Long Stay)	<p>The measure reports the percentage of all long-stay residents in a nursing facility with an annual, quarterly, significant change or significant correction MDS assessment during the selected quarter (3-month period) who were identified as high risk and who have one or more Stage 2-4 pressure ulcer(s). High risk populations are those who are comatose, or impaired in bed mobility or transfer, or suffering from malnutrition.</p> <p>Long-stay residents are those who have been in nursing facility care for more than 100 days. This measure is restricted to the population that has long-term needs; a separate pressure ulcer measure is being submitted for short-stay populations. These are defined as having a stay that ends with a discharge within the first 100 days. "</p>	The numerator is the number of long-stay residents who have been assessed with annual, quarterly, significant change or significant correction MDS 3.0 assessments during the selected time window and who are defined as high risk with one or more Stage 2-4 pressure ulcer(s). High risk populations are those who are comatose, or impaired in bed mobility or transfer, or suffering from malnutrition.	The denominator includes all long-stay residents who received an annual, quarterly, or significant change or significant correction assessment during the target quarter and who did not meet exclusion criteria.	A long-stay resident is excluded from the denominator if the MDS assessment in the current quarter is an OBRA admission assessment or a 5-day PPS assessment or if there is missing data in the relevant sections of the MDS. The OBRA admission assessment and a 5-day PPS assessment are excluded because pressure ulcers identified on them reflect care received in the previous setting and does not reflect the quality of care provided in the nursing facility. Nursing facilities with fewer than 30 residents in the sample are excluded from public reporting because of small sample size.	None listed	Outcome	MDS	0679	CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
CMS Nursing Home Quality Initiative	Percent of Residents Who Have Depressive Symptoms (Long-Stay)	Either a resident interview measure or a staff assessment measure will be reported. The preferred version is the resident interview measure. The resident interview measure will be used unless either there are three or more missing sub-items needed for calculation or the resident is rarely or never understood, in which cases the staff assessment measure will be calculated and used. These measures use those questions in MDS 3.0 that comprise the Patient Health Questionnaire (PHQ-9) depression instrument. The PHQ-9 is based on the diagnostic criteria for a major depressive disorder in the DSM-IV.	Using the PHQ-9 items in the MDS 3.0, for the Resident Interview Measure (Item D0200), the numerator is based on the total sum severity score (D0300) on the most recent MDS assessment in the selected quarter (which may be an annual, quarterly, significant change, or significant correction assessment). The total severity score reflects resident responses to questions asking about the frequency of nine symptoms over the last 2 weeks, including interest, mood, energy, appetite, self-value, ability to concentrate, change in responsiveness, or patience. The Staff Assessment Measure (Item D0500) is similar, except the judgment is being made by observers rather than the residents themselves. The numerator is calculated by using data from item D0300, the total self-reported depression severity score. While the self-report data are preferred, if data from D0300 are incomplete or unavailable then the numerator will be calculated using data from item D0600.	The denominator is the total number of all long-stay residents in the nursing facility who have received an MDS assessment (which may be an annual, quarterly, significant change or significant correction assessment) during the selected quarter (3-month period).	A long-stay resident is excluded from the denominator if the MDS assessment is an admission assessment (OBRA) or a 5-day PPS scheduled assessment, if the resident is comatose, or if there are too many missing data in the relevant section of the MDS. Facilities are excluded from public reporting if they have fewer than 30 residents.	None listed	Outcome	MDS	0690	CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
CMS Nursing Home Quality Initiative	Percent of Residents Who Have/Had a Catheter Inserted and Left in Their Bladder (Long-Stay)	This measure captures the percentage of long-stay residents who have had an indwelling catheter in the last 7 days noted on the most recent MDS 3.0 assessment, which may be annual, quarterly, significant change or significant correction during the selected quarter (3-month period).	The numerator statement refers to a catheter that was inserted and left in the bladder by the facility during the assessment period. The numerator is the number of long-stay residents who have/had a urinary catheter in the last 7 days (H0100A is checked).	The denominator is the total of all long-stay residents in the nursing home who have been assessed with an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter (3-month period) and who do not meet the exclusion criteria.	A resident is excluded from the denominator if the MDS assessment was conducted within 14 days of admission or if there is missing data in the responses to the relevant questions in the MDS assessment. Other exclusions include residents with neurogenic bladder or obstructive uropathy. Residents with diagnoses of neurogenic bladder (item I1550) or obstructive uropathy (item I1650) are excluded because these are conditions in which the person is unable to empty the bladder voluntarily or effectively, putting the person at risk of complications, such as overflow incontinence, recurrent infection, vesicoureteral reflux, or autonomic dysreflexia. Facilities are excluded from public reporting if they have fewer than 30 residents due to small sample size.	None listed	Outcome	MDS	0686	CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
CMS Nursing Home Quality Initiative	Percent of Low Risk Residents Who Lose Control of Their Bowel or Bladder (Long-Stay)	This measure reports the percent of long-stay residents who are frequently or almost always bladder or bowel incontinent as indicated on the target MDS assessment (which may be an annual, quarterly, significant change or significant correction assessment) during the selected quarter (3-month period).	The numerator is the number of long-stay residents who have been assessed with an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the selected time window and who are frequently or almost always incontinent of bowel or bladder.	The denominator is the total of all long-stay residents in the nursing facility who have been assessed with an annual, quarterly, significant change or significant correction MDS assessment during the quarter and who do not meet the exclusion criteria.	A resident is excluded from the denominator if the selected MDS 3.0 assessment was conducted within 14 days of admission (A0310A = 01) or if there is missing data in the response fields for the relevant questions in the MDS. Other exclusions include residents with severe cognitive impairment, total dependence in mobility, comatose, or with an indwelling catheter	None listed	Outcome	MDS	0685	CMS
CMS Nursing Home Quality Initiative	Percent of Residents Who Lose Too Much Weight (Long-Stay)	This measure captures the percentage of long-stay residents who had 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 noted on an MDS assessment (which may be an annual, quarterly, significant change or significant correction MDS assessment) during the selected quarter (3-month period). In order to address seasonal variation, the proposed measure uses a two-quarter average for the facility. Long-stay residents are those who have been in nursing care at least 100	The numerator is the number of nursing home residents with an MDS assessment (which may be an annual, quarterly, significant change or significant correction MDS assessment) that indicate a weight loss of 5% or more of resident's body weight in the last 30 days or 10% or more in the last 6 months that is not a result of a physician-prescribed weight-loss regimen.	The denominator uses MDS assessments (which may be an annual, quarterly, significant change or significant correction assessments), except for residents with only an admission (OBRA) assessment and residents for whom data on weight loss is missing. Reside	An assessment is excluded from the denominator if the MDS assessment was conducted within 14 days of admission (OBRA) (A0310 = 01) or if there is missing data in the responses to K0300 (weight loss) of the MDS 3.0. Facilities with fewer than 30 residents are excluded from public reporting because of small sample size.	None listed	Outcome	MDS	0689	CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
		days. The measure is restricted to this population, which has long-term care needs, rather than the short-stay population who are discharged within 100 days of admission.								
CMS Nursing Home Quality Initiative	Percent of Nursing Home Residents Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine (Short-Stay)	<p>The measure reports the percent of short-stay nursing facility residents who are assessed and appropriately given the seasonal influenza vaccination during the influenza season as reported on the target MDS assessment (which may be an OBRA admission, 5-day PPS, 14-day PPS, 30-day PPS, 60-day PPS, 90-day PPS or discharge assessment) during the selected quarter.</p> <p>Short-stay residents are those residents who are discharged within the first 100 days of the stay. The measure is restricted to the population that has short-term needs and does not include the population of residents with stays longer than 100 days. A separate quality measure has been</p>	The numerator is the number of residents in the denominator who meet any of the following criteria for the most recently completed influenza season: (1) those who received the influenza vaccine during the most recent influenza season, either in the facility or outside the facility; (2) the number who were offered and declined the influenza vaccine; or (3) the number who were ineligible due to contraindication(s) (i.e., anaphylactic hypersensitivity to eggs or other components of the vaccine, history of Guillain-Barré Syndrome within 6 weeks after a previous influenza vaccination, or bone marrow transplant within the past 6 months).	Residents are counted if they are short-stay residents, defined as residents whose length of stay is less than or equal to 100 days. The short-stay seasonal influenza vaccination sample includes residents meeting any of the following conditions: (1) the r	Residents are excluded from the denominator if they were not in the facility (item O0250.C =1) during the annual influenza season (as defined by the Centers for Disease Control and Prevention). Facilities with fewer than 20 residents are excluded from public reporting due to small sample size.	None listed	Process	MDS	0680	CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
		submitted for the long-stay population. The specifications of the proposed measure mirror those of the harmonized measure endorsed by the National Quality Forum under measure number 0432 Influenza Vaccination of Nursing Home/Skilled Nursing Facility Residents. The NQF standard specifications were developed to achieve a uniform approach to measurement across settings and populations addressing who is included in the target denominator population, who is excluded, who is included in the numerator population, and time windows for measurement and vaccinations.								
CMS Nursing Home Quality Initiative	Percent of Residents Who Were Assessed and Appropriately Given the Pneumococcal Vaccine (Short-Stay)	This measure is based on data from MDS 3.0 assessments of nursing facility residents. The measure reports the percentage of short-stay nursing facility residents who were assessed and appropriately given the Pneumococcal Vaccine (PPV) as reported on the target MDS 3.0 assessment (which may be an OBRA admission, 5-day PPS, 14-day PPS, 30-day PPS, 60-day PPS, 90-day PPS or discharge assessment) during the 12-month	Residents are counted if they are short-stay residents defined as residents whose length of stay less than or equal to 100 days. Residents are counted if they meet any of the following criteria on the most recent MDS 3.0 assessment which may be an OBRA Admission (30310.A=01), 5-day PPS (30310.B = 01, 02, 03, 04, 05, 06, 07) or discharge assessment during (A0310.F = 10, 11) during the 12 month reporting period. The following numerator components will be	The denominator consists of all short-stay residents in the pneumococcal vaccination sample with a MDS 3.0 assessment (which may be an OBRA admission, 5-day PPS, 14-day PPS, 30-day PPS, 60-day PPS, 90-day PPS or discharge assessment) within the 12-month p	There are no resident level exclusions. Only facilities with fewer than 20 residents are excluded from public reporting due to small sample size	None listed	Process	MDS	0682	CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
		reporting period.	computed and reported separately: 1. Up-to-date vaccine status (O0300.A=1) 2. Ineligible due to medical contraindications (O0300.B=1) 3. Offered and declined vaccine (O0300.B=2)							
CMS Nursing Home Quality Initiative	Percent of Residents Who Self-Report Moderate to Severe Pain (Short-Stay)	This measure updates CMS's current QM on pain severity for short-stay residents (people who are discharged within 100 days of admission). This updated measure is based on data from the Minimum Data Set (MDS 3.0) 14-day PPS assessments. This measure reports the percentage of short-stay residents with a 14-day PPS assessment during a selected quarter (3 months) 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 5 days prior to the 14-day PPS assessment.	The numerator is the number of short-stay residents who are able to self-report (item J200=1), who have a 14-day PPS assessment during the preceding 6 months, who report almost constant or frequent pain (item J0400 = 1 or 2) AND at least one episode of moderate to severe pain (item J0600A = 5, 6, 7, 8, or 9 on a scale of 1–10, with 10 being the worst pain you can imagine, OR item J0600B = 2 or 3 on a scale of 0–4, with 4 being very severe, horrible pain) OR very severe/horrible pain of any frequency (item J0600A = 10 on a scale of 1 to 10 OR item J0600B = 4 on a scale of 0 to 4) in the 5 days prior to the 14-day PPS assessment.	The denominator is the total of all short-stay residents in the nursing facility who have received an MDS 3.0 14-day PPS assessment during the preceding 6 months from the selected quarter and who do not meet the exclusion criteria.	A resident is excluded from the denominator if they cannot self-report or there is missing data in the relevant questions in the target MDS assessment. Short-stay facilities with fewer than 20 residents are excluded from public reporting because of small sample size.	None listed	Outcome	MDS	0676	CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
CMS Nursing Home Quality Initiative	Percent of Residents with Pressure Ulcers That Are New or Worsened (Short-Stay)	<p>This measure updates CMS's current QM pressure ulcer measure which currently includes Stage 1 ulcers. The measure is based on data from the MDS 3.0 assessment of short-stay nursing facility residents and reports the percentage of residents who have Stage 2-4 pressure ulcers that are new or have worsened. The measure is calculated by comparing the Stage 2-4 pressure ulcer items on the discharge assessment and the previous MDS assessment (which may be an OBRA admission or 5-day PPS assessment).</p> <p>The quality measure is restricted to the short-stay population defined as those who are discharged within 100 days of admission. The quality measure does not include the long-stay residents who have been in the nursing facility for longer than 100 days. A separate measure has been submitted for them.</p>	The numerator is the number of short-stay residents with a discharge MDS 3.0 assessment during the selected time window who have one or more Stage 2-4 pressure ulcer(s) that are new or that have worsened on the discharge assessment compared to the previous OBRA admission or 5-day PPS assessment.	All short-stay nursing facility residents except those who meet the exclusion criteria.	A short-stay resident is excluded from the denominator if there is no discharge assessment or if missing data precludes calculation of the measure. Short-stay facilities are excluded from public reporting if they have fewer than 20 residents due to small sample size.	None listed	Outcome	MDS	0678	CMS
CMS Nursing Home Quality Initiative	Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay)	This measure is based on data from all non-admission MDS 3.0 assessments of long-stay nursing facility residents which may be annual, quarterly, significant change, significant correction, or discharge assessment. It	The numerator is based on the number of long-stay nursing facility residents who experienced one or more falls that resulted in major injury (J1900c = 1 or 2) on any non-admission MDS assessment in the last 12 months which may be an	The denominator is the total number of long-stay residents in the nursing facility who were assessed during the selected time window and who did not meet the exclusion criteria.	Residents with MDS admission assessments (OBRA or a 5-day PPS assessment) from the current quarter are excluded. Also excluded are residents for whom data from the relevant section of the MDS are missing.	None listed	Outcome	MDS	0674	CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
		reports the percent of residents who experienced one or more falls with major injury (e.g., bone fractures, joint dislocations, closed head injuries with altered consciousness, and subdural hematoma) in the last year (12-month period). The measure is based on MDS 3.0 item J1900C, which indicates whether any falls that occurred were associated with major injury.	annual, quarterly, significant change, significant correction or discharge assessment. In the MDS 3.0, major injury is defined as bone fractures, joint dislocations, closed head injuries with altered consciousness, or subdural hematoma.		Residents must be present for at least 100 days to be included in long-stay measures. Long-stay facilities are excluded from the public reporting if their sample includes fewer than 30 residents.					
CMS Nursing Home Quality Initiative	The Percentage of Residents on a Scheduled Pain Medication Regimen on Admission Who Self-Report a Decrease in Pain Intensity or Frequency (Short-stay)	This measure is based on data from the MDS 3.0 assessment of short-stay nursing facility residents and reports the percentage of those short-stay residents who can self-report and who are on a scheduled pain medication regimen at admission (5-day PPS MDS assessment) and who report lower levels of pain on their discharge MDS 3.0 assessment or their 14-day PPS MDS assessment (whichever comes first) when compared with the 5-day PPS MDS assessment.	The numerator is the number of short-stay residents who have a 14-day PPS assessment or discharge assessment (whichever comes first), who can self-report, (MDS 3.0 item J200=1) and who are on a scheduled pain medication regimen (MDS 3.0 item J0100A = 1), reporting a defined reduction in pain when compared to their earlier assessment (a 5-day PPS assessment). Reduced pain is indicated, when compared to the prior assessment, there is a decrease in pain frequency (MDS 3.0 item J0400) or a decrease in pain intensity (as reported in MDS 3.0 item J0600A = 0–10, with 10 being the worst pain you can imagine, or a decrease in the verbal description of pain (MDS 3.0 item J0600B	The denominator is the total of all short-stay residents in the nursing facility who have a 5-day PPS MDS 3.0 assessment and either a 14-day PPS MDS 3.0 assessment or a discharge MDS 3.0 assessment (whichever comes first); who have been on a scheduled pa	A resident is excluded from the denominator if there are missing data in the relevant MDS questions. If the short-stay facility has fewer than 20 residents in the sample, they are excluded from public reporting because of small sample size.	None listed	Outcome	MDS	0675	CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
			= 1–4, with 4 being very severe, horrible pain).							
Minnesota Quality Indicators	Incidence of Worsening Resident Behavior (long-stay)	None listed	Verbal behavior symptoms directed toward others (E0200B>0) Physical behavioral symptoms directed toward others (E0200A>0) Other behavioral symptoms not directed toward others (E0200C>0)	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	Verbal behavior symptoms directed toward others (E0200B>0) at [t-1] or =missing at [t] or [t-1] Physical behavioral symptoms directed toward others (E0200A>0) at [t-1] or =missing at [t] or [t-1] Other behavioral symptoms not directed toward others (E0200C>0) at [t-1] or =missing at [t] or [t-1] Comatose (B0100=1 or missing) Federal OBRA Reasons for Assess (A0310A=01 in previous 12 months)	BIMs score (C0500) or CPS score ((C0700 +C1000 + B0700 + G0110H1) CVA/TIA/Stroke (I4500) Depression (I5800) Manic depression (I5900) Alzheimer's (I4200) Non-Alzheimer's dementia (I4800) Makes self-understood (B0700) Ability to understand others (B0800) Gender (A0800) Age (A0900)	Outcome	MDS		CMS/UMN

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
						Nursing home LOS (A2300)				
Minnesota Quality Indicators	Percent of Residents Who Have Depressive Symptoms (Long-Stay)	None listed	When the Resident Mood Interview is conducted, the resident must have score of two or greater for either D0200A or D0200B AND a score of two or more for five of the following items D0200A-I. When the Staff Assessment for Resident Mood is necessary, the resident must have score of two or greater for either D0200A or D0200B AND a score of two or more for five of the following items D0200A-I.	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	Comatose (B0100=1 or missing) Federal OBRA Reasons for Assess (A0310A=01 in previous 12 months)	MN Risk Adjustors: BIMs score (C0500) or CPS score ((C0700 +C1000 + B0700 + G0110H1) CVA/TIA/Stroke (I4500) Eating ADL Assistance (G0110H1) Makes self-understood (B0700) Alzheimer's (I4200) Non-Alzheimer's	Outcome	MDS		CMS/UMN

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
						dementia (I4800) Gender (A0800) Age (A0900) Nursing home LOS (A2300)				
Minnesota Quality Indicators	Prevalence of Physical Restraints (long-stay) Long stay=greater than 100 days	None listed	Trunk restraint used in bed (P0100B) =2 Limb restraint used in bed (P0100C) =2 Trunk restraint used in chair or out of bed (P0100E) =2 Limb restraints used in chair or out of bed (P0100F) =2 Chair prevents rising (P0100G)=2	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	A resident is excluded from the denominator if the selected MDS 3.0 assessment was conducted within 14 days of admission or if there is missing data in the responses to the relevant questions in the MDS.	Physical behavioral symptoms directed toward others (E0200A>0) Gender (A0800) Age (A0900) Nursing home LOS (A2300)	Outcome	MDS		CMS/UMN

