NATIONAL QUALITY FORUM

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 subcriterion 1b).

Brief Measure Information
NQF #: 2417   **De.2. Measure Title:** Risk Assessment/Treatment After Fracture   **Co.1.1. Measure Steward:** The Joint Commission   **De.3. Brief Description of Measure:** Patients age 50 or over with a fragility fracture who have either a dual-energy X-Ray absorptiometry (DXA) scan ordered or performed, or a prescription for FDA-approved pharmacotherapy for osteoporosis, or who are seen by or linked to a fracture liaison service prior to discharge from inpatient status,. If DXA is not available and documented as such, then any other specified fracture risk assessment method may be ordered or performed.   **1b.1. Developer Rationale:** Fragility fracture presumes the existence of low bone mass. It has been shown that patients with fragility fracture often are not tested or treated for osteoporosis, and there is a significant opportunity for improvement in management of these patients. Across multiple studies, the rate of testing and treatment for osteoporosis after fragility fracture is 20% or less.   The incidence of low bone mass among wrist fracture patients has been cited as 70-80%. And the incidence of low bone mass among hip fracture patients is 80%, yet the NCQA has found that, in 2011, only one in five women age 67 and over with a fracture is ever tested or treated for osteoporosis.   About half of women and one-fourth of men over the age of 50 will sustain a fracture due to osteoporosis. Since the occurrence of a fragility fracture increases the risk of additional fractures in the future by 1.5-2.0 times, it is anticipated that early detection of osteoporosis and early treatment will therefore reduce the occurrence of readmissions for future fracture, will enable significant savings in resource use, and will reduce mortality in older individuals.
S.4. Numerator Statement: Patients who had either a DXA scan ordered or performed, OR a prescription for FDA-approved pharmacotherapy for osteoporosis treatment, OR those who were seen by, contacted by, or linked to a fracture liaison service prior to discharge OR had other fracture risk assessment method ordered or performed if DXA is not available.   **S.7. Denominator Statement:** Patients age 50 and over discharged from inpatient status with an ICD-10-CM Principal or Other Diagnosis Code of selected fractures as defined in Table 3.1 Vertebral Fracture, Table 4.1 Hip Fracture, or Table 5.1 Other Fracture,   **S.10. Denominator Exclusions:** •   Age less than 50 years   •   "Comfort Measures Only" documented   •   Enrollment in a clinical trial pertaining to osteoporosis   •   On FDA-Approved pharmacotherapy for osteoporosis treatment as defined in Table 1.1 prior to the fracture date   •   Bone Mineral density test documented in the 12 months prior to the fracture   •   Expired   See attached Excel file for definitions
De.1. Measure Type: Process   **S.23. Data Source:** Electronic Clinical Data : Electronic Health Record, Paper Medical Records   **S.26. Level of Analysis:** Facility
IF Endorsement Maintenance – Original Endorsement Date: Sep 02, 2014 **Most Recent Endorsement Date:** Sep 02, 2014
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 or grouped. It is the second in a set of three measures (laboratory assessment after fracture, risk assessment/treatment after fracture, discharge instructions for emergency department patient) designed to asses and improve the care of fragility fracture patients age 50 and over with regard to the detection and treatment of low bone mass.

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 subcriteria to pass this criterion and be evaluated against the remaining criteria.*

1a. Evidence to Support the Measure Focus – See attached Evidence Submission Form
OAF-02_MeasSubm_Evidence_2013_Final-635219177744531782.docx

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., the benefits or improvements in quality envisioned by use of this measure)*
Fragility fracture presumes the existence of low bone mass. It has been shown that patients with fragility fracture often are not tested or treated for osteoporosis, and there is a significant opportunity for improvement in management of these patients. Across multiple studies, the rate of testing and treatment for osteoporosis after fragility fracture is 20% or less.

The incidence of low bone mass among wrist fracture patients has been cited as 70-80%. And the incidence of low bone mass among hip fracture patients is 80%, yet the NCQA has found that, in 2011, only one in five women age 67 and over with a fracture is ever tested or treated for osteoporosis.

