



## 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 #:** 0046

**Corresponding Measures:**

**De.2. Measure Title:** Screening for Osteoporosis for Women 65-85 Years of Age

**Co.1.1. Measure Steward:** National Committee for Quality Assurance

**De.3. Brief Description of Measure:** Percentage of women 65-85 years of age who ever had a central dual-energy x-ray absorptiometry (DXA) test to check for osteoporosis.

**1b.1. Developer Rationale:** This measure assesses the number of women 65-85 who have ever received a dual-energy x-ray absorptiometry (DXA) test to check for osteoporosis. There is convincing evidence that bone mineral density tests predict short-term risk for osteoporotic fractures. There is also evidence osteoporosis treatment reduces the incidence of fracture in women who are identified to be at risk of an osteoporotic fracture. Fractures, especially in the older population, can cause significant health issues, decline in function, and, in some cases lead to mortality.

**S.4. Numerator Statement:** The number of women who have documentation in their medical record of having received a DXA test of the hip or spine.

**S.6. Denominator Statement:** Women age 65-85.

**S.8. Denominator Exclusions:** Diagnosis of osteoporosis at the time of the encounter.

Patient receiving hospice services anytime during the measurement period.

**De.1. Measure Type:** Process

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

**S.20. Level of Analysis:** Clinician : Group/Practice, Clinician : Individual

**IF Endorsement Maintenance – Original Endorsement Date:** May 01, 2007 **Most Recent Endorsement Date:** Oct 25, 2018

**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**

0046 - Evidence.docx

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

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

Yes

**1b. Performance Gap**

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

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

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

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

This measure assesses the number of women 65-85 who have ever received a dual-energy x-ray absorptiometry (DXA) test to check for osteoporosis. There is convincing evidence that bone mineral density tests predict short-term risk for osteoporotic fractures. There is also evidence osteoporosis treatment reduces the incidence of fracture in women who are identified to be at risk of an osteoporotic fracture. Fractures, especially in the older population, can cause significant health issues, decline in function, and, in some cases lead to mortality.

**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.*

The following data were extracted from Physician Quality Reporting System (PQRS) and reflect claims data for services provided from January 1, 2012 through December 31, 2012. PQRS is a pay-for-reporting incentive program that allows providers to choose which quality measures to report on. The program has been renamed as the Quality Payment Program. In 2012, of 505,070 eligible providers, 6.1% chose to report on this measure. Performance data is summarized at the physician level and described by mean, 10th, 25th, 50th, 75th and 90th percentile.

This measure has been updated since these data were collected. Therefore, these data reflect performance on the previous version of the measure which looked for either screening or treatment for osteoporosis.

Performance Rate for all Reporting Providers for 2012

Mean	10th	25th	50th	75th	90th
58.7%	0.00%	22.7%	64.3%	100%	100%

The following data (also extracted from PQRS) show the average performance rates for several years prior to 2012.

Average performance rates from 2009-2011

2009	56.1%
2010	55.1%
2011	61.2%

**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.**

N/A

**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.*

Performance data stratified by different variables is not currently available for this measure based on how it is reported in the CMS Quality Payment Program (QPP). However, if demographic variables were collected accurately this measure could be stratified by things such as race/ethnicity or other factors, in order to assess the presence of health care disparities.

**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**

There is a misconception that osteoporosis is only a concern for non-Hispanic white women, which may result in delaying prevention and treatment in non-White and Hispanic populations. African-American and Hispanic women are less likely to believe they are at risk for osteoporosis (NIH NIAMS 2010). In a national cohort study (Gillespie and Morin 2017), researchers examined medical claims data from 2008 to 2014 for trends in osteoporosis screening in women age 50 and older. They found that after controlling for other factors, non-Hispanic Black women were least likely to have osteoporosis screening (18.2%) compared with other racial/ethnic categories (range: 22.0%-22.7%,  $P < .001$ ). After controlling for various patient characteristics, non-Hispanic Asian and Hispanic women in the 50-64 and 65-79-year age groups had the highest odds of screening. Outside of racial and ethnic disparities, women with lower socioeconomic status had lower rates of screening for osteoporosis (Gillespie and Morin). In a retrospective cohort study, researchers from the University of California, Davis Health Systems also found that Black women and women with more socioeconomic barriers were less likely to be screened for osteoporosis (Amarnath et al 2015). Interventions that target population screening are needed to improve the rates of osteoporosis screening for women age 65 and older.