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
Minnesota Quality Indicators	Incidence of worsening bladder incontinence (long stay)	None listed	Bladder incontinence (H0300 greater than target assessment)	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	H0300= missing or =9 Always incontinent (H0300=3) Comatose (B0100=1 or missing) Prognosis (J1400=1 or missing) Hospice care (O0100K1 or O0100K2) Ostomy (H0100C)	MN Risk Adjustors: BIMs score (C0500) or CPS score ((C0700 +C1000 + B0700 + G0110H1) Bed mobility ADL (G0110A1) Transfer ADL (G0110B1) Locomotion on unit (G0110E1) Gender (A0800) Age (A0900) Nursing home LOS (A2300)	Outcome	MDS		CMS/ Brown University/ Abt Associates
Minnesota Quality Indicators	Incidence of worsening bowel incontinence (long stay)	None listed	Bowel incontinence (H0400 greater than target assessment)	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	H0400= missing or =9 Always incontinent (H0400=3) Comatose (B0100=1 or missing) Prognosis (J1400=1 or missing) Hospice care (O0100K1 or O0100K2) Ostomy (H0100C)	MN Risk Adjustors: BIMs score (C0500) or CPS score ((C0700 +C1000 + B0700 + G0110H1) Bed mobility ADL (G0110A1) Transfer ADL (G0110B1) Locomotion on unit (G0110E1) Gender	Outcome	MDS		CMS/ Brown University/ Abt Associates

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
						(A0800) Age (A0900) Nursing home LOS (A2300)				
Minnesota Quality Indicators	Incidence of improved bladder incontinence (long stay)	None listed	Bladder incontinence (H0300 less than target assessment)	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	H0300= missing or =9 Always incontinent (H0300=3) Comatose (B0100=1 or missing) Prognosis (J1400=1 or missing) Hospice care (O0100K1 or O0100K2) Ostomy (H0100C)	MN Risk Adjustors: BIMs score (C0500) or CPS score ((C0700 +C1000 + B0700 + G0110H1) Bed mobility ADL (G0110A1) Transfer ADL (G0110B1) Locomotion on unit (G0110E1) Gender (A0800) Age (A0900) Nursing home LOS (A2300)	Outcome	MDS		UMN

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
Minnesota Quality Indicators	Incidence of improved bowel incontinence (long stay)	None listed	Bowel incontinence (H0400 less than target assessment)	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	H0400= missing or =9 Always incontinent (H0400=3) Comatose (B0100=1 or missing) Prognosis (J1400=1 or missing) Hospice care (O0100K1 or O0100K2) Ostomy (H0100C)	MN Risk Adjustors: BIMs score (C0500) or CPS score ((C0700 +C1000 + B0700 + G0110H1) Bed mobility ADL (G0110A1) Transfer ADL (G0110B1) Locomotion on unit (G0110E1) Gender (A0800) Age (A0900) Nursing home LOS (A2300)	Outcome	MDS		UMN
Minnesota Quality Indicators	Prevalence of occasional to full bladder incontinence without a toileting plan. (long-stay)	None listed	Current urinary toileting program or trial (H0200A=0 or H0200C=0) Urinary incontinence (H0300=1, 2 or 3)	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	Toilet use (G0110I=0) H0200A or C=1	MN Risk Adjustors: Gender (A0800) Age (A0900) Nursing home LOS (A2300)	Outcome	MDS		UMN

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
Minnesota Quality Indicators	Prevalence of occasional to full Bowel incontinence without a toileting plan. (long stay)	None listed	Current bowel toileting program (H0500C=0) Bowel incontinence (H0400=1, 2 or 3)	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	Toilet use (G0110I=0)	MN Risk Adjustors: Gender (A0800) Age (A0900) Nursing home LOS (A2300)	Outcome	MDS		UMN
Minnesota Quality Indicators	Prevalence of Indwelling catheter (long stay)	None listed	Indwelling bladder catheter (H0100A)	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	Prognosis (J1400=1 or missing) Hospice care (O0100K1 or O0100K2) Neurogenic bladder (I1550) Obstructive uropathy (I1650)	MN Risk Adjustors: CVA/TIA/Stroke (I4500) Paraplegia (I5000) Quadriplegia (I5100) Gender (A0800) Age (A0900) Nursing home LOS (A2300)	Outcome	MDS		CMS/ Brown University/ Abt Associates
Minnesota Quality Indicators	Prevalence of urinary tract infections (long stay)	None listed	UTI (I2300)	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	Prognosis (J1400=1 or missing) Hospice care (O0100K1 or O0100K2)	MN Risk Adjustors: CVA/TIA/Stroke (I4500) Paraplegia (I5000) Quadriplegia (I5100) Locomotion on unit (G0110E1) Gender (A0800) Age (A0900) Nursing home LOS (A2300)	Outcome	MDS		CMS/ Brown University/ Abt Associates

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
Minnesota Quality Indicators	Prevalence of infections (long stay)	None listed	MDRO ((I1700) Pneumonia (I2000) Septicemia (I2100) Viral Hepatitis (I2400) Wound infection other than foot (I2500) UTI last 30 days (I2300)	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	Prognosis (J1400=1 or missing) Hospice care (O0100K1 or O0100K2) Resident is not in numerator and I1700 or I2000 or I2100 or I2400 or I2500 or J!5550A or I2300 is missing)	MN Risk Adjustors: CVA/TIA/Stroke (I4500) Paraplegia (I5000) Quadriplegia (I5100) Locomotion on unit (G0110E1) Gender (A0800) Age (A0900) Nursing home LOS (A2300)	Outcome	MDS		CMS/ Brown University/ Abt Associates
Minnesota Quality Indicators	Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay)	None listed	One or more fall with major injury, or two or more falls with major injury. J1900=1 or 2	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.		MN Risk Adjustors: BIMs score (C0500) or CPS score ((C0700 +C1000 + B0700 + G0110H1) Prior ADL status: 1. Bed mobility assistance (G0110A1) 2. Transfer assistance (G0110B1) 3. Dressing assistance (G0110G1) 4. Eating assistance (G0110H1) 5. Toilet use (G0110I1)	Outcome	MDS		CMS/ Brown University/ Abt Associates

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
						6. Personal hygiene (G0110J1) 7. Bathing (G0120A) 8. Walk in room (G0110C1) 9. Walk in corridor (G0110D1) 10. Locomotion on unit (G0110E1) 11. Locomotion off unit (G0110F1) Orthostatic hypotension (I0800) CVA/TIA/Stroke (I4500) Hemiplegia/hemiparesis (I4900) Paraplegia (I5000) Parkinson's disease (I5300) Seizure disorder or epilepsy (I5400) Cataracts, glaucoma, or macular degeneration (I6500) Comatose (B0100=1)				

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
						Gender (A0800) Age (A0900) Nursing home LOS (A2300)				
Minnesota Quality Indicators	Prevalence of unexplained weight loss (long stay)	None listed	Weight loss (K0300=2)	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	Prognosis (J1400=1 or missing) Hospice care (O0100K1 or O0100K2) Weight loss (K0300=0 or missing) Weight loss planned (K0300=1 or missing)	MN Risk Adjustors: BIMs score (C0500) or CPS score ((C0700 +C1000 + B0700 + G0110H1) Comatose (B0100=1) Cancer (I0100) Gender (A0800) Age (A0900) Nursing home LOS (A2300)	Outcome	MDS		CMS/ Brown University/ Abt Associates

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
Minnesota Quality Indicators	Incidence of healed pressure ulcers (long stay)	None listed	Healed pressure ulcers (M0900A=1 and M0900B and/or M0900C and/or M0900D≥1)	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	Healed pressure ulcers (M0900A= missing)	None listed	Outcome	MDS		UMN
Minnesota Quality Indicators	Prevalence of residents with pressure ulcers that are new or worsened (short stay)	None listed	One or more Stage 2-4 pressure ulcer(s) that are new or have worsened comparing the discharge assessment (A0310.F=10, 11) and the prior OBRA admission (A0310.A=01) or the 5-day PPS assessment (A0310.B=01). On the discharge assessment, item M0800A>0 or M0800B>0 or M0800C>0: M0800=Worsening in Pressure Ulcer Status Since Prior Assessment (Indicate the number of current pressure ulcers that were not present or were are a lesser stage on the prior assessment: A. Stage 2, B. Stage 3, and C. Stage 4) OR The pressure ulcers are new or fail to improve. This is indicated by comparing the discharge assessment with the prior OBRA admission or 5-day PPS assessment on item M0300 (current number of unhealed [non-epithelialized] pressure ulcers at each stage). If M0300 is equivalent or	Number of short-stay residents who have been assessed with MDS 3.0 discharge assessments during the selected time window and whose date of discharge is less than or equal to 100 days since their most recent entry date (A1600) for the OBRA admission or 5-day PPS assessment, except for those meeting the exclusion criteria.	A short-stay resident is excluded from the denominator if there is no discharge assessment or if missing data precludes calculation of the measure.	MN Risk Adjustors: Comatose (B0100=1) Current ADL Status: 1. Bed mobility (G0110A1) 2. Transfer (G0110B1) Malnutrition (I5600) Prognosis (J1400=1 or missing) History of resolved ulcers (M0900=1, M0900B>0 or M0900C>0 or M0900D>0) Gender (A0800) Age (A0900) Nursing home LOS (A2300)	Outcome	MDS		UMN

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
			greater in the discharge assessment than in the OBRA admission or 5-day PPS assessment for each stage of ulcer, including B1 (Stage 2) OR C1 (Stage 3), or D1 (Stage 4) then they are included as having a pressure ulcer that failed to improve or is a new pressure ulcer.							
Minnesota Quality Indicators	Percent of high risk residents with pressure ulcers (long-stay)	None listed	One or more stage 2-4 pressure ulcer(s) M0300 (current number of unhealed [non-epithelialized] pressure ulcers at each stage)	Number of long-stay residents who have been assessed with annual, quarterly, significant change or significant correction MDS 3.0 assessments (A0310.A=02, 03, 04, 05, 06) during the selected time window and who are defined as high risk by meeting one of the following criteria on the assessment: 1. Impaired in bed mobility (G011A.1=3, 4, or 8) or transfer (G0110B.1=3,4, 0r 8) OR 2. Comatose (B0100=1) OR 3. Malnutrition (I5600)	A short-stay resident is excluded from the denominator if there is no discharge assessment or if missing data precludes calculation of the measure.	MN Risk Adjustors: Comatose (B0100=1) Prognosis (J1400=1 or missing) History of resolved ulcers (M0900=1, M0900B>0 or M0900C>0 or M0900D>0) Gender (A0800) Age (A0900) Nursing home LOS (A2300)	Outcome	MDS		UMN

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
Minnesota Quality Indicators	Prevalence of antipsychotics without a dx of psychosis (long stay)	None listed	Antipsychotic medications received in last 7 days (N0400A)	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	Schizophrenic disorder, delusional disorder, or non-organic psychosis (I6000) Schizophrenia (I6000) Tourette's Syndrome (I5350) Huntington's Disease (I5250) Acute manic or mixed bipolar disorder (I5900; and/or I8000A:296.40, 296.41, 296.42, 296.43, 296.44, 296.45, 296.60, 296.61, 296.62, 296.63, 296.64, 296.65) Mood disorder not elsewhere classified (I8000A=293.83) Affective psychosis (I8000A=296.34) Borderline Personality Disorder (I8000A=301.83) Post traumatic stress disorder (I6100) Hallucinations (E0100A) Prognosis (J1400=1 or missing) Hospice care (O0100K1 or O0100K2) Type of Assessment/ Federal OBRA Reasons for Assess (A0310A=01 in previous 12 months)	MN Risk Adjustors: Gender (A0800) Age (A0900) Nursing home LOS (A2300)	Outcome	MDS		UMN

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
Minnesota Quality Indicators	Improved ability to function (long stay)	None listed	More independence in: Bed mobility (G0110A1) Transfer (G0110B1) Locomotion on unit (G0110E1) Dressing (G0110G1) Eating (G0110H1) Toilet use (G0110I1) Personal hygiene (G0110J1) All at target assessment relative to prior assessment	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	ADLLF [t]=missing ADLLF [t-1]=missing and ADLLF [t] <28 ADLLF [t-1]=0 Prognosis (J1400=1 or missing) Hospice care (O0100K1 or O0100K2)	MN Risk Adjustors: BIMs score (C0500) or CPS score ((C0700 +C1000 + B0700 + G0110H1) Alzheimer's (I4200) Comatose (B0100=1 or missing) CVA/TIA/Stroke (I4500) Hemiplegia/hemiparesis (I4900) Paraplegia (I5000) Parkinson's disease (I5300) Gender (A0800) Age (A0900) Nursing home LOS (A2300)	Outcome	MDS		UMN

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
Minnesota Quality Indicators	Incidence of increased need for help with daily activities (long stay)	None listed	One step or greater decline in at least two of the following or a two step or greater decline in at least one of the following at target assessment relative to prior assessment Bed mobility (G0110A1) Transfer (G0110B1) Eating (G0110H1) Toilet use (G0110I1)	Total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	Bed mobility, transfer, toilet use & eating = 4 or 7 or 8 (G0110A1, G0110B1, G0110I1 & G0110H1=4 or 7 or 8) Resident is not in numerator and data are missing for any of the following: Bed mobility, transfer, toilet use & eating (G0110A1, G0110B1, G0110I1 & G0110H1=missing) Comatose (B0100=1 or missing) Prognosis (J1400=1 or missing) Hospice care (O0100K1 or O0100K2)	MN Risk Adjustors: BIMs score (C0500) or CPS score ((C0700 +C1000 + B0700 + G0110H1) CVA/TIA/Stroke (I4500) Hemiplegia/hemiparesis (I4900) Paraplegia (I5000) Parkinson's disease (I5300) Alzheimer's (I4200) Gender (A0800) Age (A0900) Nursing home LOS (A2300)	Outcome	MDS		UMN
Minnesota Quality Indicators	Incidence of walking as well or better than previous assessment. (long stay)	None listed	Same or improved independence in walking in coordinator at target assessment relative to prior assessment: Walk in corridor (G0110D1)	All residents with a valid non-admission target assessment and a valid prior assessment and one of the following: Balance while walking (G0300B=0 or 1) Walk in corridor (G0110D1=0,1,2, or 3)	G0110D1=missing Prognosis (J1400=1 or missing) Hospice care (O0100K1 or O0100K2)	MN Risk Adjustors: Arthritis (I3700) Paraplegia (I5000) Hemiplegia/hemiparesis (I4900) CVA/TIA/Stroke (I4500) Parkinson's disease (I5300) Hip fracture	Outcome	MDS		CMS/ Brown University/ Abt Associates

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
						(I3900) Gender (A0800) Age (A0900) Nursing home LOS (A2300)				
Minnesota Quality Indicators	Incidence of worsening ability to move in and around room. (long stay)	None listed	More dependence in movement on unit at target assessment relative to prior assessment: Locomotion on unit (G0110E)	All residents with a valid non-admission target assessment	Locomotion on unit (G0110E=missing or G0110E[t-1]=4 or 8 OR G0110E[t-1]=missing and G0110EA {t}>0) Comatose (B0100=1 or missing) Prognosis (J1400=1 or missing) Hospice care (O0100K1 or O0100K2)	MN Risk Adjustors: Arthritis (I3700) Paraplegia (I5000) Hemiplegia/hemiparesis (I4900) CVA/TIA/Stroke (I4500) Parkinson's disease (I5300) Hip fracture (I3900) Gender (A0800) Age (A0900) Nursing home LOS (A2300)	Outcome	MDS		CMS/ Brown University/ Abt Associates

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
Minnesota Quality Indicators	Incidence of decline in range of motion. (long stay)	None listed	Functional Limitation in ROM: Upper Extremity (G0400A) Functional Limitation in ROM: Lower Extremity (G0400B) Sum of ROM limitations greater than at target assessment relative to prior assessment. (G0400A +G0400B) (Range is 0-4)	All residents with a valid non-admission target assessment .	G0400A [t-1] +G0400B {t-1}=4	MN Risk Adjustors: BIMs score (C0500) or CPS score ((C0700 +C1000 + B0700 + G0110H1) Arthritis (I3700) Paraplegia (I5000) Quadriplegia (I5100) Hemiplegia/hemiparesis/ (I4900) CVA/TIA/ Stroke (I4500) Parkinson's disease (I5300) MS (I5200) Comatose (B0100=1 Gender (A0800) Age (A0900) Nursing home LOS (A2300)	Outcome	MDS		CMS/ Brown University/ Abt Associates

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
Minnesota Quality Indicators	Percent of residents on a scheduled pain medication regimen on admission who report a decrease in pain intensity or frequency (short stay)	None listed	Resident on a scheduled pain medication regimen (J0100A=1), who self-report a reduction in pain. A reduction in pain is defined as one of the followings: 1) reduced frequency of pain between the two assessments (J0400) or reduced intensity of pain (J0600A) or reduced verbal descriptor of pain (J0600B). Higher scores of these items reflect more frequent or severe pain, and so a reduction in pain is calculated if the score on any of these items is lower compared to the score of the previous assessment	All residents whose length of stay is 100 days or less.	Missing data	MN Risk Adjustors: Need to be determined	Outcome	MDS		CMS
Minnesota Quality Indicators	Percent of residents who self-report moderate to severe pain (short stay)	None listed	Number of short-stay residents able to self-report (item J200=1) and who report almost constant or frequent pain on a scale of 1 to 4. These numeric ratings were defined as the following: 1=the pain is almost constantly (item J0400=1 or 2) AND at least one episode of moderate to severe pain (item J0600A=5, 6, 7, 8, or 9 on a scale of 1-10, with 10 being the worst pain you can imagine OR item J0600B=2 or 3 on a	All residents whose length of stay is 100 days or less.	Missing data	MN Risk Adjustors: Need to be determined	Outcome	MDS		CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
			scale of 0-4, with 4 being very severe, horrible pain) OR very severe/horrible pain of any frequency (item J0600A=10 on a scale of 1 to 10 OR item J0600B=4 on a scale of 0 to 4) in the 5 days prior to the assessment.							
Minnesota Quality Indicators	Percent of residents who self-report moderate to severe pain (long stay)	None listed	Number of long-stay residents able to self-report (item J200=1) and who report almost constant or frequent pain on a scale of 1 to 4. These numeric ratings were defined as the following: 1=the pain is almost constantly (item J0400=1 or 2) AND at least one episode of moderate to severe pain (item J0600A=5, 6, 7, 8, or 9 on a scale of 1-10, with 10 being the worst pain you can imagine OR item J0600B=2 or 3 on a scale of 0-4, with 4 being very severe, horrible pain) OR very severe/horrible pain of any frequency (item J0600A=10 on a scale of 1 to 10 OR item J0600B=4 on a scale of 0 to 4) in the 5 days prior to the assessment.	All residents whose length of stay is more than 100 days.	Missing data	MN Risk Adjustors: Need to be determined NQF risk adjustment: Resident-level limited covariate risk adjustment was used for persons with independence or modified independence in daily decision making on prior MDS assessments (Item C1000—made decisions regarding tasks of daily life=0 [independent—decisions consistent/ reasonable] or 1	Outcome	MDS		CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
						[modified independence—some difficulty in new situations only]).				
RAND	NH-003-10 Physical therapy or nursing rehabilitation/restorative care for long stay patients with new balance problem	Percentage of nursing home patients 65 years old or older who have a new balance problem who receive physical therapy or nursing rehabilitation/restorative care	Patients in the denominator who received physical therapy or nursing rehabilitation/restorative	Nursing home patients 65 years or older with a new balance problem	Patients are excluded from the denominator if they are short-stay or have advanced dementia or a poor prognosis.	None listed	Process	MDS	0673	RAND

