



Measure Information

This document contains the information submitted by measure developers/stewards, but is organized according to NQF's measure evaluation criteria and process. The item numbers refer to those in the submission form but may be in a slightly different order here. In general, the item numbers also reference the related criteria (e.g., item 1b.1 relates to sub criterion 1b).

Brief Measure Information

NQF #: 0674

Corresponding Measures:

De.2. Measure Title: Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay)

Co.1.1. Measure Steward: Center for Medicare & Medicaid Services

De.3. Brief Description of Measure: This measure reports the percentage of long-stay residents in a nursing home who have experienced one or more falls resulting in major injury (defined as bone fractures, joint dislocations, closed head injuries with altered consciousness, or subdural hematoma) reported in the look-back period no more than 275 days prior to the target assessment. The long stay nursing home population is defined as residents who have received 101 or more cumulative days of nursing home care by the end of the target assessment period. This measure is based on data obtained through the Minimum Data Set (MDS) 3.0 OBRA, PPS, and/or discharge assessments during the selected quarter(s).

1b.1. Developer Rationale: This outcome-based quality measure reports the percentage of long-stay nursing home residents who have experienced one or more falls resulting in major injury, which include bone fractures, joint dislocations, and closed-head injuries. Injurious falls are important to monitor in the nursing home population because of their impacts on health outcomes, as research has demonstrated injurious falls are the leading causes of disability and death for nursing home residents. Falls with major injury also impact resident quality of life by introducing new functional limitations and psychosocial distress, while potentially influencing providers to increase the use of unwanted physical or chemical restraints. Studies have shown that risk for falling is associated with a variety of resident characteristics, including but not limited to, increasing age, being female, and cognitive decline. Falls are also associated with inappropriate or changing prescriptions. The capacity of nursing homes to provide residents appropriate living accommodations/amenities and sufficient support by appropriately qualified staff around-the-clock to serve the medical needs of residents can mitigate fall risks and prevent or reduce falls.

S.4. Numerator Statement: The numerator is the number of long-stay residents with one or more look-back scan assessments that indicate one or more falls that resulted in major injury.

S.6. Denominator Statement: The denominator consists of all long-stay nursing home residents with one or more look-back scan assessments except those who meet the exclusion criteria.

S.8. Denominator Exclusions: A resident is excluded from the denominator of this quality measure if all look-back scan assessments indicate that data is missing from the data element assessing falls resulting in major injury during the look-back period preceding the target assessment.

De.1. Measure Type: Outcome

S.17. Data Source: Assessment Data

S.20. Level of Analysis: Facility

IF Endorsement Maintenance – Original Endorsement Date: Mar 03, 2011 **Most Recent Endorsement Date:** Dec 09, 2015

IF this measure is included in a composite, NQF Composite#/title:

IF this measure is paired/grouped, NQF#/title:

De.4. IF PAIRED/GROUPED, what is the reason this measure must be reported with other measures to appropriately interpret results? This measure is not paired/grouped.

1. Evidence, Performance Gap, Priority – Importance to Measure and Report

Extent to which the specific measure focus is evidence-based, important to making significant gains in healthcare quality, and improving health outcomes for a specific high-priority (high-impact) aspect of healthcare where there is variation in or overall less-than-optimal performance. ***Measures must be judged to meet all sub criteria to pass this criterion and be evaluated against the remaining criteria.***

1a. Evidence to Support the Measure Focus – See attached Evidence Submission Form

[NQF-0674-Evidence-Form-20210408-508.docx](#)

1a.1 For Maintenance of Endorsement: Is there new evidence about the measure since the last update/submission?

Do not remove any existing information. If there have been any changes to evidence, the Committee will consider the new evidence. Please use the most current version of the evidence attachment (v7.1). Please use red font to indicate updated evidence.

Yes

1b. Performance Gap

Demonstration of quality problems and opportunity for improvement, i.e., data demonstrating:

- considerable variation, or overall less-than-optimal performance, in the quality of care across providers; and/or
- Disparities in care across population groups.

1b.1. Briefly explain the rationale for this measure (e.g., how the measure will improve the quality of care, the benefits or improvements in quality envisioned by use of this measure)

If a COMPOSITE (e.g., combination of component measure scores, all-or-none, any-or-none), SKIP this question and answer the composite questions.

This outcome-based quality measure reports the percentage of long-stay nursing home residents who have experienced one or more falls resulting in major injury, which include bone fractures, joint dislocations, and closed-head injuries. Injurious falls are important to monitor in the nursing home population because of their impacts on health outcomes, as research has demonstrated injurious falls are the leading causes of disability and death for nursing home residents. Falls with major injury also impact resident quality of life by introducing new functional limitations and psychosocial distress, while potentially influencing providers to increase the use of unwanted physical or chemical restraints. Studies have shown that risk for falling is associated with a variety of resident characteristics, including but not limited to, increasing age, being female, and cognitive decline. Falls are also associated with inappropriate or changing prescriptions. The capacity of nursing homes to provide residents appropriate living accommodations/amenities and sufficient support by appropriately qualified staff around-the-clock to serve the medical needs of residents can mitigate fall risks and prevent or reduce falls.

