



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 #: 0202

Corresponding Measures:

De.2. Measure Title: Falls with injury

Co.1.1. Measure Steward: American Nurses Association

De.3. Brief Description of Measure: All documented patient falls with an injury level of minor or greater on eligible unit types in a calendar quarter. Reported as Injury falls per 1000 Patient Days.

$(\text{Total number of injury falls} / \text{Patient days}) \times 1000$

Measure focus is safety.

Target population is adult acute care inpatient and adult rehabilitation patients.

1b.1. Developer Rationale: The National Quality Strategy (NQS) and the Centers for Medicare and Medicaid Services (CMS), including the Partnership for Patients, have identified patient falls as a patient safety concern. This measure can be used for accountability (e.g., public reporting) as well as for internal quality improvement to improve quality of care and safety of patients in acute care settings.

Also, given that there is evidence that falls are one of the most common adverse patient events and a source of significant injury, disability, and/or death (see 1c below); and there is a performance gap (see 1b.2 below), there is a major opportunity for quality improvement. We envision that hospitals and units will implement fall prevention programs that address multifactorial areas of risk and are inter-professional. Further, we envision that hospitals will monitor patient fall rates by unit type to determine if prevention programs are working and what adjustments in the prevention programs need to be made. Ideally, a target of zero falls is desired, although it is unrealistic to think that all falls can be prevented. Regional, state, and national comparisons are available to evaluate performance at both the unit and hospital level, making the measures informative for public reporting of hospital quality.

Additionally, there is a gap in comprehensive falls injury reporting in public reporting noted by CMS and the Measures Application Partnership (MAP) for performance improvement and to inform consumers and other stakeholders in healthcare decision-making. This measure was conditionally approved for CMS's Inpatient Quality Reporting (IQR) program pending endorsement at the hospital-level reporting. Transparent public reporting is a driver to achieved safety goals identified in the NQS. These measures have also been identified as being more sensitive and accurate than claims-based measures (CMMI Report, 2014).

Center for Medicare and Medicaid Innovation Report. (CMMI, 2014). Project evaluation activity in support of Partnership for Patients: Task 2 evaluation progress report. Prepared by Health Services Advisory Group and Mathematica Policy Research under to CMMI (Contract No. GS-10F-0166R).

S.4. Numerator Statement: Total number of patient falls of injury level minor or greater (whether or not assisted by a staff member) by eligible hospital unit during the calendar month X 1000.

Included Populations:

- Falls with Fall Injury Level of "minor" or greater, including assisted and repeat falls with an Injury level of minor or greater
- Patient injury falls occurring while on an eligible reporting unit

Target population is adult acute care inpatient and adult rehabilitation patients. Eligible unit types include adult critical care, step-

down, medical, surgical, medical-surgical combined, adult rehabilitation in-patient.

S.6. Denominator Statement: Denominator Statement: Patient days by Type of Unit during the calendar month.

Included Populations:

- Inpatients, short stay patients, observation patients, and same day surgery patients who receive care on eligible inpatient units for all or part of a day on the following unit types:

- Adult critical care, step-down, medical, surgical, medical-surgical combined, and adult rehabilitation inpatient units.

- Patients of any age on an eligible reporting unit are included in the patient day count.

S.8. Denominator Exclusions: Excluded Populations: Other unit types (e.g., pediatric, psychiatric, obstetrical, etc.)

De.1. Measure Type: Outcome

S.17. Data Source: Electronic Health Records, Other, Paper Medical Records

S.20. Level of Analysis: Facility, Other

IF Endorsement Maintenance – Original Endorsement Date: Aug 05, 2009 **Most Recent Endorsement Date:** Dec 10, 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? N/A

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

[0202_NQF_evidence_attachment_Sep2017.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.

No

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.