APPENDIX B: NON-CANDIDATE MEASURES LIST

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
CMS NH Value-Based Purchasing Demonstration	Rate of potentially avoidable hospitalization per resident day for long-stay residents	None listed	Number of admissions to an acute care or critical access hospital occurring while the individual is a long-term nursing home resident for a condition for which hospitalization is considered potentially avoidable, including heart failure, respiratory infection, electrolyte imbalance, sepsis, urinary tract infection, or anemia. Numerator includes hospitalizations occurring within three days of discharge from the nursing home.	Total number of days (in hundreds) during the demonstration year that residents are in the nursing home facility during long-stay episodes. A long-stay episode is defined as a single stay or sequence of stays during which an individual resides in the nursing home for a total of 90 days or more without a gap of 30 contiguous days living in the community. If a nursing home resident transfers to another nursing home, the episode of care is terminated and a new episode of care in the second home is started. If the episode of care spans either the beginning or end of the reporting period, only the days that are within the reporting period are counted in the denominator.	Episodes of care meeting any of the following criteria are excluded: · Resident was not a Medicare beneficiary for the entire demonstration year Resident was enrolled in Medicare managed care for during any portion of the stay.	The risk models include these covariates: Demographic items, comorbidity index, prior hospitalizations, functional status, other MDS items (Short stay model includes pneumonia, UTI, pressure ulcer, and oral feeding tubes) (Long stay model includes septicemia, parenteral/IV nutrition, indwelling catheter, and antibiotic resistant infection)	Outcome	MDS; Claims		
CMS NH Value-Based Purchasing Demonstration	Rate of potentially avoidable hospitalization per stay for short-stay residents	None listed	Number of short-stay nursing home stays during which resident was admitted to an acute care or critical access hospital for any of five conditions for which hospitalization is	Total number of short-stay nursing home stays occurring within the demonstration year.	Stays meeting any of the following criteria are excluded from the numerator and denominator: · Resident was not a Medicare beneficiary for the entire stay.	The risk models include these covariates: Demographic items, comorbidity index, prior hospitalizations, functional status, other MDS items (Short stay	Outcome	MDS; Claims		

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
			considered potentially avoidable: heart failure, respiratory infection, electrolyte imbalance, sepsis, or urinary tract infection. Numerator includes transfers directly from the nursing home to the hospital and admissions to the hospital within three days after NH discharge.		Resident was enrolled in Medicare managed care during any portion of the stay. Resident died in the nursing home.	model includes pneumonia, UTI, pressure ulcer, and oral feeding tubes) (Long stay model includes septicemia, parenteral/IV nutrition, indwelling catheter, and antibiotic resistant infection)				
Oklahoma Focus on Excellence	Clinical outcomes: Resident without falls	Not publicly available	Not publicly available	Not publicly available	Not publicly available	Not publicly available	Outcome	My InnerView Quality Profile		
Oklahoma Focus on Excellence	Clinical outcomes: Residents without acquired catheters	Not publicly available	Not publicly available	Not publicly available	Not publicly available	Not publicly available	Outcome	My InnerView Quality Profile		
Oklahoma Focus on Excellence	Clinical outcomes: Residents without acquired physical restraints	Not publicly available	Not publicly available	Not publicly available	Not publicly available	Not publicly available	Outcome	My InnerView Quality Profile		
Oklahoma Focus on Excellence	Clinical outcomes: Residents without unplanned weight loss/gain	Not publicly available	Not publicly available	Not publicly available	Not publicly available	Not publicly available	Outcome	My InnerView Quality Profile		
Oklahoma Focus on Excellence	Clinical outcomes: Residents without acquired	Not publicly available	Not publicly available	Not publicly available	Not publicly available	Not publicly available	Outcome	My InnerView Quality Profile		

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
	pressure ulcers									
Iowa Nursing Facility Pay for Performance	Person Directed Care: Enhanced Dining A	Menu options and alternative selections are available for all meals	None listed	None listed	None listed	None listed	Structure	Self-certification form		
Iowa Nursing Facility Pay for Performance	Person Directed Care: Enhanced Dining B	Residents have access to food and beverages 24/7 and staff are empowered to honor resident choices	None listed	None listed	None listed	None listed	Structure	Self-certification form		
Iowa Nursing Facility Pay for Performance	Person Directed Care: Enhanced Dining C	At least one meal per day is offered for an extended period so residents have the choice of what time to eat	None listed	None listed	None listed	None listed	Structure	Self-certification form		
Iowa Nursing Facility Pay for Performance	Person Directed Care: Resident Activities A	Activity program exceeds the 35 minute per day/per resident minimum requirement	None listed	None listed	None listed	None listed	Structure	Self-certification form		
Iowa Nursing Facility Pay for Performance	Person Directed Care: Resident Activities B	Activity staff exceeds the required minimum set by law, OR direct care staff is trained to plan and conduct activities on a daily basis	None listed	None listed	None listed	None listed	Structure	Self-certification form		
Iowa Nursing Facility Pay for Performance	Person Directed Care: Resident Activities C	Residents report that activities meet social, emotional and spiritual needs	None listed	None listed	None listed	None listed	Structure	Self-certification form		
Iowa Nursing Facility Pay for Performance	Person Directed Care: Resident Choice A	Residents are allowed to set their own schedules excluding what time to get up and what time to go to bed	None listed	None listed	None listed	None listed	Structure	Self-certification form		

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
Iowa Nursing Facility Pay for Performance	Person Directed Care: Resident Choice B	Residents have a choice of whether to take a bath or shower, which days this will happen and at what time it will be done	None listed	None listed	None listed	None listed	Structure	Self-certification form		
Ohio Quality Add-on	Percent of Residents Who Self-Report Moderate to Severe Pain (Long Stay)	The proposed long-stay pain measure reports the percent of long-stay residents of all ages in a nursing facility 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 5 days prior to the MDS assessment (which may be an annual, quarterly, significant change or significant correction MDS) during the selected quarter. Long-stay residents are those who have had at least 100 days of nursing facility care. This measure is restricted to the long stay population because a separate measure has been submitted for the short-stay residents (those who are discharged within 100 days of admission)."	The numerator is the number of long-stay residents with an MDS assessment (which may be an annual, quarterly, significant change or significant correction assessment) during the selected quarter and who self-report (v200=1) almost constant or frequent pain on a scale of 1 to 4 (J0400 =1 or 2) AND at least one episode of moderate to severe pain (item J0600A = 5, 6, 7, 8, or 9 on a scale of 1–10, with 10 being the worst pain you can imagine, OR item J0600B = 2 or 3 on a scale of 0–4, with 4 being very severe, horrible pain) OR very severe/horrible pain of any frequency (item J0600A = 10 on a scale of 1 to 10 OR item J0600B = 4 on a scale of 0–4) in the 5 days prior to the assessment.	The denominator is the total of all long-stay residents in the nursing facility who have an MDS assessment which may be an annual, quarterly, significant change or significant correction assessment during the selected quarter and who do not meet the exclusion criteria.	A resident is excluded from the denominator if the MDS assessment was conducted within 14 days of admission or if there are missing data in the responses to the relevant questions in the MDS assessment. If the facility sample includes fewer than 30 residents, then the facility is excluded from public reporting because of small sample size.	None listed	Outcome	MDS	0677	CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
Ohio Quality Add-on	Percent of Residents Who Were Physically Restrained (Long Stay)	The measure reports the percentage of all long-stay residents in nursing facilities with an annual, quarterly, significant change, or significant correction MDS 3.0 assessment during the selected quarter (3-month period) who were physically restrained daily during the 7 days prior to the MDS assessment (which may be annual, quarterly, significant change, or significant correction MDS 3.0 assessment).	The numerator is the number of long-stay residents (those who have been in the facility for over 100 days) who have been assessed with annual, quarterly, significant change or significant correction MDS 3.0 assessments during the selected time window and who have experienced restraint usage during the 7 days prior to the assessment, as indicated by MDS 3.0, Section P, Item 100, sub items b (P0100B – Trunk restraint used in bed), c (P0100C – Limb restraint used in bed), e (P0100E – Trunk restraint used in chair or out of bed), f (P0100F – limb restraints used in chair or out of bed), or g (P0100G – Chair prevents rising).	The denominator is the total of all long-stay residents in the nursing facility who have received an annual, quarterly, significant change or significant correction MDS 3.0 assessment during the quarter and who do not meet the exclusion criteria.	An MDS assessment may, on occasion, have incomplete data due to human error in collecting or recording the data. Those records are excluded from the quality calculation because it is not possible to perform the needed calculations when data are missing. A resident is excluded from the denominator if the selected MDS 3.0 assessment was conducted within 14 days of admission or if there is missing data in the responses to the relevant questions in the MDS. Long-stay facilities are excluded from public reporting if their samples include fewer than 30 residents.	None listed	Outcome	MDS	0687	CMS
Ohio Quality Add-on	Percent of Residents with a Urinary Tract Infection (Long-Stay)	This measure updates CMS' current QM on Urinary Tract Infections in the nursing facility populations. It is based on MDS 3.0 data and measures the percentage of long-stay residents who have a urinary tract infection on the target MDS assessment (which may be an annual, quarterly, or significant change or	The numerator is the number of long-stay nursing facility residents who have an annual, quarterly, or significant change or correction assessment during the selected time window with reported urinary tract infections in the last 30 days (Item I2300 of the MDS 3.0 is checked).	All MDS target assessments (which may be an annual, quarterly, significant change or significant correction assessment) over the last two quarters. The total number of assessments is then divided by two to report an average quarter count.	There is one exclusion for the denominator. A resident is excluded from the denominator if the selected MDS OBRA assessment was conducted within 14 days of admission (an "admission assessment"). An OBRA admission assessment is identified if item A0310A = 01 (admission assessment)	None listed	Outcome	MDS	0684	CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
		correction assessment). In order to address seasonal variation, the proposed measure uses a 6-month average for the facility. Long-stay nursing facility residents are those whose stay in the facility is over 100 days. The measure is limited to the long-stay population because short-stay residents (those who are discharged within 100 days of admission) may have developed their urinary tract infections in the hospital rather than the nursing facility.			is checked. Assessments of residents with only an admission assessment are excluded because these residents may have developed their urinary tract infections in the hospital rather than the nursing home. It would be unfair to hold the nursing facility accountable for care received in the hospital.					

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
Ohio Quality Add-on	Percent of High Risk Residents with Pressure Ulcers (Long Stay)	<p>The measure reports the percentage of all long-stay residents in a nursing facility with an annual, quarterly, significant change or significant correction MDS assessment during the selected quarter (3-month period) who were identified as high risk and who have one or more Stage 2-4 pressure ulcer(s). High risk populations are those who are comatose, or impaired in bed mobility or transfer, or suffering from malnutrition.</p> <p>Long-stay residents are those who have been in nursing facility care for more than 100 days. This measure is restricted to the population that has long-term needs; a separate pressure ulcer measure is being submitted for short-stay populations. These are defined as having a stay that ends with a discharge within the first 100 days. "</p>	The numerator is the number of long-stay residents who have been assessed with annual, quarterly, significant change or significant correction MDS 3.0 assessments during the selected time window and who are defined as high risk with one or more Stage 2-4 pressure ulcer(s). High risk populations are those who are comatose, or impaired in bed mobility or transfer, or suffering from malnutrition.	The denominator includes all long-stay residents who received an annual, quarterly, or significant change or significant correction assessment during the target quarter and who did not meet exclusion criteria.	A long-stay resident is excluded from the denominator if the MDS assessment in the current quarter is an OBRA admission assessment or a 5-day PPS assessment or if there is missing data in the relevant sections of the MDS. The OBRA admission assessment and a 5-day PPS assessment are excluded because pressure ulcers identified on them reflect care received in the previous setting and does not reflect the quality of care provided in the nursing facility. Nursing facilities with fewer than 30 residents in the sample are excluded from public reporting because of small sample size.		Outcome	MDS	0679	CMS

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
Ohio Quality Add-on	Choice: Residents must be offered at least one of the following dining choices for at least one meal each day: a) Restaurant style where staff takes resident orders, b) buffet style where residents help themselves or tell staff what they want, c) family style where food is served in bowls on dining tables or staff assist them, d) open dining where meal is available for at least a 2 hour period where residents can come when they choose, or e) 24 hour dining where residents can order meals from the facility 24 hours a day	Artifacts of Culture Change tool (Artifacts #1)	None listed	None listed	None listed	None listed	Structure	Web-based data collection tool		

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
Ohio Quality Add-on	Choice: Residents in the facility must be able to get a bath/shower as often as they would like.	Artifacts of Culture Change tool (Artifacts #11)	None listed	None listed	None listed	None listed	Structure	Web-based data collection tool		
Ohio Quality Add-on	Hospital admission	Implementation of a policy to reduce hospital admissions for residents. Policy must identify the tools the facility uses to track hospital admissions. Policy must	None listed	None listed	None listed	None listed	Outcome	Web-based data collection tool		
Ohio Quality Add-on	Accessible resident bathrooms as indicated by an average score of 4 on the following 3 questions: a) Resident room mirrors are wheelchair accessible and/or adjustable in order to be visible to a seated or standing resident b) Sinks in resident rooms are wheelchair accessible with clearance below sink for wheelchair c) Sinks used	Artifacts of Culture Change tool	None listed	None listed	None listed	None listed	Structure	Web-based data collection tool		

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
	by residents have adaptive/easy to use level or paddle handles									
VA	Percent time in therapeutic INR range (TTR): mean TTR achieved among patients who received prescriptions for warfarin and had sufficient INR values to calculate TTR.	This measure is used to assess the mean therapeutic international normalized ratio (INR) range (TTR) achieved among patients who received prescriptions for warfarin and had sufficient INR values to calculate TTR.	Mean therapeutic international normalized ratio (INR) range (TTR) achieved among patients who received prescriptions for warfarin and had sufficient INR values to calculate TTR	All patients, 18 years and older, who received prescriptions for warfarin and had sufficient international normalized ratio (INR) values to calculate therapeutic INR range (TTR) (see the related "Denominator Inclusions/Exclusions" field)	None	None listed	Process	Medical Record		VA
Australian Council on Healthcare Standards	Aged care: percentage of patients admitted to geriatric medicine or geriatric rehabilitation unit for whom there is documented objective assessment of physical function on	This measure is used to assess the percentage of patients admitted to a geriatric medicine or geriatric rehabilitation unit for whom there is documented objective assessment of physical function on admission and at least once more during the inpatient stay, during the 6 month time period.	Total number of patients admitted to a geriatric medicine or geriatric rehabilitation unit for whom there is documented objective assessment of physical function* on admission and at least once more during the inpatient stay, during the 6 month time period*Documented assessment of physical function refers to an	Total number of patients admitted to a geriatric medicine or geriatric rehabilitation unit, during the 6 month time period	None	None listed	Process	Medical Record		Australian Council on Healthcare Standards

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
	admission and at least once more during the inpatient stay, during the 6 month time period.		objectively written assessment of physical function in the patient record, the minimum requirement being assessment of mobility, gait and continence. Assessments (and reassessments) of physical function should continue to be performed during the inpatient stay using a standardized assessment instrument e.g., functional independence measure (FIM), Barthels Index.							
Institute for Clinical Systems Improvement	Palliative care: percentage of adult patients with a progressive, debilitating disease who have a palliative care plan documented in the medical record.	This measure is used to assess the percentage of adult patients with a progressive, debilitating disease who have a palliative care plan documented in the medical record.	Number of adult patients with the specified progressive, debilitating disease who have a palliative care plan in chart *A completed palliative care plan addresses all seven domains of care: physical aspects, cultural aspects, psychological aspects, social aspects, spiritual/religious/existential aspects, ethical/legal aspects, and care of the imminently dying patient.	Total number of adult patients with the specified progressive, debilitating disease Note: "Specified progressive, debilitating disease" needs to be predetermined by the medical group prior to data collection. This measure is applicable to any and all progressive, debilitating disease. These include, but are not limited to: • Pulmonary disease • Cancer/neoplasm • Liver disease • Renal disease • Neurological disorders: • Stroke • Parkinson's • Amyotrophic lateral sclerosis	None	None listed	Process	Medical Record		Institute for Clinical Systems Improvement

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
				<ul style="list-style-type: none"> Multiple sclerosis A random sampling of at least 10 adult patients with a specified progressive, debilitating disease seen each month. Medical records are reviewed to determine whether there is any evidence of a palliative care plan in place.						
American Geriatrics Society, Physician Consortium for Performance Improvement®, National Committee for Quality Assurance	Geriatrics: percentage of patients aged 65 years and older who have an advance care plan or surrogate decision maker documented in the medical record or documentation in the medical record that an advance care plan was discussed but the patient did not wish or was not able to name a surrogate decision maker	This measure is used to assess the percentage of patients aged 65 years and older with documentation of an advance care plan or surrogate decision maker documented in the medical record or documentation in the medical record that an advance care plan was discussed but the patient did not wish or was not able to name a surrogate decision maker or provide an advance care plan.	Patients who have an advance care plan or surrogate decision maker documented in the medical record or documentation in the medical record that an advance care plan was discussed but the patient did not wish or was not able to name a surrogate decision maker or provide an advance care plan. This	All patients aged 65 years and older	None	None listed	Process	Medical Record		American Geriatrics Society, Physician Consortium for Performance Improvement®, National Committee for Quality Assurance

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
	or provide an advance care plan.		documentation in the medical record could also include as appropriate that the patient's cultural and/or spiritual beliefs preclude a discussion of advance care planning as it would be viewed as harmful to the patient's beliefs and thus harmful to the physician-patient relationship.							
American Geriatrics Society, Physician Consortium for Performance Improvement®, National Committee for Quality Assurance	Geriatrics: percentage of patients aged 65 years and older who were screened for future fall risk at least once within 12 months.	This measure is used to assess the percentage of patients aged 65 years and older who were screened for future fall risk at least once within 12 months.	Patients who were screened for future fall risk at least once within 12 months *A fall is defined as a sudden, unintentional change in position causing an individual to land at a lower level, on an object, the floor, or the ground, other than as a consequence of a sudden onset of paralysis, epileptic seizure, or overwhelming external force. **Patients are considered at risk for future falls if they have had 2 or more falls in the past year or any fall with injury in the past year.	All patients aged 65 years and older	Documentation of medical reason(s) for not screening for fall risk (e.g., patient is not ambulatory)	None listed	Process	Medical Record		American Geriatrics Society, Physician Consortium for Performance Improvement®, National Committee for Quality Assurance

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
American Geriatrics Society, Physician Consortium for Performance Improvement®, National Committee for Quality Assurance	Geriatrics: percentage of patients aged 65 years and older with a history of falls who had a plan of care for falls documented within 12 months.	This measure is used to assess the percentage of patients aged 65 years and older with a history of falls who had a plan of care for falls documented within 12 months.	<p>Patients with a plan of care for falls documented within 12 months</p> <p>*Plan of care must include:</p> <ul style="list-style-type: none"> • Consideration of appropriate assistance device - medical record must include: documentation that an assistive device was provided or considered OR referral for evaluation for an appropriate assistance device <p>AND</p> <ul style="list-style-type: none"> • Balance, strength, and gait training - medical record must include: documentation that balance, strength, and gait training/instructions were provided OR referral to an exercise program, which includes at least one of the three components: balance, strength, or gait 	All patients aged 65 years and older with a history of falls (history of falls is defined as 2 or more falls in the past year or any fall with injury in the past year)	Documentation of medical reason(s) why a plan of care is not documented	None listed	Process	Medical Record		American Geriatrics Society, Physician Consortium for Performance Improvement®, National Committee for Quality Assurance