1b.2. Provide performance scores on the measure as specified (current and over time) at the specified level of analysis. (This is required for maintenance of endorsement. Include mean, std dev, min, max, interquartile range, scores by decile. Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities include.) This information also will be used to address the sub-criterion on improvement (4b1) under Usability and Use.

Current performance: Table 6 of the NQF Testing Form describes the national facility score distribution for Percent of Residents Experiencing One or More Falls with Major Injury. The facility-level mean score for this measure in Quarter 2 (Q2) of 2019 was 3.4% and the median score was 2.9%. The standard deviation was 2.9%, the minimum was 0%, and score at the 90th percentile was 7.1%. The interquartile range for this measure was 3.6%, indicating some room for improvement in this measure. Of the facilities with adequate sample size to report, 19.0% had perfect scores of 0. This analysis is restricted to facilities that had at least 20 residents in the denominator, the minimum denominator threshold for public reporting. In 2019Q2, there were 14,286 facilities (93.9%) and 1,012,706 residents (98.0%) that met the denominator inclusion criteria

n (Facilities): 14,286

k (Residents): 1,012,076

Mean score: 3.4%

Std dev.: 2.9%

10th percentile: 0.0%

25th percentile: 1.3%

50th percentile: 2.9%

75th percentile: 4.9%

90th percentile: 7.1%

Interquartile range: 3.6%.

% of facilities with "perfect scores": 19.0%

Performance Over Time: The national facility-level mean and median scores for the Percent of Residents Experiencing One or More Falls with Major Injury demonstrate stability from quarter to quarter (Figure 1 of NQF Testing Form). Overall, the national facility-level mean and median scores have decreased marginally and indicate a slight improvement in performance over time. The mean score for this measure was 3.5% in quarter 1 of 2017 and the median score was 3.0%. In Q2 2019, the mean and median were 3.4% and 2.9%, respectively. (Data Source: Data are drawn from all United States Nursing Homes with Medicare certified beds and a minimum of 20 long-stay residents in their denominator in each quarter.)

1b.3. If no or limited performance data on the measure as specified is reported in 1b2, then provide a summary of data from the literature that indicates opportunity for improvement or overall less than optimal performance on the specific focus of measurement.

This is not applicable (data are available and described in 1b.2).

1b.4. Provide disparities data from the measure as specified (current and over time) by population group, e.g., by race/ethnicity, gender, age, insurance status, socioeconomic status, and/or disability. (*This is required for maintenance of endorsement. Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included.*) For measures that show high levels of performance, i.e., "topped out", disparities data may demonstrate an opportunity for improvement/gap in care for certain sub-populations. This information also will be used to address the sub-criterion on improvement (4b1) under Usability and Use.

Age

To examine whether facilities with higher percentages of residents age 85 or older have different performance scores for falls with major injury, analyses were completed comparing the performance of facilities based on their percentage of residents aged 85 or older and residents below the age of 85. First, the percentage of residents experiencing one or more falls with major injury was stratified by age. Residents aged 85 or older represented the highest mean (4.1%) followed by residents below the age of 85 (2.6%). Next, a 2-way chi-squared test for statistical dependence was run that assessed the association between quality measure score and age. The results were significant ($p < .0001$) indicating that there is a statistically significant relationship between age and QM score for the measure. The results suggested that residents aged 85 years or older are at higher risk for experiencing falls with major injury than residents less than 85 years of age.

Race

To examine whether facilities with higher percentages of non-White residents have different performance scores for falls with major injury, analyses were completed comparing the performance of facilities based on their percentage of White only and non-White residents. First, the percentage of residents experiencing one or more falls with major injury was stratified by racial identification. American Indian/Alaska Native residents represented the highest mean (4.14%), followed by White residents (3.73%), Hispanic or Latino residents (2.45%), and Black or African American Residents (1.25%). Next a 2-way chi-squared test for statistical dependence was run that assessed the association between quality measure score and race/ethnicity. The results were significant ($p < .0001$) indicating that there is a statistically significant relationship between racial composition and QM score for the measure. The results suggested that the White only population (3.73%) is at higher risk for experiencing falls with major injury than the non-White only population (1.8%).

Socioeconomic status

To examine whether facilities with higher percentages of Medicaid-enrolled residents have different performance scores for falls with major injury, analyses were completed comparing the performance of facilities based on their percentage of Medicaid-enrolled residents and residents not enrolled in Medicaid. First, the percentage of residents experiencing one or more falls with major injury was stratified by Medicaid enrollment. Medicaid-enrolled residents represented the highest mean (3.24%), followed by residents not enrolled in Medicaid (3.13%), indicating there are slightly more Medicaid-enrolled residents that experience falls with major injury than residents not enrolled in Medicaid. Next a 2-way chi-squared test for statistical dependence was run that assessed the association between quality measure score and Medicaid enrollment. The results were significant ($p < .0001$) indicating that there is a statistically significant relationship between Medicaid enrollment and QM score for this measure. The results suggested that the non-Medicaid population (4.04%) is at higher risk for experiencing falls with major injury than the Medicaid population (3.07%), indicating there is a relationship between socioeconomic status and falls with major injury among long-stay residents.