Amarnath, A. L. D., Franks, P., Robbins, J. A., Xing, G., & Fenton, J. J. (2015). Underuse and overuse of osteoporosis screening in a regional health system: a retrospective cohort study. *Journal of general internal medicine*, 30(12), 1733-1740.

Gillespie, C. W., & Morin, P. E. (2017). Trends and disparities in osteoporosis screening among women in the United States, 2008-2014. *The American journal of medicine*, 130(3), 306-316.

National Institutes of Health. (2010). National Institute of Arthritis and Musculoskeletal and Skin Disorders. Osteoporosis and African American Women. Accessed at: [www.niams.nih.gov/hi/topics/osteoporosis/opbkg.htm](http://www.niams.nih.gov/hi/topics/osteoporosis/opbkg.htm)

## 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):  
Endocrine, Musculoskeletal, Musculoskeletal : Osteoporosis

**De.6. Non-Condition Specific**(check all the areas that apply):  
Primary Prevention, Screening

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

**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.)

NA

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

This is not an eMeasure Attachment:

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

No data dictionary Attachment:

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

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.

Yes

**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.

Since the last measure update, we have incorporated an exclusion for patients in hospice. It would not be beneficial to assess older women in hospice care to see whether they had a bone mineral density test to screen for osteoporosis.

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

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

The number of women who have documentation in their medical record of having received a DXA test of the hip or spine.

**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).

Documentation of a central dual-energy x-ray absorptiometry (DXA) test ever being performed.

The numerator criteria is met by documentation in the medical record that the patient has had a central dual-energy x-ray absorptiometry test. This measure is also collected in the Quality Payment Program using the following codes specific to the quality measure:

Performance Met: G8399 Patient with documented results of a central Dual-energy X-Ray Absorptiometry (DXA) ever being performed.

Performance Not Met: G8400 Patient with central Dual-energy X-Ray Absorptiometry (DXA) results not documented, reason not given.

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

Women age 65-85.

**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).

Women who had a documented patient encounter (see Table 1 for encounter codes) during the reporting period.

Table 1: Patient encounter during the reporting period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215

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

Diagnosis of osteoporosis at the time of the encounter.

Patient receiving hospice services anytime during the measurement period.

**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.)

The denominator exclusion criteria is met by documentation in the medical record of a diagnosis of osteoporosis at the time of the encounter (see Table 2 for diagnosis codes).

Table 2: Diagnosis of osteoporosis on date of encounter (ICD-10-CM): M80.00XA, M80.00XD, M80.00XG, M80.00XK, M80.00XP, M80.00XS, M80.011A, M80.011D, M80.011G, M80.011K, M80.011P, M80.011S, M80.012A, M80.012D, M80.012G, M80.012K, M80.012P, M80.012S, M80.019A, M80.019D, M80.019G, M80.019K, M80.019P, M80.019S, M80.021A, M80.021D, M80.021G, M80.021K, M80.021P, M80.021S, M80.022A, M80.022D, M80.022G, M80.022K, M80.022P, M80.022S, M80.029A, M80.029D, M80.029G, M80.029K, M80.029P, M80.029S, M80.031A, M80.031D, M80.031G, M80.031K, M80.031P, M80.031S, M80.032A, M80.032D, M80.032G, M80.032K, M80.032P, M80.032S, M80.039A, M80.039D, M80.039G, M80.039K, M80.039P, M80.039S, M80.041A, M80.041D, M80.041G, M80.041K, M80.041P, M80.041S, M80.042A, M80.042D, M80.042G, M80.042K, M80.042P, M80.042S, M80.049A, M80.049D, M80.049G, M80.049K, M80.049P, M80.049S, M80.051A, M80.051D, M80.051G, M80.051K, M80.051P, M80.051S, M80.052A, M80.052D, M80.052G, M80.052K, M80.052P, M80.052S, M80.059A, M80.059D, M80.059G, M80.059K, M80.059P, M80.059S, M80.061A, M80.061D, M80.061G, M80.061K, M80.061P, M80.061S, M80.062A, M80.062D, M80.062G, M80.062K, M80.062P, M80.062S, M80.069A, M80.069D, M80.069G, M80.069K, M80.069P, M80.069S, M80.071A, M80.071D, M80.071G, M80.071K, M80.071P, M80.071S, M80.072A, M80.072D, M80.072G, M80.072K, M80.072P, M80.072S, M80.079A, M80.079D, M80.079G, M80.079K, M80.079P, M80.079S, M80.08XA, M80.08XD, M80.08XG, M80.08XK, M80.08XP, M80.08XS, M80.811A, M80.811D, M80.811G, M80.811K, M80.811P, M80.811S, M80.812A, M80.812D, M80.812G, M80.812K, M80.812P, M80.812S, M80.819A, M80.819D, M80.819G, M80.819K, M80.819P, M80.819S, M80.821A, M80.821D, M80.821G, M80.821K, M80.821P, M80.821S, M80.822A, M80.822D, M80.822G, M80.822K, M80.822P, M80.822S, M80.829A, M80.829D, M80.829G, M80.829K, M80.829P, M80.829S, M80.831A, M80.831D, M80.831G, M80.831K, M80.831P, M80.831S, M80.832A, M80.832D, M80.832G, M80.832K, M80.832P, M80.832S, M80.839A, M80.839D, M80.839G, M80.839K, M80.839P, M80.839S, M80.841A, M80.841D, M80.841G, M80.841K, M80.841P, M80.841S, M80.842A, M80.842D, M80.842G, M80.842K, M80.842P, M80.842S, M80.849A, M80.849D, M80.849G, M80.849K, M80.849P, M80.849S, M80.851A, M80.851D, M80.851G, M80.851K, M80.851P, M80.851S, M80.852A, M80.852D, M80.852G, M80.852K, M80.852P, M80.852S, M80.859A, M80.859D, M80.859G, M80.859K, M80.859P, M80.859S, M80.861A, M80.861D, M80.861G, M80.861K, M80.861P, M80.861S, M80.862A, M80.862D, M80.862G, M80.862K, M80.862P, M80.862S, M80.869A, M80.869D, M80.869G, M80.869K, M80.869P, M80.869S, M80.871A, M80.871D, M80.871G, M80.871K, M80.871P, M80.871S, M80.872A, M80.872D, M80.872G, M80.872K, M80.872P, M80.872S, M80.879A, M80.879D, M80.879G, M80.879K, M80.879P, M80.879S, M80.88XA, M80.88XD, M80.88XG, M80.88XK, M80.88XP, M80.88XS, M81.0, M81.6, M81.8