About half of women and one-fourth of men over the age of 50 will sustain a fracture due to osteoporosis. Since the occurrence of a fragility fracture increases the risk of additional fractures in the future by 1.5-2.0 times, it is anticipated that early detection of osteoporosis and early treatment will therefore reduce the occurrence of readmissions for future fracture, will enable significant savings in resource use, and will reduce mortality in older individuals.

1b.2. Provide performance scores on the measure as specified (current and over time) at the specified level of analysis. *(This is required for endorsement maintenance. 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 included). This information also will be used to address the subcriterion on improvement (4b.1) under Usability and Use.*
This is a new measure.

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.
There are multiple references demonstrating that the rate of osteoporosis testing or treatment after fracture is around 20%, and that hospital-based interventions for diagnosis increase the rate of testing and treatment exponentially. In addition, use of a case manager enhances testing and treatment compliance. A representative sample of these references is included in the Evidence section of this submission form.

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 endorsement maintenance. 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 subcriterion on improvement (4b.1) under Usability and Use.*
This is the initial submission of this new measure.

1b.5. If no or limited data on disparities from the measure as specified is reported in 1b4, then provide a summary of data from the literature that addresses disparities in care on the specific focus of measurement. Include citations.
There is no data available on disparities of care; lack of care is universal.

1c. High Priority (previously referred to as High Impact)
The measure addresses:

- a specific national health goal/priority identified by DHHS or the National Priorities Partnership convened by NQF; OR
- a demonstrated high-priority (high-impact) aspect of healthcare (e.g., affects large numbers of patients and/or has a substantial impact for a smaller population; leading cause of morbidity/mortality; high resource use (current and/or future); severity of illness; and severity of patient/societal consequences of poor quality).

1c.1. Demonstrated high priority aspect of healthcare
Affects large numbers, A leading cause of morbidity/mortality, High resource use, Patient/societal consequences of poor quality

1c.2. If Other:

1c.3. Provide epidemiologic or resource use data that demonstrates the measure addresses a high priority aspect of healthcare. List citations in 1c.4.
The American Association of Clinical Endocrinologists states that at age fifty, the lifetime risk for developing fractures is 39% for white women and 13% for white men. In 2005, there were 1.8 million fractures attributed to osteoporosis in the United States, at a direct cost of 16.9 billion dollars. Based on recent statistics from 2004 – 2006, the incidence of osteoporotic fracture exceeds the number of new cases of stroke, heart attack, and breast cancer combined. Experts estimate that by 2025, there will be 3 million osteoporotic fractures sustained annually at a cost of 39 billion dollars.

In addition, hip fracture mortality during the first year after fracture is about 30% for men and 17% for women; half of hip fracture survivors require skilled extended care. Vertebral fractures cause 70,000 hospital admissions annually and generate 66,000 office visits. Forearm fractures generate about 530,000 office visits annually. A percentage of all fractures cause some permanent disability.

1c.4. Citations for data demonstrating high priority provided in 1a.3
The citation for 1c3 is:

Watts NB, Bilezikian JP, Camacho PM, Greenspan SL, Harris ST, Hodgson SF, Kleerekoper M, Luckey MM, McClung MR, Pollack RP, Petak SM, AACE Osteoporosis Task Force. American Association of Clinical Endocrinologists medical guidelines for clinical practice for the diagnosis and treatment of postmenopausal osteoporosis. Endocr Pract. 2010 Nov-Dec;16(Suppl 3):1-37. [209 references] pp 5-7.

1c.5. If a PRO-PM (e.g. HRQoL/functional status, symptom/burden, experience with care, health-related behaviors), provide evidence that the target population values the measured PRO and finds it meaningful. *(Describe how and from whom their input was obtained.)*
This is not a PRO-PM.