SOURCE: Acumen analysis of Q2 2019 MDS 3.0 data

1b.5. If no or limited data on disparities from the measure as specified is reported in 1b.4, then provide a summary of data from the literature that addresses disparities in care on the specific focus of measurement. Include citations. Not necessary if performance data provided in 1b.4

This is not applicable.

2. Reliability and Validity—Scientific Acceptability of Measure Properties

Extent to which the measure, as specified, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. **Measures must be judged to meet the sub criteria for both reliability and validity to pass this criterion and be evaluated against the remaining criteria.**

2a.1. Specifications The measure is well defined and precisely specified so it can be implemented consistently within and across organizations and allows for comparability. eMeasures should be specified in the Health Quality Measures Format (HQMF) and the Quality Data Model (QDM).

De.5. Subject/Topic Area (check all the areas that apply):

De.6. Non-Condition Specific(check all the areas that apply):

Safety, Safety : Complications

De.7. Target Population Category (Check all the populations for which the measure is specified and tested if any):

Elderly, Populations at Risk, Populations at Risk : Individuals with multiple chronic conditions

S.1. Measure-specific Web Page (Provide a URL link to a web page specific for this measure that contains current detailed specifications including code lists, risk model details, and supplemental materials. Do not enter a URL linking to a home page or to general information.)

<http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/NHQIQualityMeasures.html>;

please see “MDS-3.0-QM-User’s-Manual-v14.0.pdf” in the “Users-Manuals-Updated-10-19-2020.zip” zipped folder in the Downloads s

S.2a. If this is an eMeasure, HQMF specifications must be attached. Attach the zipped output from the eMeasure authoring tool (MAT) - if the MAT was not used, contact staff. (Use the specification fields in this online form for the plain-language description of the specifications)

This is not an eMeasure Attachment:

S.2b. Data Dictionary, Code Table, or Value Sets (and risk model codes and coefficients when applicable) must be attached. (Excel or csv file in the suggested format preferred - if not, contact staff)

No data dictionary Attachment:

S.2c. Is this an instrument-based measure (i.e., data collected via instruments, surveys, tools, questionnaires, scales, etc.)? Attach copy of instrument if available.

Attachment Attachment: MDS-3.0-RAI-Manual-v1.17.1_October_2019.pdf

S.2d. Is this an instrument-based measure (i.e., data collected via instruments, surveys, tools, questionnaires, scales, etc.)? Attach copy of instrument if available.

Clinician

S.3.1. For maintenance of endorsement: Are there changes to the specifications since the last updates/submission. If yes, update the specifications for S1-2 and S4-22 and explain reasons for the changes in S3.2.

No

S.3.2. For maintenance of endorsement, please briefly describe any important changes to the measure specifications since last

measure update and explain the reasons.

There have been no changes to the measure specifications since the last measure update.

S.4. Numerator Statement (Brief, narrative description of the measure focus or what is being measured about the target population, i.e., cases from the target population with the target process, condition, event, or outcome) DO NOT include the rationale for the measure.

IF an OUTCOME MEASURE, state the outcome being measured. Calculation of the risk-adjusted outcome should be described in the calculation algorithm (S.14).

The numerator is the number of long-stay residents with one or more look-back scan assessments that indicate one or more falls that resulted in major injury.

S.5. Numerator Details (All information required to identify and calculate the cases from the target population with the target process, condition, event, or outcome such as definitions, time period for data collection, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b)

IF an OUTCOME MEASURE, describe how the observed outcome is identified/counted. Calculation of the risk-adjusted outcome should be described in the calculation algorithm (S.14).

The numerator is the number of long-stay residents with one or more look-back scan assessments that indicate one or more falls that resulted in major injury (J1900C = [01, 02]). The selection period for the look-back scan consists of all qualifying Reason for Assessments (RFAs) (A0310A = [01, 02, 03, 04, 05, 06] or A0310B = [01] or A0310F = [10, 11]) within the current episode that have target dates no more than 275 days prior to the target assessment. A 275-day time period is used to include up to three quarterly OBRA assessments. The earliest of these assessments would have a look-back period of up to 93 days, which would cover a total of about one year. The look-back scan includes the target assessment and all qualifying earlier assessments in the scan. An earlier assessment should only be included in the scan if it meets all of the following conditions: (a) it is contained within the resident's episode, (b) it has a qualifying RFA, (c) its target date is on or before the target date for the target assessment, and (d) its target date is no more than 275 days prior to the target date of the target assessment. The Centers for Medicare & Medicaid Services (CMS) then scans the target assessment and qualifying earlier assessments to calculate the measure.

Residents are counted in the numerator if they are long-stay residents, defined as residents who have had 101 or more cumulative days of nursing home care by the end of the target period. Residents who return to the nursing home following a hospital discharge will not have their cumulative days in facility reset to zero.

An episode is defined as a period of time spanning one or more stays. An episode begins with an admission and ends with either (a) a discharge, or (b) the end of the target period, whichever comes first. Data are publicly reported on the Nursing Home Compare website and are weighted on an average of four target periods.

S.6. Denominator Statement (Brief, narrative description of the target population being measured)

The denominator consists of all long-stay nursing home residents with one or more look-back scan assessments except those who meet the exclusion criteria.