**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.)

N/A

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

No risk adjustment or risk stratification

If other:

**S.12. Type of score:**

Rate/proportion

If other:

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

Better quality = Higher score

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

Step 1: Determine the eligible population. To do so, identify patients who meet all the specified criteria.

-Sex: Females

-Age: 65-85 years of age

-Patient encounter during the reporting period (12 months)

Step 2: Exclude from the eligible population in step 1 patients who have a diagnosis of osteoporosis at time of encounter.

Step 3: Identify the number of patients with a central dual-energy x-ray absorptiometry test documented.

Step 4: Calculate the rate (number of patients who had a central dual-energy x-ray absorptiometry test documented divided by the eligible population).

**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 Data, Electronic Health Records, 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.

This measure is based on administrative claims to identify the eligible population and medical record documentation collected in the course of providing care to health plan patients to identify the numerator. In the Quality Payment Program this measure is coded using G-codes specific to quality measurement.

**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)

No data collection instrument provided

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

Clinician : Group/Practice, Clinician : Individual

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

Outpatient Services

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.)

N/A

## 2. Validity – See attached Measure Testing Submission Form

0046\_-\_Testing\_Form\_v7.1-636588800587376811.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.

No



## 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.*

No

## 2.3 For maintenance of endorsement

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

No - This measure is not risk-adjusted

## 3. Feasibility

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

### 3a. Byproduct of Care Processes

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

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

Generated or collected by and used by healthcare personnel during the provision of care (e.g., blood pressure, lab value, diagnosis, depression score), 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 allow for widespread reporting across physicians and clinical practices, this measure in practice is collected through multiple data sources (administrative data, electronic clinical data, and paper records ).

**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.

Feedback on use of this measure in CMS PQRS program has been positive with few questions raised by participating clinicians to the CMS vendor. NCQA works with the CMS vendor to review any questions or issues raised with the measure on a bi-weekly basis.

**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).**

Broad public use and dissemination of these measures is encouraged and NCQA has agreed with NQF that noncommercial uses do not require the consent of the measure developer. Use by health care physicians in connection with their own practices is not commercial use. Commercial use of a measure requires the prior written consent of NCQA. As used herein, "commercial use" refers to any sale, license or distribution of a measure for commercial gain, or incorporation of a measure into any product or service that is sold, licensed or distributed for commercial gain, even if there is no actual charge for inclusion of the measure.

## 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)

#### 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

QUALITY PAYMENT PROGRAM: this measure is used in the quality payment program (QPP) which is a reporting program that uses a combination of incentive payments and payment adjustments to promote reporting of quality information by eligible professionals (EPs).