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
American Geriatrics Society, Physician Consortium for Performance Improvement®, National Committee for Quality Assurance	Geriatrics: percentage of patients aged 65 years and older with a history of falls who had a risk assessment for falls completed within 12 months.	This measure is used to assess the percentage of patients aged 65 years and older with a history of falls who had a risk assessment for falls completed within 12 months.	Patients who had a risk assessment for falls completed within 12 monthsRisk assessment is comprised of:Balance/gait - medical record must include: documentation of observed transfer and walking OR use of a standardized scale (e.g., Get Up & Go, Berg, Tinetti OR documentation of referral for assessment of balance/gait) AND one or more of the following:Postural blood pressure - documentation of blood pressure values in standing and supine positions Vision - medical record must include: documentation that the patient is functioning well with vision or not functioning well with vision based on discussion with the patient OR use of a standardized scale or assessment tool (e.g., Snellen) OR documentation of referral for assessment of vision Home fall hazards - medical record must include: documentation of counseling on home falls hazards OR	All patients aged 65 years and older with a history of falls (history of falls is defined as 2 or more falls in the past year or any fall with an injury in the past year)	Documentation of medical reason(s) for not completing a risk assessment for falls	None listed	Process	Medical Record		American Geriatrics Society, Physician Consortium for Performance Improvement®, National Committee for Quality Assurance

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
			documentation of inquiry of home falls hazards OR referral for evaluation of home falls hazards Medications - medical record must include documentation of whether the patient's current medications may or may not contribute to falls							

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
Physician Consortium for Performance Improvement	Preventive care and screening: percentage of patients aged 65 years and older who have documentation of receiving pneumococcal immunization during the two-year measurement period.	This measure is used to assess the percentage of patients aged 65 years and older who have documentation of receiving pneumococcal immunization during the two-year measurement period.	Patients who have documentation of receiving pneumococcal immunization *Documentation may include that the patient received the immunization during that visit OR that the patient reports having previously received the immunization since age 65.	All patients aged 65 years and older who were seen at least twice for any visit or who had at least one preventive care visit during the two year measurement period	Documentation of medical reason(s) for not administering pneumococcal immunization (e.g., patient allergy, other contraindication) Documentation of patient reason(s) for not having received pneumococcal immunization (e.g., patient declined)	None listed	Process	Medical Record		Physician Consortium for Performance Improvement
CREcare	Post-acute care functional status: mean change score in applied cognitive function of patients in a post-acute care setting as assessed using the "Applied Cognition" domain of the Boston University Activity Measure for Post-acute Care (AM-PAC).	This measure is used to assess the mean change score in applied cognitive function of patients in a post-acute care setting as assessed using the "Applied Cognition" domain of the Boston University Activity Measure for Post-acute Care (AM-PAC).	Mean change score in applied cognition of patients in a post-acute care setting as assessed using the "Applied Cognition" domain of the Boston University Activity Measure for Post-acute Care (AM-PAC)	Patients in the post-acute care setting who were assessed at baseline and at some follow-up point in time using the "Applied Cognition" domain of the Boston University Activity Measure for Post-acute Care (AM-PAC)	None	Risk adjustment procedures are provided for the following variables: diagnosis, age, gender, surgery, admission basic mobility score, admission daily activity score, payment sources, number of days between accident date and admission date, severity	Outcome	Boston University Activity Measure for Post Acute Care (AM-PAC) TM Tool		CREcare

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
CREcare	Post-acute care functional status: mean change score in basic mobility of patients in a post-acute care setting as assessed using the "Basic Mobility" domain of the Activity Measure for Post-acute Care (AM-PAC).	This measure is used to assess the mean change score in basic mobility of patients in a post-acute care setting as assessed using the "Basic Mobility" domain of the Activity Measure for Post-acute Care (AM-PAC).	Mean change score in basic mobility of patients in a post-acute care setting as assessed using the "Basic Mobility" domain of the Boston University Activity Measure for Post-acute Care (AM-PAC)	Patients in the post-acute care setting who were assessed at baseline and at some follow-up point in time using the "Basic Mobility" domain of the Boston University Activity Measure for Post-acute Care (AM-PAC)	None	Risk adjustment procedures are provided for the following variables: diagnosis, age, gender, surgery, admission basic mobility score, admission daily activity score, payment sources, number of days between accident date and admission date, severity	Outcome	Boston University Activity Measure for Post Acute Care (AM-PAC) TM Tool	0429	CREcare
CREcare	Post-acute care functional status: mean change score in daily activity of patients in a post-acute care setting as assessed using the "Daily Activities" domain of the Activity Measure for Post-acute Care (AM-PAC).	This measure is used to assess the mean change score in daily activity of patients in a post-acute care setting as assessed using the "Daily Activities" domain of the Activity Measure for Post-acute Care (AM-PAC).	Mean change score in daily activity of patients in a post-acute care setting as assessed using the "Daily Activities" domain of the Boston University Activity Measure for Post-acute Care (AM-PAC)	Patients in the post-acute care setting who were assessed at baseline and at some follow-up point in time using the "Daily Activities" domain of the Boston University Activity Measure for Post-acute Care (AM-PAC)	None	Risk adjustment procedures are provided for the following variables: diagnosis, age, gender, surgery, admission basic mobility score, admission daily activity score, payment sources, number of days between accident date and admission date, severity	Outcome	Boston University Activity Measure for Post Acute Care (AM-PAC) TM Tool	0430	CREcare

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
Arthritis Foundation	Rheumatoid arthritis: percentage of patients with a diagnosis of rheumatoid arthritis reporting having difficulties performing tasks involving use of their hands and wrists either because of stiffness or pain for whom functional ability with their hands and wrists is assessed for need of hand or wrist splints (orthoses).	This measure is used to assess the percentage of patients with a diagnosis of rheumatoid arthritis reporting having difficulties performing tasks involving use of their hands and wrists either because of stiffness or pain for whom functional ability with their hands and wrists is assessed for need of hand or wrist splints (orthoses).	Patients for whom functional ability with their hands and wrists is assessed for need of hand or wrist splints (orthoses)	Patients with a diagnosis of rheumatoid arthritis reporting having difficulties performing tasks involving use of their hands and wrists either because of stiffness or pain	None	None listed	Process	Medical Record		Arthritis Foundation
Arthritis Foundation	Rheumatoid arthritis: percentage of patients with a diagnosis of rheumatoid arthritis reporting having difficulties with activities of daily living either because of stiffness or pain for whom functional ability with the	This measure is used to assess the percentage of patients with a diagnosis of rheumatoid arthritis reporting having difficulties with activities of daily living either because of stiffness or pain for whom functional ability with activities of daily living is assessed for need of assistive devices to aid with compliant tasks.	Patients for whom functional ability with the compliant tasks is assessed for need of assistive devices to aid with compliant tasks	Patients with a diagnosis of rheumatoid arthritis reporting having difficulties with activities of daily living either because of stiffness or pain	None	None listed	Process	Medical Record		Arthritis Foundation

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
	compliant tasks is assessed for need of assistive devices to aid with compliant tasks.									
Arthritis Foundation	Rheumatoid arthritis: percentage of patients with a diagnosis of rheumatoid arthritis reporting having difficulty with walking either because of stiffness, pain or instability for whom walking ability is assessed for need for ambulatory assistive devices including a cane, insoles, and orthotics.	This measure is used to assess the percentage of patients with a diagnosis of rheumatoid arthritis reporting having difficulty with walking either because of stiffness, pain or instability for whom walking ability is assessed for need for ambulatory assistive devices including a cane, insoles, and orthotics.	Patients for whom walking ability is assessed for need for ambulatory assistive devices including a cane, insoles, and orthotics	Patients with a diagnosis of rheumatoid arthritis reporting having difficulty with walking either because of stiffness, pain or instability	None	None listed	Process	Medical Record		Arthritis Foundation
American Medical Directors Association	Pressure ulcers: percentage of patients in facility admitted with	This measure assesses the percentage of patients in facility admitted with a pressure ulcer.	Number of patients from the denominator admitted with a pressure ulcer	All patients admitted to facility	None	None listed	Outcome	Medical Record		American Medical Directors Association

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
	a pressure ulcer.									
American Medical Directors Association	Pressure ulcers: percentage of patients in facility who develop pressure ulcers while in the facility	This measure is used to assess the percentage of patients in facility who develop pressure ulcers while in the facility	Number developing pressure ulcers	All patients	None	None listed	Outcome	Medical Record		American Medical Directors Association
American Medical Directors Association	Pressure ulcers: percentage of patients with a pressure ulcer or pressure ulcer risk with documented periodic assessment for specific risk factors	This measure is used to assess the percentage of patients with pressure ulcer or pressure ulcer risk factors with documented periodic assessment for specific risk factors	Number who have pressure ulcer or pressure ulcer risk with documented* periodic assessment for specific risk factors *Note: "Documentation" refers to whether a procedure/discussion was indicated/done or not indicated/not done.	All patients who have a pressure ulcer or pressure ulcer risk	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Pressure ulcers: percentage of patients with clinically significant complications.	This measure is used to assess the percentage of patients with pressure ulcers with clinically significant complications.	Number with pressure ulcers with clinically significant complications	Number of individuals with pressure ulcers	None	None listed	Outcome	Medical Record		American Medical Directors Association
American Medical Directors Association	Pressure ulcers: percentage of patients with documented assessment of pressure ulcer	This measure is used to assess the percentage of patients with documented assessment of pressure ulcer using a formal wound staging classification.	Number with documented* assessment of pressure ulcer using a formal wound staging classification	All patients with pressure ulcers	None	None listed	Process	Medical Record		American Medical Directors Association

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
	using a formal wound staging classification.		*Note: “Documentation” refers to whether a procedure/discussion was indicated/done or not indicated/not done.							
American Medical Directors Association	Pressure ulcers: percentage of patients with documented assessment of risks for possible pressure ulcer development.	This measure is used to assess the percentage of patients with documented assessment of risks for possible pressure ulcer development.	Number with documented* assessment of risks for possible pressure ulcer development *Note: “Documentation” refers to whether a procedure/discussion was indicated/done or not indicated/not done.	All patients	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Pressure ulcers: percentage of patients with documented assessment of skin for breakdown	This measure is used to assess the percentage of patients with documented assessment of skin for breakdown.	Number with documented* assessment of skin for breakdown *Note: “Documentation” refers to whether a procedure/discussion was indicated/done or not indicated/not done.	All patients	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Pressure ulcers: percentage of patients with pressure ulcers that heal.	This measure is used to assess the percentage of patients with pressure ulcers that heal.	Number of individuals with pressure ulcers that heal	Number of individuals with pressure ulcers	None	None listed	Outcome	Medical Record		American Medical Directors Association

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
American Medical Directors Association	Pressure ulcers: percentage of patients with pressure ulcers with documented treatment plan for pressure reduction approaches.	This measure is used to assess the percentage of patients with pressure ulcers with documented treatment plan for pressure reduction approaches.	Number with pressure ulcers who have documented* treatment plan for pressure reduction approaches *Note: "Documentation" refers to whether a procedure/discussion was indicated/done or not indicated/not done.	Number of individuals with pressure ulcers	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Pressure ulcers: percentage of patients with pressure ulcers with documented treatment plans citing identified risk factors and co-morbid conditions	This measure is used to assess the percentage of patients with pressure ulcers with documented treatment plans citing identified risk factors and co-morbid conditions.	Number with pressure ulcers and documented* treatment plans citing identified risk factors and co-morbid conditions *Note: "Documentation" refers to whether a procedure/discussion was indicated/done or not indicated/not done.	Number of individuals with pressure ulcers who have identified risk factors or co-morbid conditions	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Pressure ulcers: percentage of patients with pressure ulcers with necrotic tissue or slough with documented treatment plan for wound debridement	This measure is used to assess the percentage of patients with pressure ulcers with necrotic tissue or slough with documented treatment plan for wound debridement	Number with pressure ulcers with necrotic tissue or slough with documented* treatment plan for wound debridement	Number diagnosed with pressure ulcers with necrotic tissue or slough	None	None listed	Process	Medical Record		American Medical Directors Association

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
American Medical Directors Association	Pressure ulcers: percentage of patients with pressure ulcers with periodic documentation on status of the characteristics of wound (e.g., size, depth, color, induration, odor, discharge).	This measure is used to assess the percentage of patients with pressure ulcers with periodic documentation on status of the characteristics of wound (e.g., size, depth, color, induration, odor, discharge).	Number with pressure ulcers and with periodic documentation* on status of the characteristics of the wound (e.g., size, depth, color, induration, odor, discharge) *Note: "Documentation" refers to whether a procedure/discussion was indicated/done or not indicated/not done.	Number of individuals with pressure ulcers	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Pain management in the long-term care setting: percentage of patients prescribed narcotics for pain with appropriate bowel management program in place.	This measure is used to assess the percentage of patients who were prescribed narcotics for pain and had appropriate bowel management program in place.	Number with prescribed narcotics for pain with appropriate bowel management program in place	Patients with prescribed narcotics to treat pain	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Pain management in the long-term care setting: percentage of patients receiving physical complementary treatments.	This measure is used to assess the percentage of patients who received physical complementary treatments.	Number receiving physical complementary treatments	All patients receiving any treatment for pain	None	None listed	Process	Medical Record		American Medical Directors Association

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
American Medical Directors Association	Pain management in the long-term care setting: percentage of patients receiving physical exam to assess for causes of pain	This measure is used to assess the percentage of patients who receive physical examination to assess for causes of pain.	Number receiving physical exam to assess for causes of pain	All patients with reported pain	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Pain management in the long-term care setting: percentage of patients with adverse drug reactions (ADRs) to pain medications.	This measure is used to assess the percentage of patients who had adverse drug reactions (ADRs) to pain medications.	Number of patients with adverse drug reactions (ADRs) related to pain medications	All patients receiving pain medication	None	None listed	Outcome	Medical Record		American Medical Directors Association
American Medical Directors Association	Pain management in the long-term care setting: percentage of patients with appropriate treatment for pain.	This measure is used to assess the percentage of patients with appropriate treatment for pain.	Number of patients with appropriate treatment for pain	All patients with reported pain	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Pain management in the long-term care setting: percentage of patients with cognitive and language problems receiving targeted pain assessment.	This measure is used to assess the percentage of patients with diagnosed cognitive and/or language problems receiving targeted pain assessment.	Number with cognitive and language problems receiving targeted pain assessment	Patients with diagnosed cognitive and/or language deficit	None	None listed	Process	Medical Record		American Medical Directors Association

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
American Medical Directors Association	Pain management in the long-term care setting: percentage of patients with controlled adverse drug reactions (ADRs) to pain medications.	This measure is used to assess the percentage of patients whose adverse drug reactions (ADRs) to pain medications were controlled.	Number with controlled adverse drug reactions (ADRs) to pain medications	patients with reported pain receiving pain medication who had an adverse drug reaction (ADR)	None	None listed	Outcome	Medical Record		American Medical Directors Association
American Medical Directors Association	Pain management in the long-term care setting: percentage of patients with documented absence of pain symptoms after treatment.	This measure is used to assess the percentage of patients with documented absence of pain symptoms after treatment.	Number with documented* absence of pain symptoms after treatment*Note: "Documentation" refers to written evidence as to whether a procedure/discussion was indicated/done or not indicated/not done.	All patients with reported pain who received treatment	None	None listed	Outcome	Medical Record		American Medical Directors Association
American Medical Directors Association	Pain management in the long-term care setting: percentage of patients with documented assessment for pain using standardized tool at each quarterly review.	This measure is used to assess the percentage of patients with documented assessment for pain using standardized tool at each quarterly review.	Number with documented* assessment for pain using standardized tool at each quarterly review Note: "Documentation" refers to written evidence as to whether a procedure/discussion was indicated/done or not indicated/not done.	All patients	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors	Pain management in the long-term	This measure is used to assess the percentage of patients with	Number with documented* assessment for pain	All patients	None	None listed	Process	Medical Record		American Medical Directors

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
Association	care setting: percentage of patients with documented assessment for pain using standardized tool at each reported change of condition requiring minimum data set (MDS) notation.	documented assessment for pain using standardized tool at each reported change of condition requiring minimum data set (MDS) notation.	using standardized tool at each reported change of condition requiring minimum data set (MDS) notation *Note: “Documentation” refers to written evidence as to whether a procedure/discussion was indicated/done or not indicated/not done.							Association
American Medical Directors Association	Pain management in the long-term care setting: percentage of patients with documented assessment for pain using standardized tool on admission.	This measure is used to assess the percentage of patients with documented assessment for pain using standardized tool on admission.	Number with documented* admission assessment for pain using standardized tool *Note: “Documentation” refers to written evidence as to whether a procedure/discussion was indicated/done or not indicated/not done.	All patients	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Pain management in the long-term care setting: percentage of patients with documented care plan for acute or chronic pain.	This measure is used to assess the percentage of patients with documented care plan for acute or chronic pain.	Number with documented* care plan for acute or chronic pain *Note: “Documentation” refers to written evidence as to whether a procedure/discussion was indicated/done or not indicated/not done.	All patients with reported pain	None	None listed	Process	Medical Record		American Medical Directors Association

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
American Medical Directors Association	Pain management in the long-term care setting: percentage of patients with documented cause of pain symptoms.	This measure is used to assess the percentage of patients with documented cause of pain symptoms.	Number with documented* cause of pain symptoms*Note: "Documentation" refers to written evidence as to whether a procedure/discussion was indicated/done or not indicated/not done.	All patients with reported pain	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Pain management in the long-term care setting: percentage of patients with documented complete assessment of pain covering all pertinent components of pain.	This measure is used to assess the percentage of patients with documented complete assessment of pain covering all pertinent components of pain.	Number with documented* complete assessment of pain covering all pertinent components of pain *Note: "Documentation" refers to written evidence as to whether a procedure/discussion was indicated/done or not indicated/not done.	All patients with reported pain	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Pain management in the long-term care setting: percentage of patients with documented medication regimen with evidence of titration/adjustment in accordance with World Health Organization (WHO) step ladder.	This measure is used to assess the percentage of patients with documented medication regimen with evidence of titration/adjustment in accordance with World Health Organization (WHO) step ladder.	Number with documented* medication regimen with evidence of titration/adjustment in accordance with World Health Organization (WHO) step ladder *Note: "Documentation" refers to written evidence as to whether a procedure/discussion was indicated/done or not indicated/not done.	All patients receiving pain medication	None	None listed	Process	Medical Record		American Medical Directors Association

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
	(WHO) step ladder.									
American Medical Directors Association	Pain management in the long-term care setting: percentage of patients with documented reasons for no medical work-up.	This measure is used to assess the percentage of patients with documented reasons for no medical work-up.	Number with documented* reasons for no medical work-up *Note: "Documentation" refers to written evidence as to whether a procedure/discussion was indicated/done or not indicated/not done.	All patients with reported pain who don't receive a work-up	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Pain management in the long-term care setting: percentage of patients with documented reduction of pain symptoms.	This measure is used to assess the percentage of patients with documented reduction of pain symptoms.	Number of patients with documented* reduction of pain symptoms *Note: "Documentation" refers to written evidence as to whether a procedure/discussion was indicated/done or not indicated/not done.	All patients with reported pain	None	None listed	Outcome	Medical Record		American Medical Directors Association