S.7. Denominator Details (All information required to identify and calculate the target population/denominator such as definitions, time period for data collection, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b.)

IF an OUTCOME MEASURE, describe how the target population is identified. Calculation of the risk-adjusted outcome should be described in the calculation algorithm (S.14).

Residents are counted in the denominator if they are long-stay residents with one or more look-back scan assessments no more than 275 days prior to the target assessment, except those with exclusions (specified in S.8 and S.9). Long-stay residents are defined as residents who have had 101 or more cumulative days of nursing home care by the end of the target assessment period. Residents who return to the nursing home following a hospital discharge will not have their cumulative days in facility reset to zero. Target assessments may be an OBRA admission, quarterly, annual or significant change/correction assessment (A0310A = [01, 02, 03, 04, 05, 06]); or PPS 5-day assessments (A0310B = [01]); or discharge assessment with or without anticipated return (A0310F = [10, 11]).

A description of the time period for the data included in this measure is provided in S.5 above.

S.8. Denominator Exclusions (Brief narrative description of exclusions from the target population)

A resident is excluded from the denominator of this quality measure if all look-back scan assessments indicate that data is missing from the data element assessing falls resulting in major injury during the look-back period preceding the target assessment.

S.9. Denominator Exclusion Details (All information required to identify and calculate exclusions from the denominator such as definitions, time period for data collection, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b.)

A resident is excluded from the denominator if the following is true for all look-back scan assessments:

1. The number of falls with major injury was not coded (J1900C = [-]).

If the facility sample includes fewer than 20 residents after all other resident-level exclusions are applied, then the facility is suppressed from public reporting because of small sample size.

S.10. Stratification Information (Provide all information required to stratify the measure results, if necessary, including the stratification variables, definitions, specific data collection items/responses, code/value sets, and the risk-model covariates and coefficients for the clinically-adjusted version of the measure when appropriate – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format with at S.2b.)

This is not applicable because this measure is not stratified.

S.11. Risk Adjustment Type (Select type. Provide specifications for risk stratification in measure testing attachment)

No risk adjustment or risk stratification

If other:

S.12. Type of score:

Rate/proportion

If other:

S.13. Interpretation of Score (Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score)

Better quality = Lower score

S.14. Calculation Algorithm/Measure Logic (Diagram or describe the calculation of the measure score as an ordered sequence of steps including identifying the target population; exclusions; cases meeting the target process, condition, event, or outcome; time period for data, aggregating data; risk adjustment; etc.)

Step 1: Identify the total number of long-stay residents with a qualifying target assessment (OBRA, PPS, or discharge), one or more look-back scan assessments, and who do not meet the exclusion criteria (i.e., if J1900C = [-] on the target assessment or other qualifying assessments).

Step 2: Starting with the set of residents identified in Step 1, determine the total number of long-stay residents with one or more look-back scan assessments that indicate one or more falls that resulted in major injury (J1900C = [1, 2]).

Step 3: Divide the results of step 2 by the results of step 1.

Step 4: Multiply the result of step 3 by 100 to obtain a percent value.

A description of the time period for the data included in this measure is provided in S.5 above.

S.15. Sampling (If measure is based on a sample, provide instructions for obtaining the sample and guidance on minimum sample size.)

If an instrument-based performance measure (e.g., PRO-PM), identify whether (and how) proxy responses are allowed.

This is not applicable because the data are not estimated based on samples. Rather, the data include all nursing home residents nationally who do not meet the exclusion criteria.

S.16. Survey/Patient-reported data (If measure is based on a survey or instrument, provide instructions for data collection and guidance on minimum response rate.)

Specify calculation of response rates to be reported with performance measure results.

This is not applicable because this measure is not based on survey/patient-reported data.

S.17. Data Source (Check *ONLY* the sources for which the measure is SPECIFIED AND TESTED).

If other, please describe in S.18.

Assessment Data

S.18. Data Source or Collection Instrument (Identify the specific data source/data collection instrument (e.g. name of database, clinical registry, collection instrument, etc., and describe how data are collected.)

If instrument-based, identify the specific instrument(s) and standard methods, modes, and languages of administration.

The data source is the Minimum Data Set (MDS) 3.0, and the collection instrument is the Resident Assessment Instrument (RAI). For MDS 3.0 item sets used to calculate the quality measure, please see: <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/NHQIMDS30TechnicalInformation>.

S.19. Data Source or Collection Instrument (available at measure-specific Web page URL identified in S.1 OR in attached appendix at A.1)

Available at measure-specific web page URL identified in S.1

S.20. Level of Analysis (Check *ONLY* the levels of analysis for which the measure is SPECIFIED AND TESTED)

Facility

S.21. Care Setting (Check *ONLY* the settings for which the measure is SPECIFIED AND TESTED)

Post-Acute Care

If other:

S.22. COMPOSITE Performance Measure - Additional Specifications (Use this section as needed for aggregation and weighting rules, or calculation of individual performance measures if not individually endorsed.)

This is not applicable because this is not a composite performance measure.