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Also, given that there is evidence that falls are one of the most common adverse patient events and a source of significant injury, disability, and/or death (see 1c below); and there is a performance gap (see 1b.2 below), there is a major opportunity for quality improvement. We envision that hospitals and units will implement fall prevention programs that address multifactorial areas of risk and are inter-professional. Further, we envision that hospitals will monitor patient fall rates by unit type to determine if prevention programs are working and what adjustments in the prevention programs need to be made. Ideally, a target of zero falls is desired,

although it is unrealistic to think that all falls can be prevented. Regional, state, and national comparisons are available to evaluate performance at both the unit and hospital level, making the measures informative for public reporting of hospital quality.

Additionally, there is a gap in comprehensive falls injury reporting in public reporting noted by CMS and the Measures Application Partnership (MAP) for performance improvement and to inform consumers and other stakeholders in healthcare decision-making. This measure was conditionally approved for CMS's Inpatient Quality Reporting (IQR) program pending endorsement at the hospital-level reporting. Transparent public reporting is a driver to achieved safety goals identified in the NQS. These measures have also been identified as being more sensitive and accurate than claims-based measures (CMMI Report, 2014).

Center for Medicare and Medicaid Innovation Report. (CMMI, 2014). Project evaluation activity in support of Partnership for Patients: Task 2 evaluation progress report. Prepared by Health Services Advisory Group and Mathematica Policy Research under to CMMI (Contract No. GS-10F-0166R).

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.

N	Mean	Standard Deviation		25th Percentile		Median	75th percentile
Critical Care	2661	0.22	0.41	0	0	0.35	
Step-down	1788	0.61	0.57	0.22	0.52	0.88	
Medical	2276	0.75	0.77	0.33	0.61	1.02	
Surgical	1668	0.48	0.54	0.14	0.38	0.68	
Medical-Surgical	2919	0.66	0.61	0.24	0.55	0.93	
Rehabilitation	641	1.00	0.88	0.36	0.84	1.39	
Hospital Level	1705	0.80	1.32	0.22	0.45	0.88	

There are a wide range of injury fall rates across and within unit types, with room for improvement in all unit types. The greatest opportunities for improvement are rehabilitation, medical, and medical-surgical units.

Data for descriptive statistics:

National Database of Nursing Quality Indicators (NDNQI), Q1-Q3 2018 data. The NDNQI is owned by Press Ganey Associates.

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.

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.

N/A

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

Several studies have demonstrated a difference in falls rates for specific populations. Disparities have been identified according to age (Phon et al, 2013; CDC, 2006), gender (Steven & Sogolow, 2005; CDC, 2006), disability, particularly cognitive impairment (Lavedan, 2014; Ranaweera et al, 2013; Lee & Stokic, 2008), and race/ethnicity (CDC, 2006).

Centers for Disease Control (CDC; 2006). Fatalities and injuries from fall among older adults – United States, 1993-2003 and 2001-2005. Morbidity and Mortality Weekly Report, 55(45), 1221-1224.

Fhon, J. R., Rosset, I., Freitas, C. P., Silva, A. O., Santos, J. L., & Rodrigues, R. A. (2013). Prevalence of falls among frail elderly adults. *Rev Saude Publica*, 47(2), 266-273. doi: 10.1590/s0034-8910.2013047003468

Lavedan Santamaria, A., Jurschik Gimenez, P., Botigue Satorra, T., Nuin Orrio, C., & Viladrosa Montoy, M. (2014). [Prevalence and associated factors of falls in community-dwelling elderly.]. *Aten Primaria*. doi: 10.1016/j.aprim.2014.07.012

Lee, J. E., & Stokic, D. S. (2008). Risk factors for falls during inpatient rehabilitation. *Am J Phys Med Rehabil*, 87(5), 341-350; quiz 351, 422. doi: 10.1097/PHM.0b013e31816ddc01

Ranaweera, A. D., Fonseka, P., PattiyaArachchi, A., & Siribaddana, S. H. (2013). Incidence and risk factors of falls among the elderly in the District of Colombo. *Ceylon Med J*, 58(3), 100-106. doi: 10.4038/cmj.v58i3.5080

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):

Health and Functional Status : Change, Safety

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

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.)

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)

Attachment Attachment: [Falls_Codebook.xlsx](#)

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.

[No, this is not an instrument-based measure](#) Attachment:

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.

[Not an instrument-based measure](#)

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.