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
American Medical Directors Association	Pain management in the long-term care setting: percentage of patients with orders for not recommended drugs.	This measure is used to assess the percentage of patients receiving pain medication with orders for not recommended drugs.	Number of patients with orders for not recommended drugs	All patients receiving medications to treat pain	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Pain management in the long-term care setting: percentage of patients with periodic documented assessment by nursing staff of effectiveness of pain management.	This measure is used to assess the percentage of patients with periodic documented assessment by nursing staff of effectiveness of pain management.	Number with periodic documented* assessment by nursing staff of effectiveness of pain management*Note: "Documentation" refers to written evidence as to whether a procedure/discussion was indicated/done or not indicated/not done.	All patients with reported pain	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Pain management in the long-term care setting: percentage of patients with periodic documented assessment of effectiveness of pain management by medical doctor (MD).	This measure is used to assess the percentage of patients with periodic documented assessment of effectiveness of pain management by medical doctor (MD).	Number with periodic documented* assessment of effectiveness of pain management by medical doctor (MD) *Note: "Documentation" refers to written evidence as to whether a procedure/discussion was indicated/done or not indicated/not done.	Patients with reported pain	None	None listed	Process	Medical Record		American Medical Directors Association

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
American Medical Directors Association	Heart failure: average time for a patient's ineffective treatment to be modified.	This measure is used to assess the average time for patient's ineffective treatment to be modified.	Continuous variable statement: Average time (days/hours/minutes) to treatment modification Exclusions	Number with treatment modification for heart failure	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Heart failure: average time taken to respond to a patient's adverse drug reaction.	This measure is used to assess the average time taken to respond to a patient's adverse drug reaction.	Continuous variable statement: Average response time (days/hours/minutes) to adverse drug reaction	Number with adverse drug reaction with heart failure	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Heart failure: percentage of patients monitored for adverse drug reactions.	This measure is used to assess the percentage of patients with diagnosed heart failure monitored for adverse drug reactions.	Number monitored for adverse drug reactions	Number with diagnosed heart failure	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Heart failure: percentage of patients referred to cardiology/hospice/palliative care (after several ineffective modifications and based on patient's advance directive).	This measure is used to assess the percentage of patients with diagnosed heart failure referred to cardiology, hospice, or palliative care (after several ineffective modifications and based on patient's advance directive).	Number referred to cardiology, hospice, or palliative care (after several ineffective modifications and based on patient's advance directive)	Number with diagnosed heart failure	None	None listed	Process	Medical Record		American Medical Directors Association

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
American Medical Directors Association	Heart failure: percentage of patients where heart failure is diagnosed urgently or emergently (i.e., not on admission or at periodic assessment).	This measure is used to assess the percentage of patients with diagnosed heart failure where heart failure is diagnosed urgently or emergently (i.e., not on admission or at periodic assessment).	Number where heart failure is diagnosed urgently or emergently (i.e., not on admission or at periodic assessment)	Number with diagnosed heart failure	None	None listed	Outcome	Medical Record		American Medical Directors Association
American Medical Directors Association	Heart failure: percentage of patients with documentation that appropriate lab monitoring has been ordered.	This measure is used to assess the percentage of patients with diagnosed heart failure with documentation that appropriate laboratory monitoring has been ordered.	Number with documentation* that appropriate laboratory monitoring** has been ordered*Note: "Documentation" refers to whether the procedure/discussion was indicated/done or not indicated/not done.	Number with diagnosed heart failure	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Heart failure: percentage of patients with documented assessment for heart failure risk factors.	This measure is used to assess the percentage of patients with diagnosed heart failure with documented assessment for heart failure risk factors	Number with documented* assessment for heart failure risk factors** *Note: "Documentation" refers to whether the procedure/discussion was indicated/done or not indicated/not done.	Number with diagnosed heart failure	None	None listed	Process	Medical Record		American Medical Directors Association

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
American Medical Directors Association	Heart failure: percentage of patients with documented assessment for imaging studies.	This measure is used to assess the percentage of patients with or at risk for heart failure with documented assessment for imaging studies.	Number with documented* assessment for imaging studies** *Note: "Documentation" refers to whether the procedure/discussion was indicated/done or not indicated/not done.	Number with or at risk for heart failure	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Heart failure: percentage of patients with documented assessment for reversible causes of heart failure.	This measure is used to assess the percentage of patients with diagnosed heart failure with documented assessment for reversible causes of heart failure.	Number with documented* assessment for reversible causes of heart failure** *Note: "Documentation" refers to whether the procedure/discussion was indicated/done or not indicated/not done.	Number with diagnosed heart failure	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Heart failure: percentage of patients with documented assessment for reversible etiology workup.	This measure is used to assess the percentage of patients with or at risk for heart failure with documented assessment for reversible etiology workup.	Number with documented* assessment for reversible etiology workup** *Note: "Documentation" refers to whether the procedure/discussion was indicated/done or not indicated/not done.	Number with or at risk for heart failure	None	None listed	Process	Medical Record		American Medical Directors Association

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
American Medical Directors Association	Heart failure: percentage of patients with documented assessment for signs, symptoms, and heart failure risk factors at admission.	This measure is used to assess the percentage of patients with documented assessment for signs, symptoms, and heart failure risk factors at admission.	Number with documented* assessment for signs, symptoms, and heart failure risk factors at admission** *Note: "Documentation" refers to whether the procedure/discussion was indicated/done or not indicated/not done.	All patients	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Heart failure: percentage of patients with documented consideration of angiotensin-converting enzyme (ACE) inhibitor treatment.	This measure is used to assess the percentage of patients with diagnosed heart failure with documented consideration of angiotensin-converting enzyme (ACE) inhibitor treatment.	Number with documented* consideration of angiotensin-converting enzyme (ACE) inhibitor treatment*Note: "Documentation" refers to whether the procedure/discussion was indicated/done or not indicated/not done.	Number with diagnosed heart failure	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Heart failure: percentage of patients with documented consideration of beta-blocker treatment.	This measure is used to assess the percentage of patients with diagnosed heart failure with documented consideration of beta-blocker treatment.	Number with documented* consideration of beta-blocker treatment *Note: "Documentation" refers to whether the procedure/discussion was indicated/done or not indicated/not done.	Number with diagnosed heart failure	None	None listed	Process	Medical Record		American Medical Directors Association

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
American Medical Directors Association	Heart failure: percentage of patients with documented discussions regarding advance directives and/or adherence to the directive.	This measure is used to assess the percentage of patients with diagnosed heart failure with documented discussions regarding advance directives and/or adherence to the directive.	Number with documented* discussions regarding advance directives and/or adherence to the directive *Note: "Documentation" refers to whether the procedure/discussion was indicated/done or not indicated/not done.	Number with diagnosed heart failure	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Heart failure: percentage of patients with documented periodic assessment for peripheral edema and other heart failure risk factors.	This measure is used to assess the percentage of patients with or at risk for heart failure with documented periodic assessment for peripheral edema and other heart failure risk factors.	Number with documented* periodic assessment for peripheral edema and other heart failure risk factors** *Note: "Documentation" refers to whether the procedure/discussion was indicated/done or not indicated/not done.	Number with or at risk for heart failure	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Heart failure: percentage of patients with documented periodic monitoring of heart failure symptoms (lung sounds, edema, decreased activity).	This measure is used to assess the percentage of patients with diagnosed heart failure with documented periodic monitoring of heart failure symptoms (lung sounds, edema, decreased activity).	Number with documented* periodic monitoring of heart failure symptoms (lung sounds, edema, decreased activity) *Note: "Documentation" refers to whether the procedure/discussion was indicated/done or not indicated/not done.	Number with diagnosed heart failure	None	None listed	Process	Medical Record		American Medical Directors Association

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
American Medical Directors Association	Heart failure: percentage of patients with heart failure on angiotensin-converting enzyme (ACE) inhibitor.	This measure is used to assess the percentage of patients with diagnosed heart failure on angiotensin-converting enzyme (ACE) inhibitor.	Number with heart failure on angiotensin-converting enzyme (ACE) inhibitor	Number with diagnosed heart failure	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Heart failure: percentage of patients with heart failure on beta-blocker.	This measure is used to assess the percentage of patients with diagnosed heart failure on beta-blocker.	Number with heart failure on beta-blocker	Number with diagnosed heart failure	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Heart failure: percentage of patients with heart failure on diuretic therapy for at least 6 months with electrolyte measures within normal ranges.	This measure is used to assess the percentage of patients with diagnosed heart failure on diuretic therapy for at least 6 months with electrolyte measures within normal ranges.	Number with heart failure on diuretic therapy for at least 6 months who have electrolyte measures within normal ranges	Number with diagnosed heart failure	None	None listed	Outcome	Medical Record		American Medical Directors Association
American Medical Directors Association	Heart failure: percentage of patients with heart failure on diuretic therapy who had electrolyte monitoring within the past 2 months.	This measure is used to assess the percentage of patients with diagnosed heart failure on diuretic therapy who had electrolyte monitoring within the past 2 months.	Number with heart failure on diuretic therapy who had electrolyte monitoring in the past 2 months	Number with diagnosed heart failure	None	None listed	Process	Medical Record		American Medical Directors Association

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
American Medical Directors Association	Heart failure: percentage of patients with heart failure prescribed a low-sodium diet in the past 6 months.	This measure is used to assess the percentage of patients with diagnosed heart failure prescribed a low-sodium diet in the past 6 months.	Number with heart failure prescribed a low-sodium diet in the past 6 months	Number with diagnosed heart failure	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Heart failure: percentage of patients with heart failure prescribed pharmacologic agents consistent with patient's advance care directive.	This measure is used to assess the percentage of patients with diagnosed heart failure prescribed pharmacologic agents consistent with patient's advance care directive.	Number with heart failure prescribed pharmacologic agents consistent with patient's advance care directive	Number with diagnosed heart failure	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Heart failure: percentage of patients with heart failure prescribed pharmacologic agents consistent with severity of heart failure.	This measure is used to assess the percentage of patients with diagnosed heart failure prescribed pharmacologic agents consistent with severity of heart failure.	Number with heart failure prescribed pharmacologic agents consistent with severity of heart failure	Number with diagnosed heart failure	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Heart failure: percentage of patients with heart failure prescribed pharmacologic agents consistent with type of ventricular dysfunction.	This measure is used to assess the percentage of patients with diagnosed heart failure prescribed pharmacologic agents consistent with type of ventricular dysfunction.	Number with heart failure prescribed pharmacologic agents consistent with type of ventricular dysfunction	Number with diagnosed heart failure	None	None listed	Process	Medical Record		American Medical Directors Association

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
American Medical Directors Association	Heart failure: percentage of patients with heart failure readmitted for acute episode of heart failure.	This measure is used to assess the percentage of patients with diagnosed heart failure readmitted for acute episode of heart failure.	Number with heart failure readmitted for acute episode of heart failure	Number with diagnosed heart failure	None	None listed	Outcome	Medical Record		American Medical Directors Association
American Medical Directors Association	Heart failure: percentage of patients with heart failure receiving nonpharmacologic treatment, such as diet intervention and fluid restriction.	This measure is used to assess the percentage of patients with heart failure receiving nonpharmacologic treatment, such as diet intervention and fluid restriction.	Number with heart failure receiving nonpharmacologic treatment, such as diet intervention and fluid restriction	Number with diagnosed heart failure	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Heart failure: percentage of patients with heart failure sent to emergency room (ER) for acute exacerbation.	This measure is used to assess the percentage of patients with diagnosed heart failure sent to emergency room (ER) for acute exacerbation.	Number with heart failure sent to emergency room (ER) for acute exacerbation	Number with diagnosed heart failure	None	None listed	Outcome	Medical Record		American Medical Directors Association
American Medical Directors Association	Heart failure: percentage of patients with heart failure weighed as per physician's orders.	This measure is used to assess the percentage of patients with diagnosed heart failure weighed as per physician's orders.	Number with heart failure weighed as per physician's orders	Number with diagnosed heart failure	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Heart failure: percentage of patients with heart failure weighed daily.	This measure is used to assess the percentage of patients with diagnosed heart failure weighed daily.	Number with heart failure weighed daily	Number with diagnosed heart failure	None	None listed	Process	Medical Record		American Medical Directors Association

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
American Medical Directors Association	Heart failure: percentage of patients with heart failure with documented assessment of treatment effectiveness.	This measure is used to assess the percentage of patients with diagnosed heart failure with documented assessment of treatment effectiveness.	Number with heart failure with documented* assessment of treatment effectiveness *Note: "Documentation" refers to whether the procedure/discussion was indicated/done or not indicated/not done.	Number with diagnosed heart failure	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Heart failure: percentage of patients with heart failure with fluid volume overload prescribed a loop diuretic.	This measure is used to assess the percentage of patients with diagnosed heart failure with fluid volume overload prescribed a loop diuretic.	Number with fluid volume overload prescribed a loop diuretic	Number with diagnosed heart failure	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Heart failure: percentage of patients with medical record documentation for characterization of ventricular dysfunction as systolic or diastolic.	This measure is used to assess the percentage of patients with diagnosed heart failure with medical record documentation for characterization of ventricular dysfunction as systolic or diastolic.	Number with medical record documentation* for characterization of ventricular dysfunction as systolic or diastolic *Note: "Documentation" refers to whether the procedure/discussion was indicated/done or not indicated/not done.	Number with diagnosed heart failure	None	None listed	Process	Medical Record		American Medical Directors Association
American Medical Directors Association	Heart failure: percentage of patients with medical record documentation indicating communication of signs and symptoms of	This measure is used to assess the percentage of patients with diagnosed heart failure with medical record documentation indicating communication of signs and symptoms of heart	Number with medical record documentation* indicating communication of signs and symptoms of heart failure by direct team to physician, nurse practitioner, or physician assistant	Number with diagnosed heart failure	None	None listed	Process	Medical Record		American Medical Directors Association

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
	heart failure by direct care team to physician/nurse practitioner/physician assistant.	failure by direct care team to physician, nurse practitioner, or physician assistant.	*Note: "Documentation" refers to whether the procedure/discussion was indicated/done or not indicated/not done.							
New York State Department of Health AIDS Institute	HIV: percentage of nursing facility patients for whom a follow-up clinic visit is recorded every four months	This measure is used to assess the percentage of end-stage nursing facility HIV-infected patients or nursing facility HIV-infected patients with no other therapeutic options for whom a follow-up clinic visit is recorded every four months.	The number of patients for whom a follow-up clinic visit is recorded every four months	End-stage nursing facility HIV-infected patients or nursing facility HIV-infected patients with no other therapeutic options*. Patients who are either receiving antiretroviral (ARV) therapy or have received ARV therapy within the past 2 years are eligible for this indicator.	Patients who are absent for more than 21 consecutive days during a review period because of hospitalization or incarceration are not eligible for review during that four-month review period	None listed	Process	Medical Record		New York State Department of Health AIDS Institute
New York State Department of Health AIDS Institute	HIV: percentage of nursing facility patients for whom a viral load test was performed every four months	This measure is used to assess the percentage of nursing facility HIV-infected patients for whom a viral load test was performed every four months.	The number of patients for whom a viral load test was performed every four months	All nursing facility HIV-infected patients	Patients who are absent for more than 21 consecutive days during a review period because of hospitalization or incarceration are not eligible for review during that four-month review period.	None listed	Process	Medical Record		New York State Department of Health AIDS Institute
New York State Department of Health AIDS Institute	HIV: percentage of nursing facility patients for whom active tuberculosis (TB) was excluded prior to admission.	This measure is used to assess the percentage of nursing facility HIV-infected patients for whom an active tuberculosis (TB) was excluded prior to admission.	The number of patients for whom active tuberculosis (TB) was excluded prior to admission	All nursing facility HIV-infected patients	None	None listed	Process	Medical Record		New York State Department of Health AIDS Institute

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
New York State Department of Health AIDS Institute	HIV: percentage of nursing facility patients for whom CD4 was measured within the four-month review period.	This measure is used to assess the percentage of nursing facility HIV-infected patients for whom CD4 was measured within the four-month review period.	The number of patients for whom CD4 was measured within the four-month review period	All nursing facility HIV-infected patients	Patients who are absent for more than 21 consecutive days during a review period because of hospitalization or incarceration are not eligible for review during that four-month review period.	None listed	Process	Medical Record		New York State Department of Health AIDS Institute
New York State Department of Health AIDS Institute	HIV: percentage of nursing facility patients for whom hepatitis A immune status was documented.	This measure is used to assess the percentage of nursing facility HIV-infected patients for whom hepatitis A immune status was documented.	The number of patients for whom hepatitis A immune status was documented (does not have to be documented during the year of review)	All nursing facility HIV-infected patients	Patients who are absent for more than 21 consecutive days during a review period because of hospitalization or incarceration are not eligible for review during that four-month review period.	None listed	Process	Medical Record		New York State Department of Health AIDS Institute
New York State Department of Health AIDS Institute	HIV: percentage of nursing facility patients for whom hepatitis B immune status was documented.	<p>This measure is used to assess the percentage of nursing facility HIV-infected patients for whom hepatitis B immune status was documented.</p> <p>This measure is used to assess the percentage of nursing facility HIV-infected patients for whom hepatitis B immune status was documented.</p> <p>This measure is used to assess the percentage of nursing facility HIV-infected patients for whom hepatitis B immune status was documented.</p>	The number of patients for whom hepatitis B immune status was documented (does not have to be documented during the year of review)	All nursing facility HIV-infected patients	Patients who are absent for more than 21 consecutive days during a review period because of hospitalization or incarceration are not eligible for review during that four-month review period.	None listed	Process	Medical Record		New York State Department of Health AIDS Institute

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
New York State Department of Health AIDS Institute	HIV: percentage of nursing facility patients for whom hepatitis C immune status was documented	This measure is used to assess the percentage of nursing facility HIV-infected patients for whom hepatitis C immune status was documented.	The number of patients for whom hepatitis C immune status was documented (does not have to be documented during the year of review)	All nursing facility HIV-infected patients	Patients who are absent for more than 21 consecutive days during a review period because of hospitalization or incarceration are not eligible for review during that four-month review period.	None listed	Process	Medical Record		New York State Department of Health AIDS Institute
New York State Department of Health AIDS Institute	HIV: percentage of nursing facility patients for whom lipid screening was performed during the past year.	This measure is used to assess the percentage of nursing facility HIV-infected patients for whom lipid screening was performed during the past year.	The number of patients for whom lipid screening was performed during the past year	All nursing facility HIV-infected patients who are either receiving antiretroviral (ARV) therapy or received ARV therapy within the past 2 years	Patients who are absent for more than 21 consecutive days during a review period because of hospitalization or incarceration are not eligible for review during that four-month review period.	None listed	Process	Medical Record		New York State Department of Health AIDS Institute
New York State Department of Health AIDS Institute	HIV: percentage of nursing facility patients for whom mammography was recorded in the past year	This measure is used to assess the percentage of nursing facility HIV-infected female patients for whom mammography was recorded in the past year.	The number of patients for whom mammography was recorded in the past year	All nursing facility HIV-infected female patients over age 50 years	Patients who are absent for more than 21 consecutive days during a review period because of hospitalization or incarceration are not eligible for review during that four-month review period.	None listed	Process	Medical Record		New York State Department of Health AIDS Institute
New York State Department of Health AIDS Institute	HIV: percentage of nursing facility patients for whom one of four specified management options is documented in the medical record in every 4-month period the patient is considered unstable.	This measure is used to assess the percentage of nursing facility HIV-infected patients who are unstable on antiretroviral (ARV) therapy for whom one of four specified management options* is documented in the medical record in every 4-month period the patient is considered unstable. *Management options:	The number of patients for whom one of the following four management options is documented in the medical record in every 4-month period the patient is considered unstable: Regimen was changed, resistance testing completed, and viral load assay performed within 8 weeks of decision	Nursing facility HIV-infected patients who are unstable* on antiretroviral (ARV) therapy. Patients who are either receiving antiretroviral (ARV) therapy or have received ARV therapy within the past 2 years are eligible for this indicator. *Patients whose viral load has increased by more than 1 log and	Patients who are absent for more than 21 consecutive days during a review period because of hospitalization or incarceration are not eligible for review during that four-month review period.	None listed	Process	Medical Record		New York State Department of Health AIDS Institute