2. Validity – See attached Measure Testing Submission Form

[NQF-0674-Testing-20210408-508.docx](#)

2.1 For maintenance of endorsement

Reliability testing: If testing of reliability of the measure score was not presented in prior submission(s), has reliability testing of the measure score been conducted? If yes, please provide results in the Testing attachment. Please use the most current version of the testing attachment (v7.1). Include information on all testing conducted (prior testing as well as any new testing); use red font to indicate updated testing.

Yes

2.2 For maintenance of endorsement

Has additional empirical validity testing of the measure score been conducted? If yes, please provide results in the Testing attachment. Please use the most current version of the testing attachment (v7.1). Include information on all testing conducted (prior testing as well as any new testing); use red font to indicate updated testing.

Yes

2.3 For maintenance of endorsement

Risk adjustment: For outcome, resource use, cost, and some process measures, risk-adjustment that includes social risk factors is not prohibited at present. Please update sections 1.8, 2a2, 2b1, 2b4.3 and 2b5 in the Testing attachment and S.140 and S.11 in the online submission form. NOTE: These sections must be updated even if social risk factors are not included in the risk-adjustment strategy. You MUST use the most current version of the Testing Attachment (v7.1) -- older versions of the form will not have all required questions.

No - This measure is not risk-adjusted

3. Feasibility

Extent to which the specifications including measure logic, require data that are readily available or could be captured without undue burden and can be implemented for performance measurement.

3a. Byproduct of Care Processes

For clinical measures, the required data elements are routinely generated and used during care delivery (e.g., blood pressure, lab test, diagnosis, medication order).

3a.1. Data Elements Generated as Byproduct of Care Processes.

Generated or collected by and used by healthcare personnel during the provision of care (e.g., blood pressure, lab value, diagnosis, depression score)

If other:

3b. Electronic Sources

The required data elements are available in electronic health records or other electronic sources. If the required data are not in electronic health records or existing electronic sources, a credible, near-term path to electronic collection is specified.

3b.1. To what extent are the specified data elements available electronically in defined fields (i.e., data elements that are needed to compute the performance measure score are in defined, computer-readable fields) Update this field for **maintenance of endorsement**.

ALL data elements are in defined fields in electronic clinical data (e.g., clinical registry, nursing home MDS, home health OASIS)

3b.2. If ALL the data elements needed to compute the performance measure score are not from electronic sources, specify a credible, near-term path to electronic capture, OR provide a rationale for using other than electronic sources. For **maintenance of endorsement**, if this measure is not an eMeasure (eCQM), please describe any efforts to develop an eMeasure (eCQM).

3b.3. If this is an eMeasure, provide a summary of the feasibility assessment in an attached file or make available at a measure-specific URL. Please also complete and attach the NQF Feasibility Score Card.

Attachment:

3c. Data Collection Strategy

Demonstration that the data collection strategy (e.g., source, timing, frequency, sampling, patient confidentiality, costs associated with fees/licensing of proprietary measures) can be implemented (e.g., already in operational use, or testing demonstrates that it is ready to put into operational use). For eMeasures, a feasibility assessment addresses the data elements and measure logic and demonstrates the eMeasure can be implemented or feasibility concerns can be adequately addressed.

3c.1. Required for maintenance of endorsement. Describe difficulties (as a result of testing and/or operational use of the measure) regarding data collection, availability of data, missing data, timing and frequency of data collection, sampling, patient confidentiality, time and cost of data collection, other feasibility/implementation issues.

IF instrument-based, consider implications for both individuals providing data (patients, service recipients, respondents) and those whose performance is being measured.

The general data collection method for the MDS 3.0 is currently in operational use and mandatory for all Medicare/Medicaid certified nursing facilities.

3c.2. Describe any fees, licensing, or other requirements to use any aspect of the measure as specified (e.g., value/code set, risk model, programming code, algorithm).

This is not applicable.

4. Usability and Use

Extent to which potential audiences (e.g., consumers, purchasers, providers, policy makers) are using or could use performance results for both accountability and performance improvement to achieve the goal of high-quality, efficient healthcare for individuals or populations.

4a. Accountability and Transparency

Performance results are used in at least one accountability application within three years after initial endorsement and are publicly reported within six years after initial endorsement (or the data on performance results are available). If not in use at the time of initial endorsement, then a credible plan for implementation within the specified timeframes is provided.

4.1. Current and Planned Use

NQF-endorsed measures are expected to be used in at least one accountability application within 3 years and publicly reported within 6 years of initial endorsement in addition to performance improvement.