None

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).

Total number of patient falls of injury level minor or greater (whether or not assisted by a staff member) by eligible hospital unit during the calendar month X 1000.

Included Populations:

- Falls with Fall Injury Level of "minor" or greater, including assisted and repeat falls with an Injury level of minor or greater
- Patient injury falls occurring while on an eligible reporting unit

Target population is adult acute care inpatient and adult rehabilitation patients. Eligible unit types include adult critical care, step-down, medical, surgical, medical-surgical combined, adult rehabilitation in-patient.

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).

Definition:

A patient injury fall is an unplanned descent to the floor with injury (minor or greater) to the patient, and occurs on an eligible reporting nursing unit.* Include falls when a patient lands on a surface where you would not expect to find a patient. Unassisted and assisted (see definition below) falls are to be included whether they result from physiological reasons (e.g., fainting) or environmental reasons (slippery floor). Also report patients that roll off a low bed onto a mat as a fall.

Exclude falls:

- By visitors
- By students
- By staff members
- Falls on other units not eligible for reporting
- By patients from eligible reporting units when patient was not on unit at time of the fall (e.g., patient falls in radiology department)

*The nursing unit area includes the hallway, patient room and patient bathroom. A therapy room (e.g., physical therapy gym), even though physically located on the nursing unit, is not considered part of the unit.

Assisted fall is a fall in which any staff member (whether a nursing service employee or not) was with the patient and attempted to minimize the impact of the fall by easing the patient's descent to the floor or in some manner attempting to break the patient's fall, e.g., when a patient who is ambulating becomes weak and the staff lowers the patient to the floor. In this scenario, the staff was using professional judgment to prevent injury to the patient. A fall that is reported to have been assisted by a family member or a visitor counts as a fall, but does not count as an assisted fall. "Assisting" the patient back into a bed or chair after a fall is not an assisted fall. Any fall that is not documented as an assisted fall counts as an "unassisted fall".

When the initial fall report is written by the nursing staff, the extent of injury may not yet be known. Hospitals have 24 hours to determine the injury level, e.g., while awaiting diagnostic test results or consultation reports.

Injury levels:

None—patient had no injuries (no signs or symptoms) resulting from the fall; if an x-ray, CT scan or other post fall evaluation results in a finding of no injury

Minor—resulted in application of a dressing, ice, cleaning of a wound, limb elevation, topical medication, pain, bruise or abrasion

Moderate—resulted in suturing, application of steri-strips/skin glue, splinting, or muscle/joint strain

Major—resulted in surgery, casting, traction, required consultation for neurological (basilar skull fracture, small subdural hematoma) or internal injury (rib fracture, small liver laceration) or patients with coagulopathy who receive blood products as a result of a fall

Death—the patient died as a result of injuries sustained from the fall (not from physiologic events causing the fall)

Data Elements required: Collected at a patient level

- Month
- Year
- Event Type (injury fall, assisted fall, repeat fall)
- Level of injury
- Type of Unit

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

Denominator Statement: Patient days by Type of Unit during the calendar month.

Included Populations:

- Inpatients, short stay patients, observation patients, and same day surgery patients who receive care on eligible inpatient units for all or part of a day on the following unit types:

- Adult critical care, step-down, medical, surgical, medical-surgical combined, and adult rehabilitation inpatient units.

- Patients of any age on an eligible reporting unit are included in the patient day count.

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).

Conceptually, a patient day is 24 hours, beginning the hour of admission. The operational definitions of patient day are explained in the section labeled Patient Day Reporting Methods. The total number of patient days for each unit is reported for each calendar month in the quarter.

Short stay patients = Patients who are not classified as in-patients. Variously called short stay, observation, or same day surgery patients who receive care on in-patient units for all or part of a day.

With the growth in the number of short stay patients on in-patient units, the midnight census does not accurately represent the demand for nursing services on many units. Although some facilities have dedicated units for short stay patients, many do not. While the midnight census may be the only measure of patient census available for some facilities, others will have additional information that can be used to produce a patient census that is adjusted to reflect the additional demand for nursing required by short stay patients. Each unit should report patient days using the method that most accurately accounts for the patient work load.