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
		<p>Regimen was changed, resistance testing completed and viral load assay performed within 8 weeks of decision</p> <p>Justification provided not to change therapy (intercurrent illness, recent vaccination, adherence intervention documented, viral load reordered, patient prefers not to change medication, provider documents that patient is clinically/immunologically stable, resistance testing ordered, other) and viral load assay performed within 8 weeks of decision</p> <p>Documentation that patient decides not to take medication and viral load assay performed within four months</p> <p>Decision made to discontinue therapy and viral load test in four months</p>	<p>Justification provided not to change therapy (intercurrent illness, recent vaccination, adherence intervention documented, viral load reordered, patient prefers not to change medication, provider documents that patient is clinically/immunologically stable, resistance testing ordered, other) and viral load assay performed within 8 weeks of decision</p> <p>Documentation that patient decides not to take medication and viral load assay performed within four months</p> <p>Decision made to discontinue therapy and viral load test in four months</p>	<p>absolute value is over 1,000; or CD4 has dropped by 50% since the last 4-month review period; or opportunistic infection (OI) in the last four month review period (new or recurrent); or patient deemed unstable by physician.</p>						

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
New York State Department of Health AIDS Institute	HIV: percentage of nursing facility patients for whom purified protein derivative (PPD) was placed and results read during the past year.	This measure is used to assess the percentage of nursing facility HIV-infected patients for whom purified protein derivative (PPD) was placed and results read during the past year.	The number of patients for whom purified protein derivative (PPD) was placed and results read during the past year	All nursing facility HIV-infected patients without a history of previous tuberculosis (TB) treatment or a positive purified protein derivative (PPD) test result	None	None listed	Process	Medical Record		New York State Department of Health AIDS Institute
New York State Department of Health AIDS Institute	HIV: percentage of nursing facility patients placed on Mycobacterium avium complex (MAC) prophylaxis (rifabutin, clarithromycin, azithromycin or other).	This measure is used to assess the percentage of nursing facility HIV-infected patients who were placed on Mycobacterium avium complex (MAC) prophylaxis (rifabutin, clarithromycin, azithromycin or other).	The number of patients placed on Mycobacterium avium complex (MAC) prophylaxis (rifabutin, clarithromycin, azithromycin or other)	Nursing facility HIV-infected patients with CD4 counts less than 50 cells/mm ³ , including those patients whose CD4 levels have been sustained above 100 cells/mm ³ for less than 6 months	Patients who are absent for more than 21 consecutive days during a review period because of hospitalization or incarceration are not eligible for review during that four-month review period.	None listed	Process	Medical Record		New York State Department of Health AIDS Institute
New York State Department of Health AIDS Institute	HIV: percentage of nursing facility patients placed on Pneumocystis carinii pneumonia (PCP) prophylaxis (trimethoprim-sulfamethoxazole [TMP/SMX], atovaquone, dapsone, pentamidine, or other).	This measure is used to assess the percentage of nursing facility HIV-infected patients who were placed on Pneumocystis carinii pneumonia (PCP) prophylaxis (trimethoprim/sulfamethoxazole [TMP/SMX], atovaquone, dapsone, pentamidine, or other).	The number of patients placed on Pneumocystis carinii pneumonia (PCP) prophylaxis (trimethoprim-sulfamethoxazole [TMP/SMX], atovaquone, dapsone, pentamidine, or other)	Nursing facility HIV-infected patients with CD4 counts less than 200 cells/mm ³ , including patients whose CD4 levels have been sustained above 200 cells/mm ³ for less than 6 months	Patients who are absent for more than 21 consecutive days during a review period because of hospitalization or incarceration are not eligible for review during that four-month review period.	None listed	Process	Medical Record		New York State Department of Health AIDS Institute

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
	or other).									
New York State Department of Health AIDS Institute	HIV: percentage of nursing facility patients who are stable on antiretroviral (ARV) therapy for whom viral load is monitored every four months.	This measure is used to assess the percentage of nursing facility HIV-infected patients who are stable on antiretroviral (ARV) therapy for whom viral load is monitored every four months.	The number of patients for whom viral load is monitored every four months	Nursing facility HIV-infected patients who are stable* on antiretroviral (ARV) therapy. Patients who are either receiving antiretroviral (ARV) therapy or have received ARV therapy within the past 2 years are eligible for this indicator. *Patients whose viral load is undetectable; or has dropped by at least one log since last 4-month review period; or has increased by less than 3X from the lowest value in last 12 months on that regimen; or there is a note in record by treating physician that patient is deemed stable.	Patients who are absent for more than 21 consecutive days during a review period because of hospitalization or incarceration are not eligible for review during that four-month review period	None listed	Process	Medical Record		New York State Department of Health AIDS Institute
New York State Department of Health AIDS Institute	HIV: percentage of nursing facility patients with a baseline toxoplasma serology documented.	This measure is used to assess the percentage of nursing facility HIV-infected patients with a baseline toxoplasma serology documented.	The number of patients with a baseline toxoplasma serology documented (does not have to be documented during the year of review)	All nursing facility HIV-infected patients	Patients who are absent for more than 21 consecutive days during a review period because of hospitalization or incarceration are not eligible for review during that four-month review period.	None listed	Process	Medical Record		New York State Department of Health AIDS Institute

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
New York State Department of Health AIDS Institute	HIV: percentage of nursing facility patients with a pelvic exam and Papanicolaou (Pap) smear with follow-up abnormal results recorded in the past year.	This measure is used to assess the percentage of nursing facility HIV-infected female patients with a pelvic exam and Papanicolaou (Pap) smear with follow-up abnormal results recorded in the past year.	The number of patients with a pelvic exam and Papanicolaou (Pap) smear with follow-up abnormal results recorded in the past year* *Patients who have an exam that is scheduled to take place within the review period have one month from the date of the exam for documentation to be placed in the medical record.	All nursing facility HIV-infected female patients	Patients who are absent for more than 21 consecutive days during a review period because of hospitalization or incarceration are not eligible for review during that four-month review period.	None listed	Process	Medical Record		New York State Department of Health AIDS Institute
American Speech-Language-Hearing Association	Speech and language function: proportion of stroke patients in each risk-adjusted group that make at least one level of progress on the Alaryngeal Communication Functional Communication Measure (FCM).	This measure is used to assess the proportion of stroke patients in each risk-adjusted group, ages 16 years and older, who have had a total or near-total laryngectomy and make at least one level of progress on the Alaryngeal Communication Functional Communication Measure (FCM).	The number of stroke patients in each risk-adjusted group that make at least one level of progress on the Alaryngeal Communication Functional Communication Measure (FCM)	Patients, ages 16 years and older, with a treatment plan recommending speech and language intervention for a minimum of two sessions Patients who have had a stroke Patients who have had a total or near total laryngectomy Patients receiving speech and language intervention using one of two treatment models: Individual and/or group treatment model Training and/or consultation model	Patients seen for evaluation only Adults with developmental disabilities Scoring on this FCM does not include the ability to independently clean and manage prosthetic equipment.	None listed	Outcome	Special or unique data		American Speech-Language-Hearing Association

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
American Speech-Language-Hearing Association	Speech and language function: proportion of stroke patients in each risk-adjusted group that make at least one level of progress on the Attention Functional Communication Measure (FCM).	This measure is used to assess the proportion of stroke patients in each risk-adjusted group, ages 16 years and older, who make at least one level of progress on the Attention Functional Communication Measure (FCM).	The number of stroke patients in each risk-adjusted group that make at least one level of progress on the Attention Functional Communication Measure (FCM)	Patients, ages 16 years and older, with a treatment plan recommending speech and language intervention for a minimum of two sessions Patients who have had a stroke Patients receiving speech and language intervention using one of two treatment models: Individual and/or group treatment model Training and/or consultation model	Patients seen for evaluation only Adults with developmental disabilities	Method Step 1: Regression analysis to determine independent variables associated with measurement change. Step 2: Review of discharged cases to determine typical score on the measure for those patients discharged with an indication that no further speech-language pathology treatment was needed. Step 3: Establish that score as a proxy "treatment goal" for all patients with that particular score on admission. Step 4: Identify constellations of risk factors with differential amounts of treatment needed to reach that treatment goal. Statistical Results Variables affecting the amount of treatment needed to reach treatment goal: % of SLP treatment time devoted to treating attention	Outcome	Special or unique data		American Speech-Language-Hearing Association

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
						Number of other Functional Communication Measures scored Score on this measure at admission				
American Speech-Language-Hearing Association	Speech and language function: proportion of stroke patients in each risk-adjusted group that make at least one level of progress on the Augmentative-Alternative Communication Functional Communication Measure (FCM).	The measure is used to assess the proportion of stroke patients in each risk-adjusted group, ages 16 years and older, that make at least one level of progress on the Augmentative-Alternative Communication Functional Communication Measure (FCM).	The number of stroke patients in each risk-adjusted group that make at least one level of progress on the Augmentative-Alternative Communication Functional Communication Measure (FCM)	Patients, ages 16 years and older, with a treatment plan recommending speech and language intervention for a minimum of two sessions Patients who have had a stroke Patients receiving speech and language intervention using one of two treatment models: Individual and/or group treatment model Training and/or consultation model	Patients seen for evaluation only Adults with developmental disabilities Do not include ability to independently set up and manage augmentative-alternative communication systems.	None listed	Outcome	Special or unique data		American Speech-Language-Hearing Association

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
American Speech-Language-Hearing Association	Speech and language function: proportion of stroke patients in each risk-adjusted group that make at least one level of progress on the Fluency Functional Communication Measure (FCM).	The measure is used to assess the proportion of stroke patients in each risk-adjusted group, ages 16 years and older, that make at least one level of progress on the Fluency Functional Communication Measure (FCM).	The number of stroke patients in each risk-adjusted group that make at least one level of progress on the Fluency Functional Communication Measure (FCM)	Patients, ages 16 years and older, with a treatment plan recommending speech and language intervention for a minimum of two sessions Patients who have had a stroke Patients receiving speech and language intervention using one of two treatment models: Individual and/or group treatment model Training and/or consultation model	Patients seen for evaluation only Adults with developmental disabilities Patients who exhibit difficulty with rate and prosody as a result of a neurological impairment, cluttering, foreign dialect, or developmental disability	None listed	Outcome	Special or unique data		American Speech-Language-Hearing Association
American Speech-Language-Hearing Association	Speech and language function: proportion of stroke patients in each risk-adjusted group that make at least one level of progress on the Memory Functional Communication Measure (FCM).	The measure is used to assess the proportion of stroke patients in each risk-adjusted group, ages 16 years and older, that make at least one level of progress on the Memory Functional Communication Measure (FCM).	The number of stroke patients in each risk-adjusted group that make at least one level of progress on the Memory Functional Communication Measure (FCM)	Patients, ages 16 years and older, with a treatment plan recommending speech and language intervention for a minimum of two sessions Patients who have had a stroke Patients receiving speech and language intervention using one of two treatment models: Individual and/or group treatment model Training and/or consultation model	Patients seen for evaluation only Adults with developmental disabilities	Method Step 1: Regression analysis to determine independent variables associated with measurement change. Step 2: Review of discharged cases to determine typical score on the measure for those patients discharged with an indication that no further speech-language pathology treatment was needed. Step 3: Establish that score as a proxy "treatment goal" for all patients with that particular score on admission.	Outcome	Special or unique data		American Speech-Language-Hearing Association

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
						<p>Step 4: Identify constellations of risk factors with differential amounts of treatment needed to reach that treatment goal.</p> <p>Statistical Results</p> <p>Variables affecting the amount of treatment needed to reach treatment goal:</p> <p>% of SLP treatment time devoted to treating memory</p> <p>Number of other Functional Communication Measures scored</p> <p>Medical diagnosis</p> <p>Score on this measure at admission</p>				
American Speech-Language-Hearing Association	Speech and language function: proportion of stroke patients in each risk-adjusted group that make at least one level of progress on the Motor Speech Functional Communication Measure (FCM).	The measure is used to assess the proportion of stroke patients in each risk-adjusted group, ages 16 years and older, that make at least one level of progress on the Motor Speech Functional Communication Measure (FCM).	The number of stroke patients in each risk-adjusted group that make at least one level of progress on the Motor Speech Functional Communication Measure (FCM)	Patients, ages 16 years and older, with a treatment plan recommending speech and language intervention for a minimum of two sessions Patients who have had a stroke Patients receiving speech and language intervention using one of two treatment models: Individual and/or group treatment model Training and/or consultation model	Patients seen for evaluation only Adults with developmental disabilities	MethodStep 1: Regression analysis to determine independent variables associated with measurement change.Step 2: Review of discharged cases to determine typical score on the measure for those patients discharged with an indication that no further speech-language pathology treatment was needed.Step 3: Establish that score as a proxy "treatment goal" for all patients with that particular score on	Outcome	Special or unique data		American Speech-Language-Hearing Association

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
						admission.Step 4: Identify constellations of risk factors with differential amounts of treatment needed to reach that treatment goal.Statistical ResultsVariables affecting the amount of treatment needed to reach treatment goal:% of SLP treatment time devoted to treating motor speech Number of other Functional Communication Measures scored Score on this measure at admission				
American Speech-Language-Hearing Association	Speech and language function: proportion of stroke patients in each risk-adjusted group that make at least one level of progress on the Pragmatics Functional Communication Measure (FCM).	The measure is used to assess the proportion of stroke patients in each risk-adjusted group, ages 16 years and older, that make at least one level of progress on the Pragmatics Functional Communication Measure (FCM).	The number of stroke patients in each risk-adjusted group that make at least one level of progress on the Pragmatics Functional Communication Measure (FCM)	Patients, ages 16 years and older, with a treatment plan recommending speech and language intervention for a minimum of two sessions Patients who have had a stroke Patients receiving speech and language intervention using one of two treatment models: Individual and/or group treatment model Training and/or consultation model	Patients seen for evaluation only Adults with developmental disabilities	None listed	Outcome	Special or unique data		American Speech-Language-Hearing Association
American Speech-Language-Hearing Association	Speech and language function: proportion of stroke patients	The measure is used to assess the proportion of stroke patients in each risk-adjusted group, ages 16 years and older,	The number of stroke patients in each risk-adjusted group that make at least one level of progress on the	Patients, ages 16 years and older, with a treatment plan recommending speech and language	Patients seen for evaluation only Adults with developmental disabilities	None listed	Outcome	Special or unique data		American Speech-Language-Hearing Association

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
	in each risk-adjusted group that make at least one level of progress on the Problem Solving Functional Communication Measure (FCM).	that make at least one level of progress on the Problem Solving Functional Communication Measure (FCM).	Problem Solving Functional Communication Measure (FCM)	intervention for a minimum of two sessions Patients who have had a stroke Patients receiving speech and language intervention using one of two treatment models: Individual and/or group treatment model Training and/or consultation model Patients who have demonstrated sufficient attention and memory skills to be scored on this Functional Communication Measure (FCM) (functioning at a minimum of level 3 on the Attention and Memory FCMs)						
American Speech-Language-Hearing Association	Speech and language function: proportion of stroke patients in each risk-adjusted group that make at least one level of progress on the Reading Functional Communication Measure (FCM).	The measure is used to assess the proportion of stroke patients in each risk-adjusted group, ages 16 years and older, that make at least one level of progress on the Reading Functional Communication Measure (FCM).	The number of stroke patients in each risk-adjusted group that make at least one level of progress on the Reading Functional Communication Measure (FCM)	Patients, ages 16 years and older, with a treatment plan recommending speech and language intervention for a minimum of two sessions Patients who have had a stroke Patients receiving speech and language intervention using one of two treatment models: Individual and/or group treatment model Training and/or consultation model	Patients seen for evaluation only Adults with developmental disabilities	None listed	Outcome	Special or unique data		American Speech-Language-Hearing Association

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
American Speech-Language-Hearing Association	Speech and language function: proportion of stroke patients in each risk-adjusted group that make at least one level of progress on the Spoken Language Comprehension Functional Communication Measure (FCM).	This measure is used to assess the proportion of stroke patients in each risk-adjusted group, ages 16 years and older, that make at least one level of progress on the Spoken Language Comprehension Functional Communication Measure (FCM).	The number of stroke patients in each risk-adjusted group that make at least one level of progress on the Spoken Language Comprehension Functional Communication Measure (FCM)	Patients, ages 16 years and older, with a treatment plan recommending speech and language intervention for a minimum of two sessions Patients who have had a stroke Patients receiving speech and language intervention using one of two treatment models: Individual and/or group treatment model Training and/or consultation model	Patients seen for evaluation only Adults with developmental disabilities	MethodStep 1: Regression analysis to determine independent variables associated with measurement change.Step 2: Review of discharged cases to determine typical score on the measure for those patients discharged with an indication that no further speech-language pathology treatment was needed.Step 3: Establish that score as a proxy "treatment goal" for all patients with that particular score on admission.Step 4: Identify constellations of risk factors with differential amounts of treatment needed to reach that treatment goal.Statistical ResultsVariables affecting the amount of treatment needed to reach treatment goal:% of SLP treatment time devoted to treating spoken language comprehension Combined % of treatment time devoted to treating spoken language comprehension and spoken language expression Score on this measure at admission Score on other measure	Outcome	Special or unique data		American Speech-Language-Hearing Association

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
						at admission: Functional Communication Measure for Spoken Language Expression				
American Speech-Language-Hearing Association	Speech and language function: proportion of stroke patients in each risk-adjusted group that make at least one level of progress on the Spoken Language Expression Functional Communication Measure (FCM).	This measure is used to assess the proportion of stroke patients in each risk-adjusted group, ages 16 years and older, that make at least one level of progress on the Spoken Language Expression Functional Communication Measure (FCM).	The number of stroke patients in each risk-adjusted group that make at least one level of progress on the Spoken Language Expression Functional Communication Measure (FCM)	Patients, ages 16 years and older, with a treatment plan recommending speech and language intervention for a minimum of two sessions Patients who have had a stroke Patients receiving speech and language intervention using one of two treatment models: Individual and/or group treatment model Training and/or consultation model	Patients seen for evaluation only Adults with developmental disabilities Patients using an augmentative/alternative communication system	MethodStep 1: Regression analysis to determine independent variables associated with measurement change.Step 2: Review of discharged cases to determine typical score on the measure for those patients discharged with an indication that no further speech-language pathology treatment was needed.Step 3: Establish that score as a proxy "treatment goal" for all patients with that particular score on admission.Step 4: Identify constellations of risk factors with	Outcome	Special or unique data		American Speech-Language-Hearing Association

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
						differential amounts of treatment needed to reach that treatment goal. Statistical Results Variables affecting the amount of treatment needed to reach treatment goal: % of SLP treatment time devoted to treating spoken language expression Combined % of treatment time devoted to treating spoken language expression and spoken language comprehension Score on this measure at admission Score on other measure at admission: Functional Communication Measure for Spoken Language Comprehension				
American Speech-Language-Hearing Association	Speech and language function: proportion of stroke patients in each risk-adjusted group that make at least one level of progress on the Swallowing Functional Communication Measure (FCM).	This measure is used to assess the proportion of stroke patients in each risk-adjusted group, ages 16 years and older, that make at least one level of progress on the Swallowing Functional Communication Measure (FCM).	The number of stroke patients in each risk-adjusted group that make at least one level of progress on the Swallowing Functional Communication Measure (FCM)	Patients, ages 16 years and older, with a treatment plan recommending speech and language intervention for a minimum of two sessions Patients who have had a stroke Patients receiving speech and language intervention using one of two treatment models: Individual and/or group treatment model Training and/or consultation model	Patients seen for evaluation only Adults with developmental disabilities	Methods Step 1: Regression analysis to determine independent variables associated with measurement change. Step 2: Review of discharged cases to determine typical score on the measure for those patients discharged with an indication that no further speech-language pathology treatment was needed. Step 3: Establish that score as a proxy "treatment goal"	Outcome	Special or unique data		American Speech-Language-Hearing Association