Specific Plan for Use	Current Use (for current use provide URL)
	<p>Public Reporting Care Compare https://www.medicare.gov/care-compare/ Provider Data Catalog https://data.cms.gov/provider-data/ Care Compare https://www.medicare.gov/care-compare/ Provider Data Catalog https://data.cms.gov/provider-data/</p> <p>Quality Improvement (external benchmarking to organizations) Certification And Survey Provider Enhanced Reports (CASPER) https://www.qtso.com/providernh.html</p> <p>Quality Improvement (Internal to the specific organization) Certification And Survey Provider Enhanced Reports (CASPER) https://www.qtso.com/providernh.html</p>

4a1.1 For each CURRENT use, checked above (update for maintenance of endorsement), provide:

- Name of program and sponsor
- Purpose
- Geographic area and number and percentage of accountable entities and patients included
- Level of measurement and setting

Public Reporting:

- Program and sponsor: Care Compare and Provider Data Catalog/Centers for Medicare and Medicaid
- Purpose: Consumer information
- Geographic area and number and percentage of accountable entities and patients included: All United States Nursing Homes with Medicare-eligible long-stay residents. In quarter 2 of 2019 there were 15,215 eligible facilities and 1,033,796 residents with target assessments, and 14,286 facilities (93.9%) had sufficient sample size (20 or more long-stay residents included in the denominator) to report on this measure, and 1,012,706 residents (98.0%) were included in the calculation of this measure. Four individual quarter scores are publicly reported on Provider Data Catalog. To enhance measurement stability and reliability beyond a one-quarter measure, a four-quarter average version of the measure is publicly reported as part of the Five-Star Quality Rating System through Care Compare and Provider Data Catalog. Five-Star is a rating system CMS created to help consumers, families and care givers compare nursing homes more easily.

Quality Improvement with Benchmarking (external benchmarking to multiple organizations):

- Program and sponsor: Certification and Survey Provider Enhanced Reports (CASPER)/Centers for Medicare and Medicaid
- Purpose: Quality improvement
- Geographic area and number and percentage of accountable entities and patients included: All United States Medicare/Medicaid certified Nursing Homes with eligible long-stay residents regardless of denominator sample size. In quarter 2 of 2019 there were 15,215 eligible facilities and 1,033,796 residents with target assessments.

Quality Improvement (internal to the specific organization):

- Program and sponsor: Certification and Survey Provider Enhanced Reports (CASPER)/Centers for Medicare and Medicaid
- Purpose: Quality improvement
- Geographic area and number and percentage of accountable entities and patients included: All United States Medicare/Medicaid certified Nursing Homes with eligible long-stay residents regardless of denominator sample size. In quarter 2 of 2019 there were 15,215 eligible facilities and 1,033,796 residents with target assessments.

4a1.2. If not currently publicly reported OR used in at least one other accountability application (e.g., payment program,

certification, licensing) what are the reasons? (e.g., Do policies or actions of the developer/steward or accountable entities restrict access to performance results or impede implementation?)

This is not applicable; this measure is publicly reported.

4a1.3. If not currently publicly reported OR used in at least one other accountability application, provide a credible plan for implementation within the expected timeframes -- any accountability application within 3 years and publicly reported within 6 years of initial endorsement. (Credible plan includes the specific program, purpose, intended audience, and timeline for implementing the measure within the specified timeframes. A plan for accountability applications addresses mechanisms for data aggregation and reporting.)

This is not applicable; this measure is publicly reported.

4a2.1.1. Describe how performance results, data, and assistance with interpretation have been provided to those being measured or other users during development or implementation.

How many and which types of measured entities and/or others were included? If only a sample of measured entities were included, describe the full population and how the sample was selected.

This quality measure (NQF #0674, Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay)) is part of the Nursing Home Quality Initiative (NHQI). Information on this measure is available to both nursing home providers and to the public.

All United States Medicare and/or Medicaid certified nursing home providers may view their performance results for this and other NHQI measures via the Certification and Survey Provider Enhanced Reports (CASPER) system. These CASPER MDS 3.0 QM reports are intended to provide nursing home providers with feedback on their quality measure scores, helping them to improve the quality of care delivered to their residents. CASPER MDS 3.0 reports also include Resident-Level Quality Measure Reports, which allow providers to identify the residents that trigger a particular quality measure (by scanning a column of interest and looking for the residents with an "X") and to identify residents who trigger multiple quality measures. Providers can use this information to target residents for quality improvement activities. Quality measure reports are also available to state surveyors and facility staff through the CASPER reporting system.

Consumers, including current and prospective nursing home residents and their families/caregivers, may access nursing home performance scores on this quality measure via the Care Compare website (<https://www.medicare.gov/care-compare/?providerType=NursingHome>) or the Provider Data Catalog (<https://data.cms.gov/provider-data/>). The Care Compare site reports the four-quarter average, while the Provider Data Catalog site reports the one-quarter version of the measure alongside the four-quarter average.

CMS also publishes composite quality ratings on Care Compare via the Five-Star Rating System. Five-Star features an overall quality rating of one to five stars based on nursing home performance on three domains, each of which has its own rating. The four quarter version of this quality measure (NQF #0674, Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay)) is one of the clinical measures that contribute to the rating of the Quality Measures domain of Five-Star. The Five-Star program requires the measure denominator to include at least 20 residents' assessments across four quarters of data.

Further, providers have an opportunity to review their performance prior to public reporting on the Nursing Home Compare website via Provider Preview Reports, also available through the CASPER system. These reports allow providers to view their quality measure scores for each NHQI measure, along with state and national averages for comparison, to identify potential errors in data submission or other information and request an update. These reports also allow providers to view their Five-Star rating. Detailed instructions on how to view and interpret reports, including an explanation of differences between the quality measure reports and publicly reported information, are provided in the CASPER Reporting MDS Provider Users Guide, Section 11, which can be found at the following website: https://qtso.cms.gov/system/files/qtso/cspr_sec11_mds_prvdr_0.pdf

4a2.1.2. Describe the process(es) involved, including when/how often results were provided, what data were provided, what educational/explanatory efforts were made, etc.