There are four (4) Patient Days reporting methods:

- **Method 1-Midnight Census**

This is adequate for units that have all in-patient admissions. This method is not appropriate for units that have both in-patient and short stay patients. The daily number should be summed for every day in the month.

- **Method 2-Midnight Census + Patient Days from Actual Hours for Short Stay Patients**

This is an accurate method for units that have both in-patients and short stay patients. The short stay “days” should be reported separately from midnight census and will be summed by NDNQI to obtain patient days. The total daily hours for short stay patients

should be summed for the month and divided by 24.

- **Method 3-Patient Days from Actual Hours**

This is the most accurate method. An increasing number of facilities have accounting systems that track the actual time spent in the facility by each patient. Sum actual hours for all patients, whether in-patient or short stay, and divide by 24.

- **Method 4-Patient Days from Multiple Census Reports**

Some facilities collect censuses multiple times per day (e.g., every 4 hours or each shift). This method has shown to be almost as accurate as Method 3. Patient days based on midnight and noon census have shown to be sufficient in adjusting for short stay patients. A sum of the daily average censuses can be calculated to determine patient days for the month on the unit.

Data Elements:

- Month
- Year
- Patient Days Reporting method that includes midnight census and short stay patient days
- Type of Unit
- Patient days
- Short stay patient days

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

Excluded Populations: Other unit types (e.g., pediatric, psychiatric, obstetrical, etc.)

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.)*

Patient days must be from the same unit as the patient falls.

If unit type is not adult critical care, adult step-down, adult medical, adult surgical, adult medical surgical combined, or adult rehabilitation inpatient, then unit type is excluded from denominator.

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.)*

Stratification by unit type:

General Adult Inpatient Patient Population

- **Critical Care**

Highest level of care, includes all types of intensive care units. Optional specialty designations include: Burn, Cardiothoracic, Coronary Care, Medical, Neurology, Pulmonary, Surgical, and Trauma ICU.

- **Step-Down**

Limited to units that provide care for patients requiring a lower level of care than critical care units and higher level of care than provided on medical/surgical units. Examples include progressive care or intermediate care units. Telemetry is not an indicator of acuity level. Optional specialty designations include: Med-Surg, Medical or Surgical Step-Down units.

- **Medical**

Units that care for patients admitted to medical services, such as internal medicine, family practice, or cardiology. Optional specialty designations include: BMT, Cardiac, GI, Infectious Disease, Neurology, Oncology, Renal or Respiratory Medical units.

- **Surgical**

Units that care for patients admitted to surgical services, such as general surgery, neurosurgery, or orthopedics. Optional specialty designations include: Bariatric, Cardiothoracic, Gynecology, Neurosurgery, Orthopedic, Plastic Surgery, Transplant or Trauma Surgical unit.

- **Med-Surg Combined**

Units that care for patients admitted to either medical or surgical services. Optional specialty designations include: Cardiac, Neuro/Neurosurgery or Oncology Med-Surg combined units.

Adult Rehabilitation In-patient Patient Population*

- Limited to units generally caring for rehab patients over 16 years old. Optional specialty designations include: Brain Injury/SCI, Cardiopulmonary, Neuro/Stroke and Orthopedic/Amputee Rehab units.

* Medicare payment policies differentiate rehabilitation from acute care, requiring patients to be discharged from acute care and admitted to a distinct acute rehabilitation unit. Rehabilitation units provide intensive therapy 5 days/week for patients expected to improve.

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

Other

If other: Stratification is by unit type (e.g., critical care, step down, medical), which is not identical to risk, but may be related.

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.)

Eligible units identified and selected; input patient days (including method) for each respective unit; input number of injury falls for respective unit by month; then divide to produce monthly injury fall rate per 1000 patient days; then calculate quarterly injury fall rate as the mean of the 3 months.

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.

N/A

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.

N/A

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

If other, please describe in S.18.

Electronic Health Records, Other, Paper Medical Records

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.