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 subcriteria 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):*
Endocrine, Musculoskeletal : Osteoporosis

De.6. Cross Cutting Areas *(check all the areas that apply):*
Prevention, Prevention : Screening, Safety : Readmissions

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.jointcommission.org/assets/1/6/Osteoporosis_Imp_Guide_16318.pdf

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:** Appendix_Final-635936517538187795.xlsx

S.3. **For endorsement maintenance**, please briefly describe any changes to the measure specifications since last endorsement date and explain the reasons.
This is an initial submission

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)*
IF an OUTCOME MEASURE, state the outcome being measured. Calculation of the risk-adjusted outcome should be described in the calculation algorithm.
Patients who had either a DXA scan ordered or performed, OR a prescription for FDA-approved pharmacotherapy for osteoporosis treatment, OR those who were seen by, contacted by, or linked to a fracture liaison service prior to discharge OR had other fracture risk assessment method ordered or performed if DXA is not available.

S.5. **Time Period for Data** *(What is the time period in which data will be aggregated for the measure, e.g., 12 mo, 3 years, look back to August for flu vaccination? Note if there are different time periods for the numerator and denominator.)*
The time period for measurement is the duration of the hospitalization.

S.6. **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, 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.
Data Elements: (See attached Excel file for definitions and allowable values)
DXA Scan Ordered or Performed Prior to Discharge
Other Fracture Risk Assessment Method Ordered or Performed Prior to Discharge
FDA-approved Pharmacotherapy for Osteoporosis Treatment
Reason for No DXA Scan
Reason for No FDA-approved Pharmacotherapy for Treatment of Osteoporosis
 Fracture liaison service

S.7. **Denominator Statement** *(Brief, narrative description of the target population being measured)*
Patients age 50 and over discharged from inpatient status with an ICD-10-CM Principal or Other Diagnosis Code of selected fractures as defined in Table 3.1 Vertebral Fracture, Table 4.1 Hip Fracture, or Table 5.1 Other Fracture,

S.8. **Target Population Category** *(Check all the populations for which the measure is specified and tested if any):*
 Populations at Risk, Senior Care

S.9. **Denominator Details** *(All information required to identify and calculate the target population/denominator such as definitions, 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)*
Data Elements: (See definitions and allowable values in attached Excel file)
Admission date
Birthdate
ICD-10-CM Principal Diagnosis Code

ICD-10-CM Other Diagnosis Code
Comfort Measures Only
Clinical Trial
Bone Mineral Density Test Performed in the 12 Months Prior to the Fracture
On FDA-approved Pharmacotherapy for Treatment of Osteoporosis Prior to Fracture
Discharge Date
Discharge Disposition

S.10. Denominator Exclusions *(Brief narrative description of exclusions from the target population)*
- Age less than 50 years
- "Comfort Measures Only" documented
- Enrollment in a clinical trial pertaining to osteoporosis
- On FDA-Approved pharmacotherapy for osteoporosis treatment as defined in Table 1.1 prior to the fracture date
- Bone Mineral density test documented in the 12 months prior to the fracture
- Expired

See attached Excel file for definitions

S.11. Denominator Exclusion Details *(All information required to identify and calculate exclusions from the denominator such as definitions, 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)*

See attached Excel file for definitions of exclusions as listed in S-10.

S.12. Stratification Details/Variables *(All information required to stratify the measure results including the stratification variables, definitions, 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 with at S.2b)*

This measure is not stratified.

S.13. Risk Adjustment Type (Select type. Provide specifications for risk stratification in S.12 and for statistical model in S.14-15)

No risk adjustment or risk stratification
If other:

S.14. Identify the statistical risk model method and variables *(Name the statistical method - e.g., logistic regression and list all the risk factor variables. Note - risk model development and testing should be addressed with measure testing under Scientific Acceptability)*

N/A

S.15. Detailed risk model specifications *(must be in attached data dictionary/code list Excel or csv file. Also indicate if available at measure-specific URL identified in S.1.)*
Note: Risk model details (including coefficients, equations, codes with descriptors, definitions), should be provided on a separate worksheet in the suggested format in the Excel or csv file with data dictionary/code lists at S.2b.