The CASPER reports are available to providers on-demand with quality measure data updated monthly. Care Compare reports the rolling average of four quarters for the quality measure, comparing each nursing home's score to both the state and national average; providers can preview this information before it is publicly reported.

Detailed instructions on how to view and interpret reports, including an explanation of differences between the quality measure reports and publicly reported information, are provided in the CASPER Reporting MDS Provider Users Guide, Section 11, at the

following website: https://qtso.cms.gov/system/files/qtso/cspr_sec11_mds_prvdr_0.pdf

CMS provides technical users' guides (<https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/CertificationandCompliance/Downloads/usersguide.pdf>) on how the quality measures are used in the 5-star rating system, as well as a Help Line, which is accessible by telephone and email, to answer provider questions about the NHQI quality measures and reporting requirements.

4a2.2.1. Summarize the feedback on measure performance and implementation from the measured entities and others described in 4d.1.

Describe how feedback was obtained.

CMS is committed to receiving ongoing feedback on measures implemented as part of the NHQI. CMS takes into consideration feedback and input on measure performance and implementation through the appropriate sub-regulatory communication channels, including but not limited to: NQF public comment periods held as part of endorsement processes; feedback from providers submitted to the CMS quality measure support inboxes and feedback from the provider community on Open Door Forums (ODFs).

4a2.2.2. Summarize the feedback obtained from those being measured.

Upon review of all inquiries submitted to the quality measure support inbox between 10/2019 and 02/2021, those being measures raised no concerns regarding the performance and implementation of NQF 0674.

4a2.2.3. Summarize the feedback obtained from other users

Upon review of all inquiries submitted to the quality measure support inbox between 10/2019 and 02/2021, one other user raised a concern regarding the overlap in implementation of NQF 0674 and the SNF QRP application of this measure. There are rare cases where a SNF stay overlaps with a LS Nursing Home stay. In such cases, the resident must be discharged from the short stay as their Medicare PPS Part A stay ends, and after discharge the resident remains in the facility. Under such circumstances, a fall with major injury could be included in both stays (SNF and LS Nursing Home) if the fall with major injury occurred before the Medicare PPS Discharge and within the target assessment period for the long-stay measure.

However, NQF 0674 and the SNF QRP application of the measure are not in the same quality reporting program. Only the LS Nursing Home measure is included in the Nursing Home Five-Star Quality Rating System.

4a2.3. Describe how the feedback described in 4a2.2.1 has been considered when developing or revising the measure specifications or implementation, including whether the measure was modified and why or why not.

The user's feedback was not a direct comment about the implementation or performance of the LS Nursing Home falls with major injury measure, but rather a question about its overlap with the SNF QRP application of the measure. It is not concerning for the event to be flagged twice for the same facility because NHQI focuses on the quality of care for LS residents while SNF QRP focuses on the quality of care for SNF residents. Therefore, the user's comment was not taken into consideration during the Spring 2021 NQF maintenance of 0674.

Improvement

Progress toward achieving the goal of high-quality, efficient healthcare for individuals or populations is demonstrated. If not in use for performance improvement at the time of initial endorsement, then a credible rationale describes how the performance results could be used to further the goal of high-quality, efficient healthcare for individuals or populations.

4b1. Refer to data provided in 1b but do not repeat here. Discuss any progress on improvement (trends in performance results, number and percentage of people receiving high-quality healthcare; Geographic area and number and percentage of accountable entities and patients included.)

If no improvement was demonstrated, what are the reasons? If not in use for performance improvement at the time of initial endorsement, provide a credible rationale that describes how the performance results could be used to further the goal of high-quality, efficient healthcare for individuals or populations.

Progress (trends in performance results, number and percentage of people receiving high-quality healthcare)

- The national facility-level mean and median scores for the Percent of Residents Experiencing One or More Falls with Major Injury demonstrate stability from quarter to quarter (Figure 1 of NQF Testing Form). Overall, the national facility-level mean and median scores have decreased marginally and indicate a slight improvement in performance over time. The mean score for this measure was 3.5% in quarter 1 of 2017 and the median score was 3.0%. In Q2 2019, the mean and median were 3.4% and 2.9%,

respectively.

Geographic area and number and percentages of accountable entities and patients included:

- All United States Nursing Homes with Medicare-eligible long-stay residents. In quarter 2 of 2019 there were 15,215 eligible facilities and 1,033,796 residents with target assessments, and 14,286 facilities (93.9%) had sufficient sample size (20 or more long-stay residents included in the denominator) to report on this measure, and 1,012,706 residents (98.0%) were included in the calculation of this measure.

4b2. Unintended Consequences

The benefits of the performance measure in facilitating progress toward achieving high-quality, efficient healthcare for individuals or populations outweigh evidence of unintended negative consequences to individuals or populations (if such evidence exists).

4b2.1. Please explain any unexpected findings (positive or negative) during implementation of this measure including unintended impacts on patients.