Database: National Database of Nursing Quality Indicators(R) [NDNQI(R)]; participant hospitals have NDNQI guidelines and Excel spreadsheets to guide data collection; data are provided to NDNQI via a secure web-based data entry portal or XML upload.

Original sources for injury falls are incident reports, patient medical records (including electronic health records).

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 in attached appendix at A.1

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

Facility, Other

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

Inpatient/Hospital

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.)

2. Validity – See attached Measure Testing Submission Form

[0202_Measure_Testing_ver_7.1_112420.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.

Yes - Updated information is included

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 by and used by healthcare personnel during the provision of care, e.g., blood pressure, lab value, medical condition, Coded by someone other than person obtaining original information (e.g., DRG, ICD-9 codes on claims), Abstracted from a record by someone other than person obtaining original information (e.g., chart abstraction for quality measure or registry)

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**.

Some data elements are in defined fields in electronic sources

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).

To date there have been limited efforts to develop an eCQM. Currently, most data on patient falls is collected electronically through adverse event reporting systems which are not reliably linked to the EHR or administrative records in any standardized way.

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.

FALL DATA COLLECTION PROCESS

Based on the telephone interviews and online survey results an outline of the fall data collection process was developed. The outline describes the variety of players and components involved in the process, which was used to guide the development of the site coordinator survey. The fall data collection process can be depicted in three phases that involve different groups of staff with diverse roles and requirements. In the INPUT phase direct care providers, with various roles and professional backgrounds, submit a fall incident report. Incident reports are either submitted electronically or on paper with multiple requirements based on the intra- and extra organizational requirements. In the VERIFICATION phase the initial report is checked by the organizational group with fall surveillance responsibility. This group determines if the reported incident is an actual fall and assigns an injury level. In some, organizations incident reports could be processed by more than one department. In the OUTPUT stage, fall data are prepared for submission to NDNQI. The process is similar to the process underlying the common format initiative of the Agency for Healthcare Research and Quality (2010). The approach of the common format differentiates between the initial "Healthcare Event Reporting Form" (HERF), which represents the input phase and the Summary of Initial Report (SIR), which represents the verification phase described here.

DATA COLLECTION SOURCES AND BURDEN

In a recent survey of hospitals engaged in reporting this falls measure (NDNQI, 2015), over 85% reported that the hospital had an electronic reporting system which captured falls data. Additionally, two-thirds of the hospital reported that the electronic system captured all the data elements necessary for reporting the measure. Most NDNQI Site Coordinators (77%) also reported that the time required to generate and submit the falls measure data was 2 days or less.

REPORTING ACCURACY

However 62% described the accuracy of the fall injury level data as excellent and 34% as good. Additionally, 84% of site coordinators reported using at least one mechanism (check by nurse or risk managers, comparison to previous quarters or other reports) to verify data before it is submitted to NDNQI.

TRAINING

Almost 70% of site coordinators provide training for fall incident reporting and about two thirds of those facilities that provide training for fall incident reports provide also the NDNQI definition of falls.

NDNQI has learned/modified the injury falls measure in a variety of ways.

First, our data collection guidelines: The definition of a fall has been recently clarified to better define what surfaces where a patient may land (during a fall) count as an extension of the floor.

Old fall definition: A patient fall is an unplanned descent to the floor (or extension of the floor, e.g., trash can or other equipment) with or without injury to the patient, and occurs on an eligible reporting nursing unit. All types of falls are to be included whether they result from physiological reasons (fainting) or environmental reasons (slippery floor). Include assisted falls – when a staff member attempts to minimize the impact of the fall.

New fall definition: A patient fall is an unplanned descent to the floor with or without injury to the patient, and occurs on an eligible reporting nursing unit.* Include falls when a patient lands on a surface where you wouldn't expect to find a patient. All unassisted and assisted (see definition below) falls are to be included whether they result from physiological reasons (fainting) or environmental reasons (slippery floor). Also report patients that roll off a low bed onto a mat as a fall.

*The nursing unit area includes the hallway, patient room and patient bathroom. A therapy room (e.g., physical therapy gym), even though physically located on the nursing unit is not considered part of the unit.