S.15a. Detailed risk model specifications (*if not provided in excel or csv file at S.2b*)

S.16. Type of score:
Rate/proportion
If other:

S.17. 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 = Higher score

S.18. Calculation Algorithm/Measure Logic *(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; aggregating data; risk adjustment; etc.)*

1.   Target population is identified by principal or other diagnosis code
2.   Admission and appropriate age identified; those not admitted and under age 50 are excluded
3.   Expired patients are excluded
4.   Patients who had comfort measures only or who participated in a clinical trial for osteoporosis are excluded
5.   Patients who had a bone mineral density test in the prior 12 months or who were on FDA=approved pharmacotherapy for osteoporosis immediately prior to the fracture are excluded
6.   Those who had a DXA scan ordered or performed are in the numerator
7.   For those remaining patients without a DXA scan if some other risk assessment method was performed, they are placed in the numerator.
8.   For those remaining patients without a scan or fracture risk assessment method performed, if they were seen by or linked to a fracture liaison service or placed on FDA-approved pharmacotherapy for osteoporosis, they are placed in the numerator.
9.   For those remaining patients without a scan or fracture risk assessment method or pharmacotherapy, if there is a documented reason for no pharmacotherapy they are placed in the numerator; if the patient refused pharmacotherapy they are excluded from the measure
10.   For those patients remaining who have had no DXA scan ordered or performed, no other fracture risk assessment method, and no pharmacotherapy administered and there is no reason for no pharmacotherapy documented and they have not refused pharmacotherapy, if they were contacted by, seen by or linked to a fracture liaison service they are placed in the numerator.
11.   All remaining patients are part of the denominator population.

S.19. **Calculation Algorithm/Measure Logic Diagram URL or Attachment** *(You also may provide a diagram of the Calculation Algorithm/Measure Logic described above 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. **Sampling** *(If measure is based on a sample, provide instructions for obtaining the sample and guidance on minimum sample size.)*
IF a PRO-PM, identify whether (and how) proxy responses are allowed.
This measure is not based on a sample and is not a PRO-PM

S.21. **Survey/Patient-reported data** *(If measure is based on a survey, provide instructions for conducting the survey and guidance on minimum response rate.)*
IF a PRO-PM, specify calculation of response rates to be reported with performance measure results.
N/A

S.22. **Missing data** (specify how missing data are handled, e.g., imputation, delete case.)
Required for Composites and PRO-PMs.
N/A

S.23. **Data Source** *(Check ONLY the sources for which the measure is SPECIFIED AND TESTED).*
If other, please describe in S.24.
Electronic Clinical Data : Electronic Health Record, Paper Medical Records

S.24. **Data Source or Collection Instrument** *(Identify the specific data source/data collection instrument e.g. name of database, clinical registry, collection instrument, etc.)*
IF a PRO-PM, identify the specific PROM(s); and standard methods, modes, and languages of administration.
A data collection instrument has been developed by The Joint Commission for the purpose of the pilot test. Contracted vendors will develop data collection tools specific to their performance measurement systems when the measures specifications are released to them.

S.25. **Data Source or Collection Instrument** *(available at measure-specific Web page URL identified in S.1 OR in attached appendix at A.1)*
No data collection instrument provided

S.26. **Level of Analysis** *(Check ONLY the levels of analysis for which the measure is SPECIFIED AND TESTED)*
Facility

S.27. Care Setting *(Check ONLY the settings for which the measure is SPECIFIED AND TESTED)*
 Hospital/Acute Care Facility
If other:

S.28. 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 a composite measure.

2a. Reliability – See attached Measure Testing Submission Form
2b. Validity – See attached Measure Testing Submission Form
OAF-02_MeasSubm_MeasTesting_2013_Final-635231389679584769.docx

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.
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)*

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.