**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?)

N/A

**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.)

N/A



**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.**

Quality Payment Program (QPP) - previously Physician Quality Reporting System (PQRS): In 2015, 80 eligible professionals (EP) reported on the measure. EPs submitting PQRS data to CMS received a PQRS feedback report on whether they satisfactorily reported and if they are subject to a payment adjustment. The data in these reports may help EPs determine whether or not it is necessary to submit an informal review request. An informal review is a process that allows EPs to request a review of their payment adjustment determination.

**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.**

Quality Payment Program (QPP) - previously Physician Quality Reporting System (PQRS): Each year, QPP individual EPs and QPP group practices receive feedback reports on whether they satisfactorily reported and if they are subject to the future downward payment adjustment. CMS hosts training sessions on these reports and posts audio recording and slide presentations on their webpages. CMS also provides technical assistance and maintains webpages with information about accessing and understanding these reports.

**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.**

Quality Payment Program (QPP) - previously Physician Quality Reporting System (PQRS): CMS solicits feedback and has a designated space on their webpage with information on how to share feedback with them. The measure owner has not received any feedback on this measure.

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

Quality Payment Program (QPP) - previously Physician Quality Reporting System (PQRS): No feedback was received specific to this measure.

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

This measure went through a re-evaluation process in 2014. During that process, feedback on the measure was obtained from measure advisory panels including NCQA's Geriatric Measurement Advisory Panel and NCQA's Osteoporosis Advisory Workgroup. This measure was deemed a priority measure by the panels.

**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.**

At the time of the measure's last major update in 2014, no feedback had been received.

#### **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.**

From 2009-2012 the average performance rate increased by 2.6 percent, which shows minor improvement amongst those providers who choose to report on this measure. In 2012, of 505,070 eligible providers, 6.1% chose to report on this measure.

Currently, this measure is not required for physician reporting (they have the option). There is hope that with increasing accountability to report on this measure then the rate will begin to show improvement.

#### 4b2. Unintended Consequences

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

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

There is a possibility that the measures may result in overuse dual-energy x-ray absorptiometry (DXA) testing for women. The measure looks for documentation that a DXA test was performed. If a provider does not have access to previous medical records documenting that a DXA was performed or patient reported/provided results of a previous DXA, then a repeat DXA may be ordered even if the patient had a previous DXA. There is no guidance on how frequently a woman should receive a test, but the USPTSF recommends that a minimum two-year gap is needed to detect bone density changes between tests. This measure also has the potential to lead women who had a bone mineral density test prior to 65 to repeat screening after age 65, which may not be indicated by the woman's risk factors.

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

N/A

### 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)

0037 : Osteoporosis Testing in Older Women (OTO)

0045 : Communication with the physician or other clinician managing on-going care post fracture for men and women aged 50 years and older

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

2416 : Laboratory Investigation for Secondary Causes of Fracture

2417 : Risk Assessment/Treatment After Fracture

##### 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.

There are multiple NQF-endorsed measures of osteoporosis prevention and management. In the most recent update, we undertook a comprehensive harmonization exercise to align several NQF-endorsed osteoporosis measures where possible given the different measure focus, methods of data collection and level of accountability. Below we describe the harmonization between this measure

(0046) and the most closely related measure, 0037. Please see the attached memo on alignment of measures for a more in-depth description of the NCQA harmonization efforts. -----Measure 0037 assesses the percentage of women who report having received a bone mineral density test to screen for osteoporosis., is collected using a survey and is only specified for health plan level reporting. Measure 0037 has the same focus and target population as measure 0046 and therefore could be considered competing. The two measures are completed harmonized on all data elements with the exception of the following which could not be harmonized due to difference in data source: TYPE OF TEST: Because measure 0037 is a survey measure, the term “bone mineral density test” is used to refer to “dual energy x-ray absorptiometry test.” This term is used because cognitive testing indicated the term was more understandable to survey respondents. We have harmonized the two measures by ensuring both measures only capture testing done of the hip or spine; however, 0046 is able to capture more specific about the type of test done due to the data source used for measure collection. EXCLUSIONS: Measure 004 includes an exclusion for diagnosis of osteoporosis at the time of encounter. An exclusion for diagnosis of osteoporosis is not feasible in the survey measure (0046) due to the timing of data collection. ----- Given the two different data sources, we do not expect the two measures (0037 and 0046) to have exactly comparable results; however the two measures address the same quality gap for different levels of accountability. -Measure 0037 addresses whether a health plan is addressing the risk for osteoporosis in the patient population by determining the percent of the population that had a bone mineral density test regardless who their provider is. This test may have been done outside of the context of their primary care provider. Measure 0046 addresses whether individual providers are addressing the risk for osteoporosis in their patient population by determining if an individual had a bone mineral density test to screen for osteoporosis and if their provider is aware of those results and can advise on appropriate risk reduction.----- Measures 0045, 0053, 2416, and 2417 address a different population than 0046. These measures address women who have experienced a fracture, and are focused on secondary prevention of future fractures as opposed to screening for osteoporosis. Therefore we consider these measures to be related but not competing. The differences between these measures are reflective of the different guidelines for general population screening and secondary prevention. Where it is appropriate to the measure focus and evidence we have aligned the measures.