There were no unexpected findings during the testing process of NQF #0674.

4b2.2. Please explain any unexpected benefits from implementation of this measure.

This is not applicable; there are no unexpected benefits from the implementation of NQF #0674.

5. Comparison to Related or Competing Measures

If a measure meets the above criteria and there are endorsed or new related measures (either the same measure focus or the same target population) or competing measures (both the same measure focus and the same target population), the measures are compared to address harmonization and/or selection of the best measure.

5. Relation to Other NQF-endorsed Measures

Are there related measures (conceptually, either same measure focus or target population) or competing measures (conceptually both the same measure focus and same target population)? If yes, list the NQF # and title of all related and/or competing measures.
Yes

5.1a. List of related or competing measures (selected from NQF-endorsed measures)

0101 : Falls: Screening, Risk-Assessment, and Plan of Care to Prevent Future Falls

0141 : Patient Fall Rate

0202 : Falls with injury

5.1b. If related or competing measures are not NQF endorsed please indicate measure title and steward.

5a. Harmonization of Related Measures

The measure specifications are harmonized with related measures;

OR

The differences in specifications are justified

5a.1. If this measure conceptually addresses EITHER the same measure focus OR the same target population as NQF-endorsed measure(s):

Are the measure specifications harmonized to the extent possible?

No

5a.2. If the measure specifications are not completely harmonized, identify the differences, rationale, and impact on interpretability and data collection burden.

#0202 Falls with Injury - Acute Care Prevention of Falls (rate of inpatient falls with injury per 1,000 patient days): This measure has a similar focus as NQF #0674, but it is different because it focuses on adult acute care inpatient and adult rehabilitation patients and is reported as a rate rather than a percentage. Additionally, this measure includes any injury from minor to major. This is an important distinction. Focusing on falls with minor injury could potentially create inappropriate incentives for nursing homes to reduce

resident opportunity for mobility and independence. The selection of the outcome of falls with major injury for NQF #0674 was deliberate to reduce this potential adverse unintended consequence. #0101 Falls Screening, Risk-Assessment, and Plan of Care to Prevent Future Falls: This is a clinical process measure that assesses falls prevention in older adults. The measure has three rates: 1) screening: percentage of patients aged 65 years of age and older who were screened for future fall risk at least once within 12 months; 2) falls risk assessment: percentage of patients aged 65 years of age and older with a history of falls who had a risk assessment for falls completed within 12 months; and 3) plan of care for falls: percentage of patients aged 65 years of age and older with a history of falls who had a plan of care for falls documented within 12 months. This measure is different in that it is a process measure, rather than an outcome measure. #0141 Patient Fall Rate (Total number of patient falls [with or without injury to the patient and whether or not assisted by a staff member] by hospital unit during the calendar month X 1000): This measure has a similar focus as NQF #0674, but it is different because it focuses on the adult acute care inpatient and adult rehabilitation patients and does not discriminate between falls with and without injuries, which is an important distinction. Focusing on falls with minor injury could potentially create inappropriate incentives for nursing homes to reduce resident opportunity for mobility. The selection of the outcome of falls with major injury for NQF #0674 was deliberate to reduce this potential adverse unintended consequence.

5b. Competing Measures

The measure is superior to competing measures (e.g., is a more valid or efficient way to measure);

OR

Multiple measures are justified.

5b.1. If this measure conceptually addresses both the same measure focus and the same target population as NQF-endorsed measure(s):

Describe why this measure is superior to competing measures (e.g., a more valid or efficient way to measure quality); OR provide a rationale for the additive value of endorsing an additional measure. (Provide analyses when possible.)

This is not applicable. There are no competing measures.

Appendix

A.1 Supplemental materials may be provided in an appendix. All supplemental materials (such as data collection instrument or methodology reports) should be organized in one file with a table of contents or bookmarks. If material pertains to a specific submission form number, that should be indicated. Requested information should be provided in the submission form and required attachments. There is no guarantee that supplemental materials will be reviewed.

Attachment [Attachment: NQF_0674_Measure_Submission_Appendix_20210402_Upload.docx](#)

Contact Information

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Co.2 Point of Contact: [Rebekah, Natanov](#), Rebekah.Natanov@cms.hhs.gov, 202-205-2913-

Co.3 Measure Developer if different from Measure Steward: [Acumen LLC](#)

Co.4 Point of Contact: [Aathira, Santhosh](#), asanthosh@sphereinstitute.org, 650-558-8882-1256

Additional Information

Ad.1 Workgroup/Expert Panel involved in measure development

Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development.

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This TEP met over 2 days in October of 2009 to review the environmental scan and deliberate on the importance and validity of potential new nursing home measures for further development.

Measure Developer/Steward Updates and Ongoing Maintenance

Ad.2 Year the measure was first released: 2011

Ad.3 Month and Year of most recent revision: 04, 2015

Ad.4 What is your frequency for review/update of this measure? Every 3 years

Ad.5 When is the next scheduled review/update for this measure? 04, 2021

Ad.6 Copyright statement: n/a

Ad.7 Disclaimers: n/a

Ad.8 Additional Information/Comments: n/a