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.
 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. Describe what you have learned/modified 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 a PRO-PM, consider implications for both individuals providing PROM data (patients, service recipients, respondents) and those whose performance is being measured.
We have learned:
Timing: It takes an average of 9 minutes to collect data for this measure

Cost: Costs of data collection are from $2.81 to $6.86 for this measure, depending on the level of personnel abstracting

Availability of data: Prior DXA testing records are available electronically only if the patient receives services in the same, integrated health system

Other: Hospitals do not routinely perform DXA scanning for inpatients for 3 reasons: 1) There is no additional reimbursement for Medicare patients, 2) DXA scanning equipment is sometimes not located in an area of radiology accessible by inpatients (located in a remote outpatient facility), and 3) the patient is often hospitalized so briefly that the length of time spent waiting for an available DXA appointment exceeds the length of time the patient is hospitalized. Those patients who passed this measure did so by virtue of having an appointment for DXA scanning set for them to occur post-discharge.

We have modified the measure to include referral of the patient to a fracture liaison service as meeting the intent of the measure.

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)*.
There are no fees associated with use of any measure components. There are no fees, licensing or other requirements to use this measure. It is freely available in the public domain.

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.

Planned	Current Use (for current use provide URL)
Public Reporting	Not in use
	Not in use
Regulatory and Accreditation Programs	Not in use
Quality Improvement with Benchmarking (external benchmarking to multiple organizations)	
Quality Improvement (Internal to the specific organization)	

4a.1. For each CURRENT use, checked above, provide:
- Name of program and sponsor
- Purpose
- Geographic area and number and percentage of accountable entities and patients included

4a.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?)*
It is anticipated that this measure will be made available for use by The Joint Commission for accreditation purposes when NQF

endorsement is achieved. This measure will also be publicly reported on The Joint Commission's public reporting site, qualitycheck.org.

4a.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.*)
Specific Program: Osteoporosis-Associated Fracture Performance Improvement Measure Set, Core Performance Measures, Quality Check

Purpose: Assessment of acute hospital care for patients with fragility fracture

Intended Audience: Acute Care Hospitals, General Public

Timeline:
       Quarters 1-2, 2014 – NQF Endorsement
       Quarters 3-4, 2014 – Approval by The Joint Commission Board of Directors
       Quarter 1, 2015 – Preparation of measure materials for Specifications Manual
       Quarters 2-3, 2015 – Publication in Specifications Manual (accountability application)
       Quarter 1, 2016 – Data collection and reporting commence
       Quarter 1, 2017 – First public reporting, in Quality Check, of data collected in 2016

4b. 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.

4b.1. **Progress on Improvement. (Not required for initial endorsement unless available.)**
Performance results on this measure (current and over time) should be provided in 1b.2 and 1b.4. Discuss:
- **Progress (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**

Not available; this is an initial submission.

4b.2. **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.**
One hospital, recognizing that they were not rendering care in accordance with these performance measures, implemented a plan of education for staff and resident physicians and for hospital staff during the pilot test period. This hospital was able to achieve >90% compliance scores on all test measures, and was the only hospital that implemented a plan of care and the only hospital achieving significantly higher performance scores.

4c. 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).

4c.1. **Were any unintended negative consequences to individuals or populations identified during testing; OR has evidence of unintended negative consequences to individuals or populations been reported since implementation? If so, identify the negative unintended consequences and describe how benefits outweigh them or actions taken to mitigate them.**
There were no unintended negative consequences reported or detected during testing.