#### **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.)**

Although 0037 and 0046 have the same measure focus and same target population they are specified for different levels of analysis and accountability, and use different data sources. We have described above where the measures are conceptually harmonized and the rationale for where the measures cannot be harmonized in their technical specifications due to the level of analysis and data source.

-----  
RESPONSE TO 5a.2 (insufficient space above):

There are multiple NQF-endorsed measures of osteoporosis prevention and management. In the most recent update, we undertook a comprehensive harmonization exercise to align several NQF-endorsed osteoporosis measures where possible given the different measure focus, methods of data collection and level of accountability. Below we describe the harmonization between this measure (0046) and the most closely related measure, 0037.

Measure 0046 assesses the percentage of women who have a bone mineral density test to screen for osteoporosis. Measure 0046 is collected using medical record review and is only specified for physician level reporting. The rationale for different data sources is the availability of data for the level of reporting.

- Measure 0037 is a health plan level measure. Since the recommended timeframe for osteoporosis testing is at least once since turning age 65 or prior to age 65 if at risk, the measure is specified as “ever” having a bone mineral density test. It is not feasible for a Medicare Advantage plan to have access to enough historical claims data or medical record data to determine if the entire member population ever had a bone mineral density test. Therefore a survey method is the recommended data source for collecting this type of historical data.

- Measure 0046 is a physician level measure. Physicians are limited by the same lack of historical data, but also have limited resources to field and collect a survey of their patient population. Therefore, this measure looks for documentation in the medical record that a bone mineral density test was performed. This documentation may come from previous medical records requested by

the current physician on past care.

The harmonized measure elements described below are reflective of the most recent measure versions submitted for endorsement.

Harmonized Measure Elements between 0037 and 0046:

- Type of Test: Because measure 0037 is a survey measure, the term “bone mineral density test” is used to refer to “dual energy x-ray absorptiometry test.” This term is used because cognitive testing indicated the term was more understandable to survey respondents. We have harmonized the two measures by ensuring both measures only capture testing done of the hip or spine; however, 0046 is able to capture more specific about the type of test done due to the data source used for measure collection.
- Eligible Population: Both measures are focused on women age 65-85 years of age.
- Timeframe for testing: Both measures address whether testing was done at least once in the woman’s lifetime.

Given the two different data sources, we do not expect the two measures (0037 and 0046) to have exactly comparable results; however, the two measures address the same quality gap for different levels of accountability.

- Measure 0037 addresses whether a health plan is addressing the risk for osteoporosis in the patient population by determining the percent of the population that had a bone mineral density test regardless who their provider is. This test may have been done outside of the context of their primary care provider.
- Measure 0046 addresses whether individual providers are addressing the risk for osteoporosis in their patient population by determining if an individual had a bone mineral density test to screen for osteoporosis and if their provider is aware of those results and can advise on appropriate risk reduction.

Measures 0045, 0048, 0053, 2416, and 2417 address a different population than 0046. These measures address women who have experienced a fracture, and are focused on secondary prevention of future fractures as opposed to screening for osteoporosis. Therefore, we consider these measures to be related but not competing. The differences between these measures are reflective of the different guidelines for general population screening and secondary prevention. Where it is appropriate to the measure focus and evidence we have aligned the measures.

## Appendix

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

**No appendix Attachment:**

## Contact Information

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**Co.3 Measure Developer if different from Measure Steward:** National Committee for Quality Assurance

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## Additional Information

**Ad.1 Workgroup/Expert Panel involved in measure development**

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

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**Measure Developer/Steward Updates and Ongoing Maintenance**

**Ad.2 Year the measure was first released:** 2003

**Ad.3 Month and Year of most recent revision:** 05, 2014

**Ad.4 What is your frequency for review/update of this measure?** Approximately every 3 years, sooner if clinical guidelines or evidence has changed significantly

**Ad.5 When is the next scheduled review/update for this measure?** 12, 2019

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