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
						for all patients with that particular score on admission. Step 4: Identify constellations of risk factors with differential amounts of treatment needed to reach that treatment goal. Statistical Results Variables affecting the amount of treatment needed to reach treatment goal: % of SLP treatment time devoted to treating swallowing Number of other Functional Communication Measures scored Score on this measure at admission				
American Speech-Language-Hearing Association	Speech and language function: proportion of stroke patients in each risk-adjusted group that make at least one level of progress on the Voice Following Tracheostomy Functional Communication Measure (FCM).	This measure is used to assess the proportion of stroke patients in each risk-adjusted group who have undergone tracheostomy tube placement, ages 16 years and older, that make at least one level of progress on the Voice Following Tracheostomy Functional Communication Measure (FCM).	The number of stroke patients in each risk-adjusted group that make at least one level of progress on the Voice Following Tracheostomy Functional Communication Measure (FCM)	Patients who have had a stroke Patients who have undergone tracheostomy tube placement as a result of a temporary or stable medical condition and are considered candidates for oral communication Patients receiving speech and language intervention using one of two treatment models: Individual and/or group treatment model Training and/or consultation model	Patients seen for evaluation only Adults with developmental disabilities Do not include ability to independently set up and manage equipment.	None listed	Outcome	Special or unique data		American Speech-Language-Hearing Association

Source	Measure	Description	Numerator	Denominator	Exclusions	Risk Adjustment	Measure Type	Data Source	NQF ID	Measure Owner
American Speech-Language-Hearing Association	Speech and language function: proportion of stroke patients in each risk-adjusted group that make at least one level of progress on the Voice Functional Communication Measure (FCM).	This measure is used to assess the proportion of stroke patients in each risk-adjusted group, ages 16 years and older, that make at least one level of progress on the Voice Functional Communication Measure (FCM).	The number of stroke patients in each risk-adjusted group that make at least one level of progress on the Voice Functional Communication Measure (FCM)	Patients, ages 16 years and older, with a treatment plan recommending speech and language intervention for a minimum of two sessions Patients who have had a stroke Patients receiving speech and language intervention using one of two treatment models: Individual and/or group treatment model Training and/or consultation model	Patients seen for evaluation only Adults with developmental disabilities Patients who have had a laryngectomy or tracheotomy Patients with resonance disorders	None listed	Outcome	Special or unique data		American Speech-Language-Hearing Association
Inouye, Sharon K., MD, MPH - Independent Author	Delirium: proportion of patients meeting diagnostic criteria on the Confusion Assessment Method (CAM).Delirium: proportion of patients meeting diagnostic criteria on the Confusion Assessment Method (CAM).	This measure assesses the proportion of patients meeting the diagnostic criteria for delirium as measured by the Confusion Assessment Method (CAM) instrument.	The number of patients from the denominator meeting the diagnostic criteria for delirium as assessed by the Confusion Assessment Method (CAM) instrument.*The measure is scored based on ratings of four key features of delirium:Acute onset and fluctuating course Inattention Disorganized thinking Altered level of consciousness The diagnosis of delirium by CAM requires the presence of features (1), (2), and either (3 or 4).	All patients studied, typically a cohort of older persons, such as hospital or nursing home admissions	None	None listed	Outcome	Medical Record		Inouye, Sharon K., MD, MPH - Independent Author

APPENDIX C: eMEASURE EVALUATION TOOL

eMeasure Evaluation Tool (Evaluation criteria adapted from National Quality Forum (NQF) evaluation criteria)

Importance

Subcriterion	Pass	Fail
1a. High Impact	<p>The measure focus addresses a specific national health goal/priority identified by one or more of the following:</p> <ul style="list-style-type: none"> ◆ CMS/HHS ◆ Legislative mandate ◆ NQF's National Priorities Partners <p>OR</p> <p>The measure focus has high impact on health care as demonstrated by one or more of the following:</p> <ul style="list-style-type: none"> ◆ Affects large numbers ◆ Substantial impact for a small population ◆ A leading cause of morbidity/mortality ◆ Severity of illness ◆ High Resource Use ◆ Potential cost savings to the Medicare Program (business case) ◆ Patient/societal consequences of poor quality regardless of cost (social case) 	<p>The measure does not directly address a national health goal/priority.</p> <p>AND</p> <p>The data do not indicate it is a high impact aspect of health care, or is unknown.</p>
1b. Performance Gap	<p>Evidence exists to substantiate a quality problem and opportunity for improvement (i.e., data demonstrate considerable variation)</p> <p>OR</p> <p>Data demonstrate overall poor performance across providers or population groups (disparities).</p>	<p>Performance gap is unknown,</p> <p>OR</p> <p>There is limited or no room for improvement (no variability across providers or population groups and overall good performance).</p>

Summary Rating: Importance

Pass: All of the subcriteria (1a, 1b) are rated “Pass”.

Fail: Any of subcriteria (1a, 1b) are rated “Fail”.

Scientific Acceptability of Measure

Subcriterion	High	Moderate	Low
2a. Reliability testing	<p>Empirical evidence of reliability of BOTH data elements AND measure score within acceptable norms.</p> <p>Data element: appropriate method, scope, and reliability statistics for critical data elements within acceptable norms (new testing, or prior evidence for the same data type); OR commonly used data elements for which reliability can be assumed (e.g., gender, age, date of admission); OR <i>may forego data element reliability</i></p>	<p>Empirical evidence of reliability within acceptable norms for either critical data elements OR measure score.</p> <p>Data element: appropriate method, scope, and reliability statistics for critical data elements within acceptable norms (new testing, or prior evidence for the same data type); OR commonly used data elements for which reliability can be assumed (e.g., gender, age, date of admission); OR <i>may forego data element reliability testing if data element validity was demonstrated;</i></p>	<p>Empirical evidence (using appropriate method and scope) of unreliability for either data elements OR measure score, i.e., statistical results outside of acceptable norms</p> <p>OR</p> <p>Inappropriate method or scope of reliability testing</p>

eMeasure Evaluation Tool
 (Evaluation criteria adapted from National Quality Forum (NQF) evaluation criteria)

	<p><i>testing if data element validity was demonstrated;</i></p> <p>AND</p> <p>Measure score: appropriate method, scope, and reliability statistics for score computation or risk adjustment</p>	<p>OR</p> <p>Measure score: appropriate method, scope, and reliability statistics for score computation or risk adjustment</p>	
Subcriterion	High	Moderate	Low
2b. Validity testing	<p>Empirical evidence of validity of <u>BOTH data elements AND measure score within acceptable norms:</u></p> <p><u>Data element:</u> appropriate method, scope, and statistical results within acceptable norms (new testing, or prior evidence for the same data type) for critical data elements;</p> <p><u>Measure score:</u> Evidence that supports the intended interpretation of measure scores for the intended purpose—making conclusions about the quality of care. Examples of the types of measure score validity testing:</p> <ul style="list-style-type: none"> • Construct validity • Discriminative validity/Contrasted groups • Predictive validity • Convergent validity • Reference strategy/Criterion validity 	<p>Empirical evidence of validity <u>within acceptable norms for either critical data elements OR measure score</u></p> <p><u>Data element:</u> appropriate method, scope, and statistical results within acceptable norms (new testing, or prior evidence for the same data type) for critical data elements;</p> <p><u>Measure score:</u> Evidence that supports the intended interpretation of measure scores for the intended purpose—making conclusions about the quality of care. Examples of the types of measure score validity testing:</p> <ul style="list-style-type: none"> • Construct validity • Discriminative validity/Contrasted groups • Predictive validity • Convergent validity <p>Reference strategy/Criterion validity</p> <p>OR</p> <p>Systematic assessment of face validity of measure, which is the extent to which a measure appears to reflect that which it is supposed to measure “at face value.” Face validity for a CMS quality measure may be adequate if accomplished through a systematic and transparent process, by a panel of experts, such as the TEP, where formal rating of the validity is recorded and appropriately aggregated. The TEP should explicitly address whether measure scores provide an accurate reflection of quality, and whether they can be used to distinguish between good and poor quality.</p>	<p>Empirical evidence (using appropriate method and scope) of <u>invalidity for either data elements OR measure score</u>, i.e., statistical results outside of acceptable norms</p> <p>OR</p> <p>Systematic assessment of face validity of measure resulted in <u>lack of consensus</u> as to whether measure scores provide an accurate reflection of quality, and whether they can be used to distinguish between good and poor quality.</p> <p>OR</p> <p>Inappropriate method or scope of validity testing (including inadequate assessment of face validity)</p>

Summary Rating: Scientific Acceptability of Measure Properties

Pass: The measure rates **moderate to high on both** reliability **and** validity.
Fail: The measure **rates low** for one or both reliability **or** validity subcriteria.

eMeasure Evaluation Tool
(Evaluation criteria adapted from National Quality Forum (NQF) evaluation criteria)

Usability

Subcriterion	High	Moderate	Low
3a. Public Reporting	Testing demonstrates that information produced by the measure is meaningful, understandable, and useful for public reporting (e.g., systematic feedback from users, focus group, cognitive testing).	Formal testing has not been performed, but the measure is in widespread use and you think it is meaningful and understandable for public reporting (e.g., focus group, cognitive testing) OR <i>When measure is being rated during its initial development:</i> A rationale for how the measure performance results will be meaningful, understandable, and useful for public reporting.	The measure is not in use and has not been tested for usability; OR Testing demonstrates information produced by the measure is not meaningful , understandable, and useful for public reporting OR <i>When measure is being rated during its initial development:</i> A rationale for how the measure performance results will be meaningful, understandable, and useful for public reporting is not provided.
3b. Quality Improvement	Testing demonstrates that information produced by the measure is meaningful, understandable, and useful for quality improvement (e.g., systematic feedback from users, analysis of quality improvement initiatives).	Formal testing has not been performed but the measure is in widespread use and accepted to be meaningful and useful for quality improvement (e.g., quality improvement initiatives). OR <i>When measure is being rated during its initial development:</i> A rationale for how the measure performance results will be meaningful, understandable, and useful for quality improvement.	The measure is not in use and has not been tested for usability; OR Testing demonstrates information produced by the measure is not meaningful , understandable, and useful for public reporting OR <i>When measure is being rated during its initial development:</i> A rationale for how the measure performance results will be meaningful, understandable, and useful for quality improvement is not provided .

Summary Rating: Usability

Pass: The measure rates “Moderate” to “High” on **both** aspects usability

Fail: The measure rates “Low” for **one or both** aspects of usability

Feasibility

Subcriterion	High	Moderate	Low
4a. Byproduct of care (<i>clinical measures only</i>)	The required data elements are routinely generated concurrent with and as a byproduct of care processes during care delivery (e.g., BP reading, diagnosis).	The required data are based on information generated during care delivery; HOWEVER , trained coders or abstractors are required to use the data in computing the measure.	The required data are not generated during care delivery and are difficult to collect or require special surveys or protocols.
4b. Data collection strategy	The measure is in operational use and the data collection strategy (e.g., source, timing, frequency, sampling, patient confidentiality, etc.) has been implemented without difficulty.	The measure is not in operational use; HOWEVER testing demonstrates the data collection strategy can be implemented with minimal difficulty or additional resources.	The measure is not in operational use, AND Testing indicates the data collection strategy was difficult to implement and/or requires substantial additional resources.

eMeasure Evaluation Tool
 (Evaluation criteria adapted from National Quality Forum (NQF) evaluation criteria)

Summary Rating: Feasibility

High rating indicates: **Three or four** subcriteria are rated “**High**”.

Moderate rating indicates: “**Moderate**” or **mixed ratings**, with **no more than one** “**Low**” rating.

Low rating indicates: **Two or more** subcriteria are rated “**Low**”.

Comparison to Related and Competing Measures

Completely	Partially	Not Harmonized
The measure specifications are completely harmonized with related measures; the measure can be used at multiple levels or settings/data sources	The measure specifications are partially harmonized with related measures, HOWEVER the rationale justifies any differences; the measure can be used at one level or setting/data source	The measure specifications are not harmonized with related measures AND the rationale does not justify the differences

APPENDIX D: MEASURE EVALUATION REPORT

Measure Evaluation Report

Measure Name:
Measure Owner:
Measure Type:
Program:

Criteria	Rating	Comment
Importance:	High/Mod/Low	
1a. Impact		
1b. Performance Gap		
Summary Rating for Importance:	Pass/Fail	Pass: All of subcriteria are rated high. Fail: At least one of the subcriteria is <u>not</u> rated as high.
Scientific Acceptability of Measure Properties	High/Mod/Low	
2a. Reliability Testing		
2b. Validity Testing		
Summary Rating for Scientific Acceptability:	Pass/Fail	Pass: All of subcriteria are rated moderate to high. Fail: At least one of the subcriteria is rated as low.
Usability	High/Mod/Low	
3a. Useful for public reporting		
3a. Useful for quality improvement		
Summary Rating for Feasibility:	Pass/Fail	Pass: All of subcriteria are rated moderate to high. Fail: At least one of the subcriteria is rated as low.
Feasibility	High/Mod/Low	
4a. Data a byproduct of care		
4b. Data collection strategy		
Summary Rating for Usability:	Pass/Fail	Pass: All of subcriteria are rated moderate to high. Fail: At least one of the subcriteria is rated as low.
Comparison to Related and Competing Measures	Completely/Partially/Not Harmonized	Pass: Measure is rated as completely or partially harmonized. Fail: Measure is rated as not harmonized.

APPENDIX E: NEW MEASURE RECOMMENDATIONS STATEWIDE RATES BY QUARTER

Overview

Appendix E contains the preliminary statewide averages, trending results, and statistics for the six new nursing home measures recommended by HSAG. The measures and time periods analyzed are noted in Table 1. These results are preliminary and have not been risk adjusted.

Table 1—Measures and Time Period		
Measure		Time Period Analyzed
1	Percent of Low Risk Residents Who Lose Control of Their Bowel or Bladder (Long-Stay).	July 2011 – March 2012
2	Percent of Residents Who Have Depressive Symptoms (Long-Stay).	
3	Percent of Residents with a Urinary Tract Infection (Long-Stay).	
4	Percent of Residents Who Self-Report Moderate to Severe Pain (Short-Stay).	
5	Percent of Residents Who Self-Report Moderate to Severe Pain (Long-Stay).	
6	Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (Long-Stay).	

In order to provide meaningful results, a minimum threshold was applied in order to consider a facility to have a reportable rate (i.e., the facility had to meet a minimum denominator size). For the Long-Stay measures, the minimum threshold was set at 30. For the, Short-Stay measure the minimum threshold was set at 20. This methodology is consistent with Nursing Home Compare.

1. Percent of Low Risk Residents Who Lose Control of Their Bowel or Bladder (Long-Stay)

Table 2 displays the total number of facilities, the State average, the number of facilities worse than the average, and the number of facilities equal to or better than the State average for the Percent of Low Risk Residents Who Lose Control of Their Bowel or Bladder (Long-Stay) measure.

Table 2—Percent of Low Risk Residents Who Lose Control of Their Bowel or Bladder (Long-Stay): State Average				
Quarter by Year	Total Number of Facilities	State Average	Number of Facilities Worse than Average	Number of Facilities Equal to or Better than Average
Q3 2011	454	45%	53.96% n = 245	46.04% n = 209
Q4 2011	475	45%	53.47% n = 254	46.53% n = 221
Q1 2012	462	46%	53.25% n = 246	46.75% n = 216

Figure 1 shows the mean distribution rate for the Percent of Low Risk Residents Who Lose Control of Their Bowel or Bladder (Long-Stay) measure, a lower rate indicates better performance.

Figure 1: Percent of Low Risk Residents Who Lose Control of Their Bowel or Bladder (Long-Stay) Trend Analysis

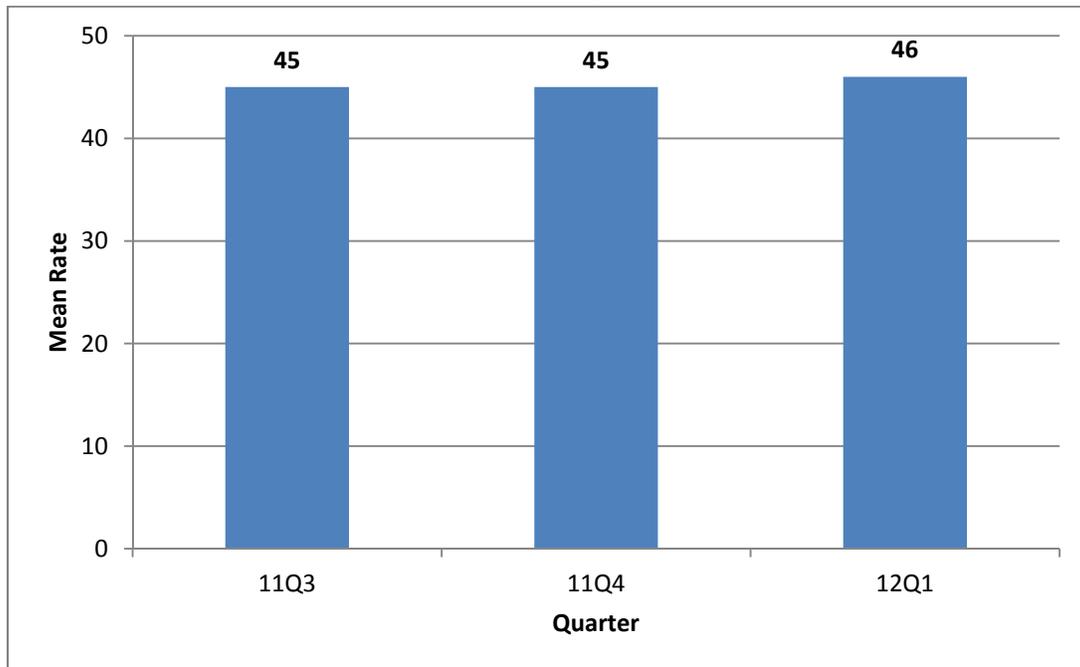


Table 3 shows the results of the data analysis for the Percent of Low Risk Residents Who Lose Control of Their Bowel or Bladder (Long-Stay) measure by quarter.

Table 3—Percent of Low Risk Residents Who Lose Control of Their Bowel or Bladder (Long-Stay) by Quarter									
Quarter by Year	Number of Facilities	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile	Mean	Minimum Rate	Maximum Rate
Q3 2011	454	67%	58%	48%	33%	20%	45%	0%	88%
Q4 2011	475	68%	58%	47%	33%	20%	45%	0%	88%
Q1 2012	462	68%	60%	48%	34%	23%	46%	0%	88%

The table above shows that the top 10 percent of nursing homes had rates of 23 percent or lower during the reported quarters, and 50 percent of nursing homes had rates of 48 percent or lower during the reported quarters for the Percent of Low Risk Residents Who Lose Control of Their Bowel or Bladder (Long-Stay) measure.

2. Percent of Residents Who Have Depressive Symptoms (Long-Stay)

Table 4 displays the total number of facilities, the State average, the number of facilities worse than the average, and the number of facilities equal to or better than the State average for the Percent of Residents Who Have Depressive Symptoms (Long-Stay) measure.