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)**
0048 : Osteoporosis: Management Following Fracture of Hip, Spine or Distal Radius for Men and Women Aged 50 Years and Older
0053 : Osteoporosis Management in Women Who Had a Fracture

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

5a. Harmonization
   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 completely harmonized?
No

5a.2. **If the measure specifications are not completely harmonized, identify the differences, rationale, and impact on interpretability and data collection burden.**
Differences: 1.   NQF#0048 is intended for use in Care Settings of Ambulatory Care: Clinician Office/Clinic, Ambulatory Care: Urgent Care; OAF-02 is intended for use in acute care hospitals. 2.   Denominator of #0045 is patients with hip, spine or distal radial fracture; denominator of OAF-02 includes those sites of fracture plus additional sites of fracture. 3.   NQF#0048 allows only central DXA to be performed and does not allow for any other fracture risk assessment method. 4.   NQF #0048 does not address the use of a fracture liaison service. 5.   NQF #0048 does not state a time frame for performance of the testing 6.   The data source for NQF#0048 is administrative claims, while the data source for OAF-02 is the medical record. 7.   NQF#0053 excludes men, excludes women under the age of 67, and excludes patients with an acute care hospitalization. 8.   NQF#0053 allows 6 months to elapse from the date of the fracture. 9. The level of analysis of NCQA measures is either health-plan or physician-specific; OAF-02 level of analysis is the inpatient facility. Rationale: 1.   The acute care hospital setting assures more timely care and increases the likelihood of diagnosis and treatment of osteoporosis, particularly in a timely manner that will curtail intervening fragility fractures that will occur with a delay in diagnosis and treatment. 2.   OAF-02 includes additional sites of fracture known to be sites of fragility fracture such as humerus, clavicle, ankle, tibia, and pelvis 3.   OAF-02 recognizes that there are instances in which a DXA cannot be performed due to lack of equipment, scheduling, or other patient issues (such as inability to position the patient in a DXA scanner or patient access issues) and allows for the use of valid alternative risk assessment methods. 4.   The physician following the patient may not be skilled or specialized in the diagnosis or treatment of osteoporosis, so that QAF-02 provides that patients are seen by or referred to entities skilled in diagnosis and management of osteoporosis, such as fracture liaison services or specialty physicians, if the diagnostic testing is not actually done while an inpatient. 5.   Rapid assessment and management reduce the re-fracture rate that can occur while the patient is waiting to be assessed or managed in NQF#0048. 6. NQF#0048 indicates that documented patient, system or medical reasons exclude the patient from the measure. How is that determined on an administrative claim? While the same considerations are active in OAF-02, that information is only documented in a medical record, not an administrative claim. 7. OAF-02 includes men and women 50 and over because any fragility fracture in that age group, irrespective of gender, needs to be assessed and treated for osteopenia/osteoporosis; the disease is not limited to women 67 and over. This measure is for acute care inpatients, where care can be rendered efficiently. 8.   Patients with a fragility fracture have a high rate of re-fracture, that can occur in the 6 months that are allowed in NQF#0053; there is no point in delay of diagnosis and treatment. 9.   Early diagnosis and treatment is often a facility-based initiative; OAF-02 allows facilities to evaluate the effectiveness of any such program they initiate or have in place. 10.   OAF-02 can increase compliance with #0053 and #0048.

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.)
No NQF-endorsed competing measures were found.

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:** OAF_Appendix_Final-635231389537622949.xlsx

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Co.1 **Measure Steward (Intellectual Property Owner):** The Joint Commission
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Co.3 **Measure Developer if different from Measure Steward:** The Joint Commission
Co.4 **Point of Contact:** Ann, Watt, awatt@jointcommission.org, 630-792-5944-

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 role of the Expert Panel over the seven years of development was to provide advisory oversight in literature review, measure construct and content, review of testing results, and endorsement of draft and finalized measures, as well as to continue to provide measure content oversight and update in the future. Members are:

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Measure Developer/Steward Updates and Ongoing Maintenance

Ad.2 Year the measure was first released: 2013

Ad.3 Month and Year of most recent revision: 09, 2013

Ad.4 What is your frequency for review/update of this measure? Twice Yearly

Ad.5 When is the next scheduled review/update for this measure? 06, 2014

Ad.6 Copyright statement: This measure resides in the public domain and is not copyrighted

Ad.7 Disclaimers:

Ad.8 Additional Information/Comments: The Measure Steward Agreement is under discussion between the legal representatives of NQF and The Joint Commission.