The definition of 'assisted fall' was clarified:

Old assisted fall definition: A fall in which any staff member (whether a nursing service employee or not) was with the patient and attempted to minimize the impact of the fall by easing the patient's descent to the floor or in some manner attempting to break the patient's fall. "Assisting" the patient back into a bed or chair after a fall is not an assisted fall. A fall that is reported to have been assisted by a family member or visitor counts as a fall, but does not count as an assisted fall.

New assisted fall definition: A fall in which any staff member (whether a nursing service employee or not) was with the patient and attempted to minimize the impact of the fall by easing the patient's descent to the floor or in some manner attempting to break the patient's fall, e.g., when a patient who is ambulating becomes weak and the staff lowers the patient to the floor. In this scenario, the staff was using professional judgment to prevent injury to the patient. A fall that is reported to have been assisted by a family member or a visitor counts as a fall, but does not count as an assisted fall. "Assisting" the patient back into a bed or chair after a fall is not an assisted fall.

The definitions for fall injury levels have changed:

Old definitions:

When the initial fall report is written by the nursing staff, the extent of injury may not yet be known. A method to follow up on the patient's condition 24 hours after the fall should be established as level of injury is a required data element. If the patient is discharged from the hospital within 24 hours of the fall, determine injury level at the time of discharge.

Injury level guidelines:

- None—patient had no injuries (no signs or symptoms) resulting from the fall; if an x-ray, CT scan or other post fall evaluation results in a finding of no injury
- Minor—resulted in application of a dressing, ice, cleaning of a wound, limb elevation, topical medication, pain, bruise or abrasion
- Moderate—resulted in suturing, application of steri-strips/skin glue, splinting, or muscle/joint strain
- Major—resulted in surgery, casting, traction, required consultation for neurological (basilar skull fracture, small subdural hematoma) or internal injury (rib fracture, small liver laceration) or patients with coagulopathy who receive blood products as a result of a fall
- Death—the patient died as a result of injuries sustained from the fall (not from physiologic events causing the fall)

New definitions:

When the initial fall report is written by the nursing staff, the extent of injury may not yet be known. Hospitals have 24 hours to determine the injury level, e.g., when you are awaiting diagnostic test results or consultation reports.

- None—patient had no injuries (no signs or symptoms) resulting from the fall; if an x-ray, CT scan or other post fall evaluation results in a finding of no injury
- Minor—resulted in application of a dressing, ice, cleaning of a wound, limb elevation, topical medication, pain, bruise or abrasion

- Moderate—resulted in suturing, application of steri-strips/skin glue, splinting, or muscle/joint strain
- Major—resulted in surgery, casting, traction, required consultation for neurological (basilar skull fracture, small subdural hematoma) or internal injury (rib fracture, small liver laceration) or patients with coagulopathy who receive blood products as a result of a fall
- Death—the patient died as a result of injuries sustained from the fall (not from physiologic events causing the fall)

NDNQI collects patient fall data through a website. We recently added more error messages to assist in accurate and complete data collection. An example is "Missing patient days for fall rate report". We also modified data entry field validations to reduce out of range data.

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).

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)
	Public Reporting State of Colorado http://www.cohospitalquality.org/ State of Maine https://mhdo.maine.gov/quality_data.htm State of Massachusetts http://www.patientcarelink.org/ State of New York http://w3.health.state.ny.us/dbspace/NYCRR10.nsf/56cf2e25d626f9f785256538006c3ed7?SearchView State of Washington http://www.hca.wa.gov/hw/Documents/pmcc_final_core_measure_set_approved_121714.pdf Regulatory and Accreditation Programs The American Nurses Credentialing Center (ANCC) Magnet Recognition Program http://www.nursecredentialing.org/Magnet The American Nurses Association Credentialing Center Pathways to Excellence Program http://www.nursecredentialing.org/Pathway Professional Certification or Recognition Program American Nurses Credentialing Center Magnet Recognition Program https://www.nursingworld.org/organizational-programs/magnet/

Quality Improvement (Internal to the specific organization) Internal Quality Improvement Individual Hospitals
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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

States with Mandated or Voluntary Falls Reporting

Colorado:

Colorado Hospital Report Card provides patient safety information such as Falls and Falls with Injury
<http://www.cohospitalquality.org/>

Maine:

Chapter 270 Quality Data Nursing Sensitive Indicators (NSI)

Healthcare outcome measures

NSPC-2: Number of inpatient falls per inpatient days.