Table 4—Percent of Residents Who Have Depressive Symptoms (Long-Stay): State Average				
Quarter by Year	Total Number of Facilities	State Average	Number of Facilities Worse than Average	Number of Facilities Equal to or Better than Average
Q3 2011	1,022	3%	25.73% n = 263	74.27% n = 759
Q4 2011	1,014	3%	23.57% n = 239	76.43% n = 775
Q1 2012	1,013	3%	21.22% n = 215	78.78% n = 798

Figure 2 shows the mean distribution rate for the Percent of Residents Who Have Depressive Symptoms (Long-Stay) measure by quarter, a lower rate indicates better performance.

Figure 2: Percent of Residents Who have Depressive Symptoms (Long-Stay) Trend Analysis

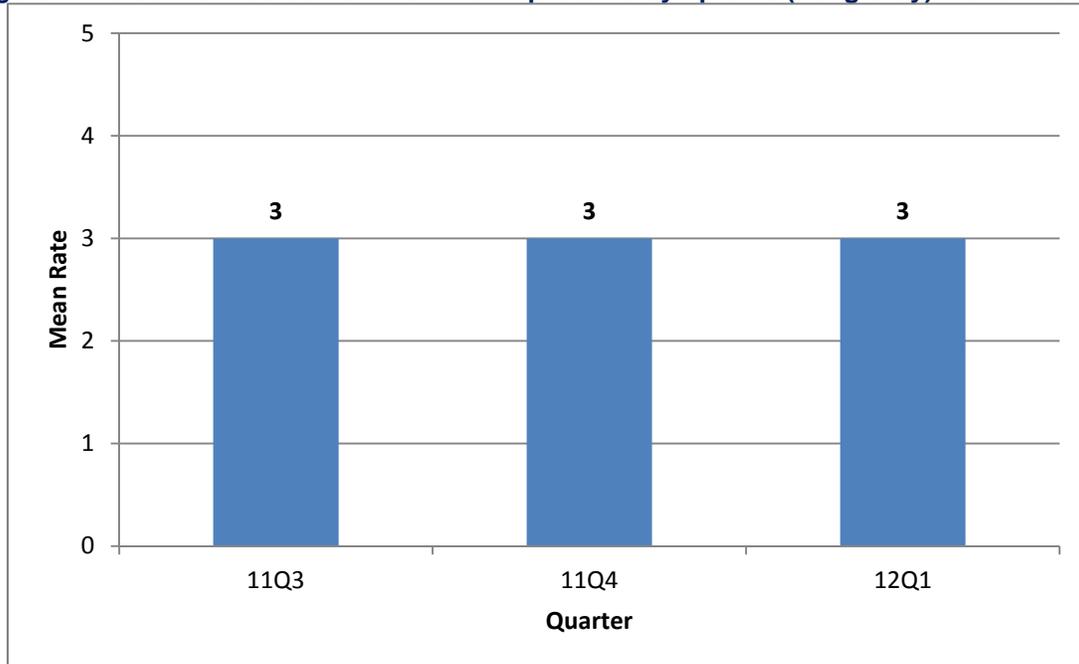


Table 5 shows the results of the data analysis for the Percent of Residents Who Have Depressive Symptoms (Long-Stay) measure by quarter.

Table 5—Percent of Residents Who Have Depressive Symptoms (Long-Stay) by Quarter									
Quarter by Year	Number of Facilities	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile	Mean	Minimum Rate	Maximum Rate
Q3 2011	1,022	8%	4%	0%	0%	0%	3%	0%	82%
Q4 2011	1,014	8%	3%	0%	0%	0%	3%	0%	74%
Q1 2012	1,013	9%	3%	0%	0%	0%	3%	0%	56%

This table shows that 50 percent of nursing homes had rates of 0 percent for the Percent of Residents Who Have Depressive Symptoms (Long-Stay) measure during the reported quarters.

3. Percent of Residents with a Urinary Tract Infection (Long-Stay)

Table 6 displays the total number of facilities, the State average, the number of facilities worse than the average, and the number of facilities equal to or better than the State average for the Percent of Residents with a Urinary Tract Infection (Long-Stay) measure.

Table 6—Percent of Residents with a Urinary Tract Infection (Long-Stay): State Average				
Quarter by Year	Total Number of Facilities	State Average	Number of Facilities Worse than Average	Number of Facilities Equal to or Better than Average
Q3 2011	1,025	7%	43.12% n = 442	56.88% n = 583
Q4 2011	1,021	7%	42.61% n = 435	57.39% n = 586
Q1 2012	1,020	7%	39.61% n = 404	60.39% n = 616

Figure 3 shows the mean distribution rate for the Percent of Residents with a Urinary Tract Infection (Long-Stay) measure by quarter, a lower rate indicates better performance.

Figure 3: Percent of Residents with a Urinary Tract Infection (Long-Stay) Trend Analysis

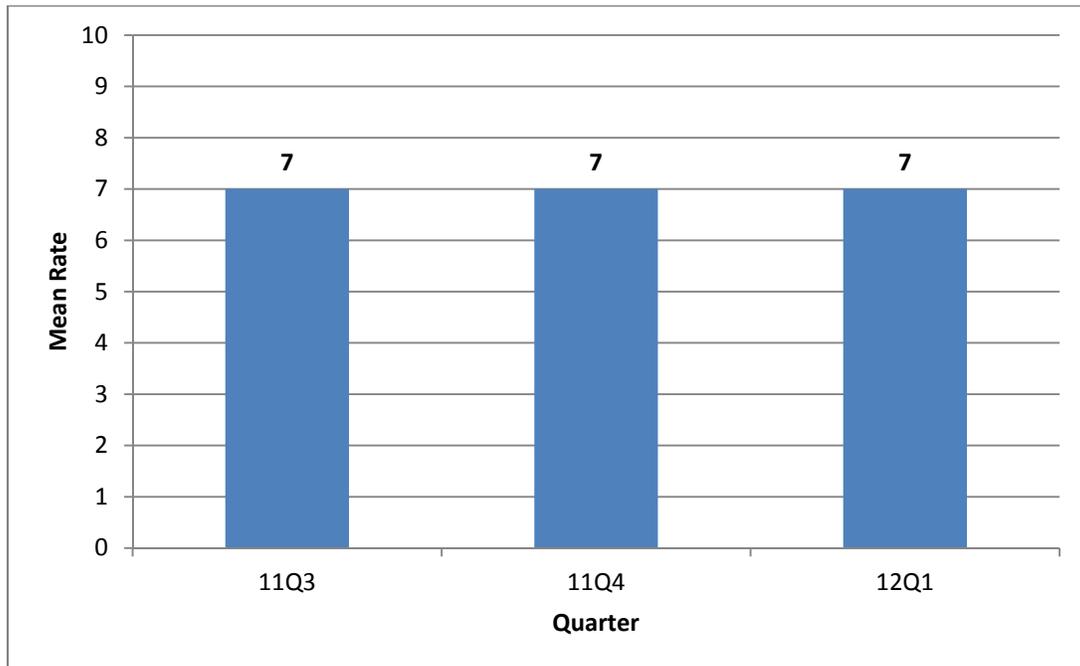


Table 7 shows the results of the data analysis for the Percent of Residents with a Urinary Tract Infection (Long-Stay) measure by quarter.

Table 7—Percent of Residents with a Urinary Tract Infection (Long-Stay) by Quarter									
Quarter by Year	Number of Facilities	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile	Mean	Minimum Rate	Maximum Rate
Q3 2011	1,025	14%	10%	7%	3%	1%	7%	0%	48%
Q4 2011	1,021	15%	10%	6%	3%	1%	7%	0%	47%
Q1 2012	1,020	15%	10%	6%	3%	1%	7%	0%	44%

The table shows the top 25 percent of nursing homes reported rates less than or equal to 3 percent during the reported quarters for the Percent of Residents with a Urinary Tract Infection (Long-Stay) measure.

4. Percent of Residents Who Self-Report Moderate to Severe Pain (Short-Stay)

Table 8 displays the total number of facilities, the State average, the number of facilities worse than the average, and the number of facilities equal to or better than the State average for the Percent of Residents Who Self-Report Moderate to Severe Pain (Short-Stay) measure.

Table 8—Percent of Residents Who Self-Report Moderate to Severe Pain (Short-Stay): State Average				
Quarter by Year	Total Number of Facilities	State Average	Number of Facilities Worse than Average	Number of Facilities Equal to or Better than Average
Q3 2011	891	24%	46.58% n = 415	53.42% n = 476
Q4 2011	894	23%	46.98% n = 420	53.02% n = 474
Q1 2012	913	22%	46.44% n = 424	53.56% n = 489

Figure 4 shows the mean distribution rate for the Percent of Residents Who Self-Report Moderate to Severe Pain (Short-Stay) measure by quarter, a lower rate indicates better performance.

Figure 4: Percent of Residents Who Self-Report Moderate to Severe Pain (Short-Stay) Trend Analysis

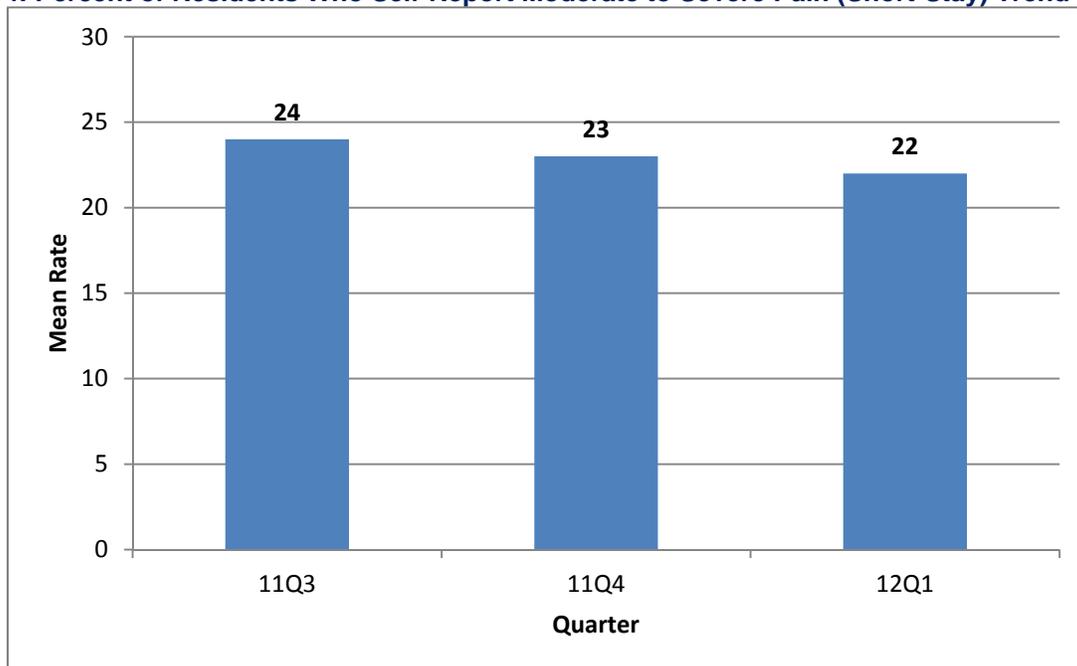


Table 9 shows the results of the data analysis for the Percent of Residents Who Self-Report Moderate to Severe Pain (Short-Stay) measure by quarter.

Table 9—Percent of Residents Who Self-Report Moderate to Severe Pain (Short-Stay) by Quarter									
Quarter by Year	Number of Facilities	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile	Mean	Minimum Rate	Maximum Rate
Q3 2011	891	40%	33%	23%	14%	7%	24%	0%	87%
Q4 2011	894	40%	32%	22%	14%	7%	23%	0%	89%
Q1 2012	913	40%	31%	21%	13%	5%	22%	0%	87%

The table above shows that the top 10 percent of nursing homes had rates of 7 percent or lower during the reported quarters for the Percent of Residents Who Self-Report Moderate to Severe Pain (Short-Stay) measure.

5. Percent of Residents Who Self-Report Moderate to Severe Pain (Long-Stay)

Table 10 displays the total number of facilities, the State average, the number of facilities worse than the average, and the number of facilities equal to or better than the State average for the Percent of Residents Who Self-Report Moderate to Severe Pain (Long-Stay) measure.

Table 10—Percent of Residents Who Self-Report Moderate to Severe Pain (Long-Stay): State Average				
Quarter by Year	Total Number of Facilities	State Average	Number of Facilities Worse than Average	Number of Facilities Equal to or Better than Average
Q3 2011	865	11%	40.35% n = 349	59.65% n = 516
Q4 2011	855	11%	38.25% n = 327	61.75% n = 528
Q1 2012	862	11%	37.01% n = 319	62.99% n = 543

Figure 5 shows the mean distribution rate for the Percent of Residents Who Self-Report Moderate to Severe Pain (Long-Stay) measure by quarter, a lower rate indicates better performance.

Figure 5: Percent of Residents Who Self-Report Moderate to Severe Pain (Long-Stay) Trend Analysis

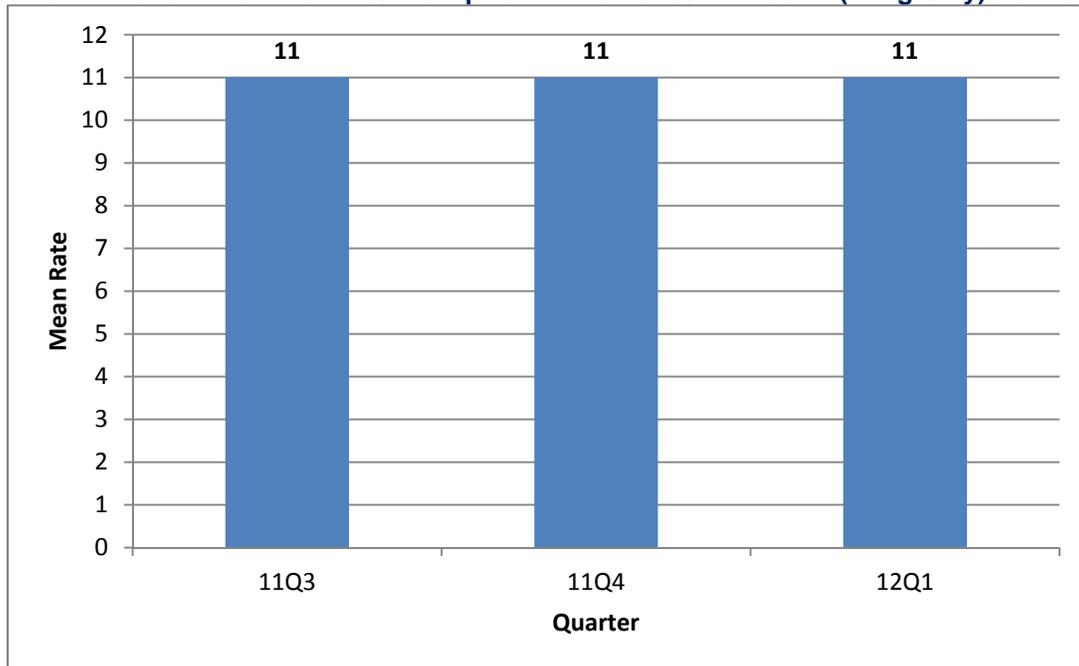


Table 11—Percent of Residents Who Self-Report Moderate to Severe Pain (Long-Stay) by Quarter

Quarter by Year	Number of Facilities	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile	Mean	Minimum Rate	Maximum Rate
Q3 2011	865	23%	16%	9%	4%	0%	11%	0%	53%
Q4 2011	855	23%	15%	9%	4%	1%	11%	0%	58%
Q1 2012	862	22%	15%	9%	4%	0%	11%	0%	51%

The table above shows that the top 25 percent of nursing homes had a rate of 4 percent or lower during the reported quarters for the Percent of Residents Who Self-Report Moderate to Severe Pain (Long-Stay) measure.

6. Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (Long-Stay)

Table 12 displays the total number of facilities, the State average, the number of facilities worse than the average, and the number of facilities equal to or better than the State average for the Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (Long-Stay) measure.

Table 12—Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (Long-Stay): State Average				
Quarter by Year	Total Number of Facilities	State Average	Number of Facilities Worse than Average	Number of Facilities Equal to or Better than Average
Q3 2011	889	14%	40.94% n = 364	59.06% n = 525
Q4 2011	887	14%	37.88% n = 336	62.12% n = 551
Q1 2012	878	14%	43.74% n = 384	56.26% n = 494

Figure 6 shows the mean distribution rate for the Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (Long-Stay) measure by quarter, a lower rate indicates better performance.

Figure 6: Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (Long-Stay) Trend Analysis

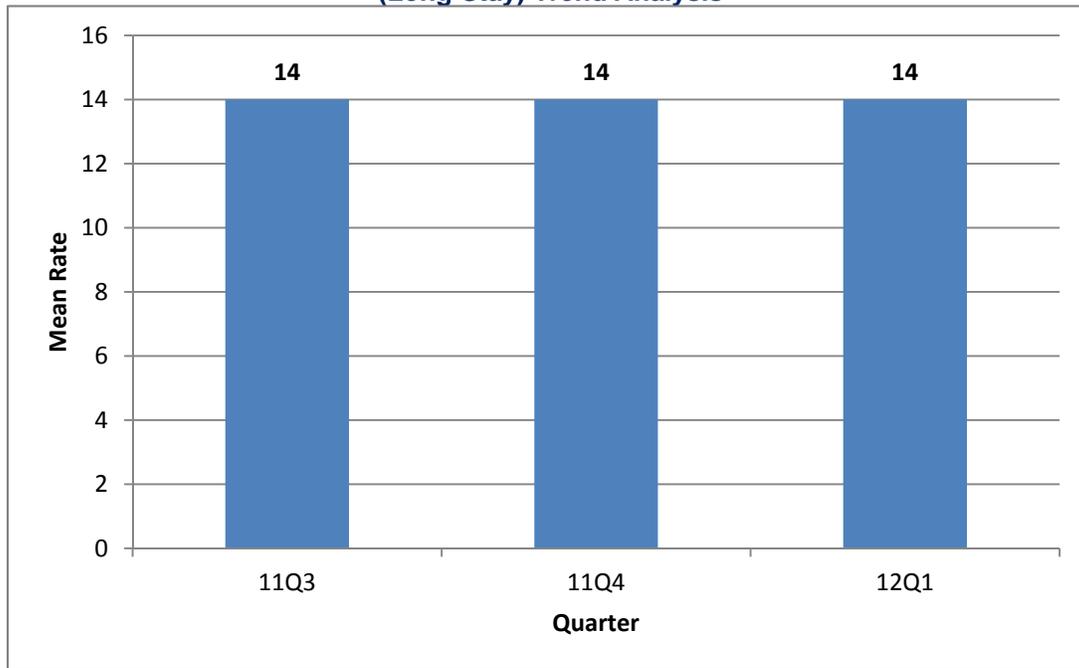


Table 13 shows the results of the data analysis for the Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (Long-Stay) measure by quarter.

Table 13—Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (Long-Stay) by Quarter									
Quarter by Year	Number of Facilities	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile	Mean	Minimum Rate	Maximum Rate
Q3 2011	889	25%	19%	12%	7%	3%	14%	0%	67%
Q4 2011	887	27%	19%	12%	7%	4%	14%	0%	73%
Q1 2012	878	27%	19%	13%	8%	3%	14%	0%	77%

The table shows that the top 25 percent of nursing homes reported rates at or below 8 percent during the reported quarters, and 50 percent of nursing homes had rates at or below 13 percent for the Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (Long-Stay) measure.