NSPC-3: Number of inpatient falls with injuries per inpatient days.

https://mhdo.maine.gov/quality_data.htm

Massachusetts:

An examination of patient outcomes such as fall rates, pressure ulcer rates, and Hospital Compare measures in the Performance Measures section of PatientCareLink are reported. (voluntary)

<http://www.patientcarelink.org/>

New York:

Section 400.25 Disclosure of nursing quality indicators.

(a) Definitions. For purposes of this section, the following terms shall have the following meanings:

(3) Fall means:

(i) For general hospitals, an unplanned descent to the floor with or without injury to the patient including unassisted and assisted descents whether they result from physiological or environmental reasons.

(4) Fall injury level means:

(i) For general hospitals, the degree of injury resulting from a fall and designated as moderate, major or fatal. For purposes of this subparagraph: moderate injuries involve suturing, application of steri-strips/skin glue, splinting or muscle/joint strain; major injuries involve surgery, casting or traction, or require consultation to rule out neurological or internal injury or patients with coagulopathy that receive blood products as a result of the fall; and fatal falls involve injuries that cause the patient's death but do not include falls caused by physiologic events.

<http://w3.health.state.ny.us/dbspace/NYCRR10.nsf/56cf2e25d626f9f785256538006c3ed7?SearchView>

Washington:

Future Public Reporting - See final measures set approved 12/17/14 p. 6 and p. 10 notes ANA measure - Falls with Injury per Patient Day. http://www.hca.wa.gov/hw/Documents/pmcc_final_core_measure_set_approved_121714.pdf

Regulatory and Accreditation Programs:

The American Nurses Credentialing Center (ANCC) includes patient falls and injury as part of their Magnet Recognition Program and Pathways to Excellence Recognition Program (ANCC, 2015), though they are not required in both programs.

<http://www.nursecredentialing.org/Magnet>

<http://www.nursecredentialing.org/Pathway>

Internal Quality Improvement:

The measure is used for internal quality improvement in hospitals. In a recent survey of hospital reporting this measure (NDNQI, 2015), 74% reported that the patient falls measure was very important to their quality improvement efforts. The patient fall measure was used by hospitals to identify hospitals with high fall rates (82%), to set goals for improving fall rates (75%), to create quality improvement strategies for improving the patient fall rate (68%), and to monitor quality improvement initiatives (72%). Of

those hospitals using the falls measure for quality improvement, 56% reporting some success in reducing patient falls, and an additional 24% indicated a high level of success in reducing patient falls.

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?)

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.)

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.

Over 2,000 US hospitals participate in the National Database of Nursing Quality Indicators (NDNQI), and use the patient fall measure for evaluating patient safety and implementing quality improvement programs within their organizations. All hospitals that submit data on patient falls receive quarterly benchmarking reports.

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.

Benchmarking reports are provided to organizations quarterly on clinical quality measures, including falls. The falls measures are included in quality dashboards, and organizations are able to view the outcome measures alongside structural (e.g. staffing) and process (e.g. fall risk assessment and intervention rates). Benchmarking is provided for a number of levels of data (unit, unit type, hospital, system), and a number of benchmark categories (e.g. teaching status, bed size, census region).

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.

The NDNQI advisory team is available for ongoing feedback from organizations on the usefulness of the measures and benchmarking reports. Client feedback surveys are also conducted on an intermittent basis.

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

The most common feedback is regarding reporting, particularly for more frequent reporting (i.e. monthly). The measure definitions and specifications have received little feedback in recent years, though previous requests to include more specification in data elements to allow of classifying falls by type (e.g. physiological, developmental, suspected intentional) were part of the feedback from participating organizations.

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

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.

Current work is underway to address the timing of reports. The data are collected at the monthly level, but aggregated for quarterly reporting. The structure of the data supports monthly reporting, but a delay in increasing frequency of reporting has been largely due to the increased burden of more frequent and timely data submission for organizations. New data submission platforms are being explored to reduce burden and increase report frequency. Feedback on falls types was addressed in a revision to the measure specifications prior to the last review of the measures.

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.

Longitudinal studies of the ANA patient fall measure based on NDNQI data show improvement in falls over time. He et al (2012), found a decreasing trend in patient falls rates overall from 2004-2009; however the trend in patient falls over time varied by unit type. Similarly, Waters et al (2015), found that injurious fall rates are declining, both before and after Medicare's nonpayment policy was implemented in 2008.

Finally, a recent report from AHRQ shows an estimated 17% reduction in hospital acquired conditions from 2010-13, resulting in 1,317,800 fewer adverse events. The estimated number of deaths averted, associated with patient falls is 2.750 over the same time period with an estimated cost savings of \$361,700,000 (AHRQ, 2014).

Agency for Healthcare Research and Quality (AHRQ, 2014). Retrieved from: <http://www.ahrq.gov/professionals/quality-patient-safety/pfp/> on April 10, 2015.

He, J., Dunton, N., & Staggs, V. (2012). Unit-level Time Trends in Inpatient Fall Rates in US Hospitals. *Medical Care*, 50(9), 801-807.
Waters, T.M., Daniels, M.J., Bazzoli, G.J., Perencevich, E., Dunton, N., Staggs, V.S., Potter, C., Fareed, N., Liu, M., & Shorr, R.I. (2012). Effect of Medicare's nonpayment for hospital-acquired conditions: Lessons for future policy. *JAMA Internal Medicine*, 175(3), 347-354. doi:10.1001/jamainternmed.2014.5486.

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.

None

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

None

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)

0141 : Patient Fall Rate

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?

Yes

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

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.)

Patient falls is also a measure for which the American Nurses Association is the measure steward. Falls with injury is not a competing measure with patient falls, but rather a subset of falls. Both measures are completely harmonized.

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:** [0202_MeasureLogic_ScientificSupplement-635642744398725960.pdf](#)

Contact Information

Co.1 Measure Steward (Intellectual Property Owner): American Nurses Association

Co.2 Point of Contact: Mary Beth, Bresch White, marybreschwhite@ana.org, 301-628-5022-

Co.3 Measure Developer if different from Measure Steward: American Nurses Association

Co.4 Point of Contact: Mary Beth, Bresch White, marybreschwhite@ana.org, 301-628-5022-

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.

The American Nurses Association sponsored the development of the patient falls and falls with injury measures. The Lewin Group was hired by ANA to identify measures that likely were nurse-sensitive. An interview guide was developed and various institutions were selected based on their geographical location and organizational characteristics to provide a nation-wide sample that would include an academic medical center, private hospital, public hospital, urban hospitals, rural hospitals and hospital system. JCAHO, Catholic Health Association, AHA and AHCPR were also contacted to provide broader context. The interviews were conducted with nursing executives, quality specialists and other experts identified by each organization between August 1995 and October 1995. ANA's advisory committee was Rhonda Anderson RN, FAAN, Joanne Disch, PhD, RN FAAN, Gwendolyn Johnson, MA, RN,C, Clair B. Jordan, MSN, RN, Norma Lang, PhD, RN, FAAN, Pamela Mitchell, PhD, CNRN, FAAN, Margaret Sovie PhD, RN, FAAN, and Mary K. Walker, PhD, RN, FAAN.

Measure Developer/Steward Updates and Ongoing Maintenance

Ad.2 Year the measure was first released: 2004

Ad.3 Month and Year of most recent revision: 03, 2009 Ad.4 What is your frequency for review/update of this measure? annual updates, with every 3 year re-endorsement Ad.5 When is the next scheduled review/update for this measure? 12, 2012
Ad.6 Copyright statement: Copyright 2011, American Nurses Association. All Rights Reserved. Ad.7 Disclaimers:
Ad.8 Additional Information/Comments: