

American Academy of Family Physicians/American Academy of Orthopaedic Surgeons/American Association of Clinical Endocrinologists/American College of Rheumatology/The Endocrine Society/Physician Consortium for Performance Improvement®/National Committee for Quality Assurance

Osteoporosis
Physician Performance Measurement Set

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Intended Audience and Patient Population:

All physicians treating patients aged 50 years and older with a hip, spine or radial fracture or managing the on-going care of patients with a diagnosis of osteoporosis (see measures to specific population characteristics)

These clinical performance measures are designed for individual quality improvement. Some of the measures may also be appropriate for accountability if appropriate sample sizes and implementation rules are achieved.

Accountability Measures:

Measure #1: Post-Fracture – Communication with the Physician Managing On-going Care Post Fracture of Hip, Spine or Distal Radius for Men and Women Aged 50 Years and Older - NQF-Endorsed™ (Time-Limited)

Measure #2: General Population – Screening or Therapy for Women Aged 65 Years and Older - NQF-Endorsed™ (Time-Limited)

Measure #3: Post-Fracture – Management Following Fracture of Hip, Spine or Distal Radius for Men and Women Aged 50 Years and Older - NQF-Endorsed™ (Time-Limited)

Measure #4: Osteoporosis – Pharmacologic Therapy for Men and Women Aged 50 Years and Older - NQF-Endorsed™ (Time-Limited)

Measure #5: Osteoporosis – Counseling for Vitamin D and Calcium Intake and Exercise for Men and Women

Quality Improvement Measure:

Measure #6: Glucocorticosteroids and Other Secondary Causes

Osteoporosis

Measure #1: Communication with the Physician Managing On-going Care Post Fracture of Hip, Spine or Distal Radius for Men and Women Aged 50 Years and Older

This measure may be used as an Accountability measure – Physician treating the fracture.

Clinical Performance Measure
<p>Numerator: Patients with documentation of communication with the physician managing the patient's on-going care that a fracture occurred and that the patient was or should be tested or treated for osteoporosis</p> <p>Definition: Communication – May include documentation in the medical record indicating that the clinician treating the fracture communicated (e.g., verbally, by letter, DXA report was sent) with the clinician managing the patient's on-going care OR a copy of a letter in the medical record outlining whether the patient was or should be treated for osteoporosis.</p> <p>Denominator: All patients aged 50 years and older treated for hip, spine, or distal radial fracture</p> <p>Denominator Exceptions: Documentation of medical reason(s) for not communicating with physician managing on-going care of patient that a fracture occurred and that the patient was or should be tested or treated for osteoporosis Documentation of patient reason(s) for not communicating with physician managing on-going care of patient that a fracture occurred and that the patient was or should be tested or treated for osteoporosis</p> <p>Measure: Percentage of patients aged 50 years and older treated for a hip, spine, or distal radial fracture with documentation of communication with the physician managing the patient's on-going care that a fracture occurred and that the patient was or should be tested or treated for osteoporosis.</p>
<p>The following clinical recommendation statements are quoted <u>verbatim</u> from the referenced clinical guidelines and represent the evidence base for the measure:</p> <p>The most important risk factors for osteoporosis-related fractures are a prior low-trauma fracture as an adult and a low BMD in patients with or without fractures. (AAE¹)</p> <p>BMD measurement should be performed in all women 40 years old or older who have sustained a fracture. (AAE¹)</p> <p>The decision to measure bone density should follow an individualized approach. It should be considered when it will help the patient decide whether to institute treatment to prevent osteoporotic fracture. It should also be considered in patients receiving glucocorticoid therapy for 2 months or more and patients with other conditions that place them at high risk for osteoporotic fracture. (NIH²)</p> <p>The most commonly used measurement to diagnose osteoporosis and predict fracture risk is based on assessment of BMD by dual-energy X-ray absorptiometry (DXA). (NIH²) Measurements of BMD made at the hip predict hip fracture better than measurements made at other sites while BMD measurement at the spine predicts spine fracture better than measures at other sites. (NIH²)</p> <p>The single most powerful predictor of a future osteoporotic fracture is the presence of previous such fractures. (AGA³)</p>
<p>Rationale for the measure: Patients who experience fragility fractures should either be treated or screened for the presence of osteoporosis. Although the fracture may be treated by the orthopedic surgeon, the testing and/or treatment is likely to be under the responsibility of the physician providing on-going care. It is important the physician providing on-going care for the patient be made aware the patient has sustained a non-traumatic fracture. There is a high degree of variability and consensus by experts of what constitutes a fragility fracture and predictor of an underlying problem of osteoporosis. The work group determined that only those fractures, which have the strongest consensus and evidence that they are predictive of osteoporosis, should be included in the measure at this time. We anticipate that the list of fractures will expand as further evidence is published supporting the inclusion of other fractures.</p>

Measure Specifications – Measure #1: Communication with the Physician Managing On-going Care Post Fracture of Hip, Spine or Distal Radius for Men and Women Aged 50 Years and Older
Measure specifications will be provided for multiple data sources.

<p>A. Administrative claims data Administrative claims data collection requires users to identify the eligible population (denominator) and numerator using codes recorded on claims or billing forms (electronic or paper). Users report a rated based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria.</p> <p>(Note: The specifications listed below are those needed for <u>performance calculation</u>.)</p> <p><u>Denominator (Eligible Population):</u> All patients aged 50 years and older treated for hip, spine, or distal radial fracture</p> <p><u>Option 1 - Denominator Criteria (Eligible Cases):</u> Patients aged ≥ 50 years on date of encounter AND Diagnosis for hip, spine or distal radial fracture (line-item ICD-9-CM): 805.00, 805.01, 805.02, 805.03, 805.04, 805.05, 805.06, 805.07, 805.08, 805.2, 805.4, 805.6, 805.8, 813.40, 813.41, 813.42, 813.44, 813.45, 813.50, 813.51, 813.52, 813.54, 820.00, 820.01, 820.02, 820.03, 820.09, 820.20, 820.21, 820.22, 820.8 AND Patient encounter during the reporting period (CPT) – Service codes: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245</p> <p style="text-align: center;">OR</p> <p><u>Option 2 - Denominator Criteria (Eligible Cases):</u> Patients aged ≥ 50 years on the date of encounter And Diagnosis for hip, spine or distal radial fracture (line-item ICD-9-CM): 733.00, 733.01, 733.02, 733.03, 733.09, 805.00, 805.01, 805.02, 805.03, 805.04, 805.05, 805.06, 805.07, 805.08, 805.2, 805.4, 805.6, 805.8, 813.40, 813.41, 813.42, 813.44, 813.45, 813.50, 813.51, 813.52, 813.54, 820.00, 820.01, 820.02, 820.03, 820.09, 820.20, 820.21, 820.22, 820.8 AND Patient encounter during the reporting period (CPT) – Procedure codes: 22305, 22310, 22315, 22318, 22319, 22325, 22326, 22327, 22520, 22521, 22523, 22524, 25600, 25605, 25606, 25607, 25608, 25609, 27230, 27232, 27235, 27236, 27238, 27240, 27244, 27245, 27246, 27248</p> <p><u>Numerator:</u> Patients with documentation of communication with the physician managing the patient's on-going care that a fracture occurred and that the patient was or should be tested or treated for osteoporosis</p> <ul style="list-style-type: none">• Report the CPT Category II code: 5015F – Documentation of communication that a fracture occurred and that the patient was or should be tested or treated for osteoporosis <p><u>Denominator Exception:</u> Documentation of medical reason(s) for not communicating with physician managing on-going care of patient that a fracture occurred and that the patient was or should be tested or treated for osteoporosis</p> <ul style="list-style-type: none">• Append modifier to CPT Category II code: 5015F-1P <p>Documentation of patient reason(s) for not communicating with physician managing on-going care of patient that a fracture occurred and that the patient was or should be tested or treated for osteoporosis</p> <ul style="list-style-type: none">• Append modifier to CPT Category II code: 5015F-2P
B. Electronic Health Record System <i>(in development)</i>
C. Paper Medical Record <i>(in development)</i>

Osteoporosis

Measure #2: Screening or Therapy for Osteoporosis for Women Aged 65 Years and Older

This measure may be used as an Accountability measure.

Clinical Performance Measure
<p>Numerator: Patients who had a central DXA measurement ordered or performed at least once since age 60 or pharmacologic therapy prescribed within 12 months</p> <p>Definitions: Pharmacologic Therapy – U.S. Food and Drug Administration approved pharmacologic options for osteoporosis prevention and/or treatment of postmenopausal osteoporosis include, in alphabetical order: bisphosphonates (alendronate, ibandronate, and risedronate), calcitonin, estrogens (estrogen and/or hormone therapy), parathyroid hormone [PTH (1-34), teriparatide], and selective estrogen receptor modules or SERMs (raloxifene). Prescribed – Includes patients who are currently receiving medication(s) that follow the treatment plan recommended at an encounter during the reporting period, even if the prescription for that medication was ordered prior to the encounter</p> <p>Denominator: All female patients aged 65 years and older</p> <p>Denominator Exceptions: Documentation of medical reason(s) for not ordering or performing a central DXA measurement or not prescribing pharmacologic therapy. Documentation of patient reason(s) for not ordering or performing a central DXA measurement or not prescribing pharmacologic therapy. Documentation of system reason(s) for not ordering or performing a central DXA measurement or not prescribing pharmacologic therapy.</p> <p>Measure: Percentage of female patients aged 65 years and older who have a central dual-energy X-ray absorptiometry (DXA) measurement ordered or performed at least once since age 60 or pharmacologic therapy prescribed within 12 months.</p>
<p>The following clinical recommendation statements are quoted <u>verbatim</u> from the referenced clinical guidelines and represent the evidence base for the measure: The U.S. Preventive Services Task Force (USPSTF) recommends that women aged 65 and older be screened routinely for osteoporosis. (B Recommendation) (USPSTF⁴)</p> <p>The USPSTF recommends that routine screening begin at age 60 for women at increased risk for osteoporotic fractures. Use of risk factors, particularly increasing age, low weight, and non-use of estrogen replacement, to screen younger women may identify high-risk women. (B Recommendation) (USPSTF)</p> <p>BMD measurement should be performed in all women beyond 65 years of age. Dual x-ray absorptiometry of the lumbar spine and proximal femur provides reproducible values at important sites of osteoporosis-associated fracture. These sites are preferred for baseline and serial measurements. (AAACE¹)</p> <p>The most important risk factors for osteoporosis-related fractures are a prior low-trauma fracture as an adult and a low BMD in patients with or without fractures. (AAACE¹) BMD testing should be performed on:</p> <ul style="list-style-type: none">• All women aged 65 and older regardless of risk factors• Younger postmenopausal women with one or more risk factors (other than being white, postmenopausal, and female)• Postmenopausal women who present with fractures <p>The decision to test for BMD should be based on an individual's risk profile. Testing is never indicated unless the results could influence a treatment decision. (NOF⁵)</p> <p>Markers of greater osteoporosis and fracture risk include older age, hypogonadism, corticosteroid therapy, and</p>

established cirrhosis. (Level B Evidence) (AGA⁶)

The single most powerful predictor of a future osteoporotic fracture is the presence of previous such fractures. (AGA³)

Pharmacologic therapy should be initiated to reduce fracture risk in women with:

- BMD T-scores below -2.0 by central dual x-ray absorptiometry (DXA) with no risk factors
- BMD T-scores below -1.5 by central dual x-ray absorptiometry (DXA) with one or more risk factors
- A prior vertebral or hip fracture (NOG⁵)

The decision to measure bone density should follow an individualized approach. It should be considered when it will help the patient decide whether to institute treatment to prevent osteoporotic fracture. It should also be considered in patients receiving glucocorticoid therapy for 2 months or more and patients with other conditions that place them at high risk for osteoporotic fracture. (NIH²)

The most commonly used measurement to diagnose osteoporosis and predict fracture risk is based on assessment of BMD by dual-energy X-ray absorptiometry (DXA). (NIH²)

Measurements of BMD made at the hip predict hip fracture better than measurements made at other sites while BMD measurement at the spine predicts spine fracture better than measures at other sites. (NIH²)

Rationale for the measure:

Patients with elevated risk for osteoporosis should have the diagnosis of osteoporosis excluded or be on treatment of osteoporosis.

Measure Specifications – Measure #2: Screening or Therapy for Osteoporosis for Women Aged 65 Years and Older
Measure specifications will be provided for multiple data sources.

A. Administrative claims data

Administrative claims data collection requires users to identify the eligible population (denominator) and numerator using codes recorded on claims or billing forms (electronic or paper). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria.

(Note: The specifications listed below are those needed for performance calculation.)

Denominator (Eligible Population): All female patients aged 65 years and older

Denominator Criteria (Eligible Cases):

Female patients aged ≥ 65 years on date of encounter

AND

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

Numerator: Patients who had a central DXA measurement ordered or performed at least once since age 60 or pharmacologic therapy prescribed within 12 months

- Report the CPT Category II code: 3096F – Central Dual-energy X-Ray Absorptiometry (DXA) ordered

OR

- Report the CPT Category II code: 3095F – Central Dual-energy X-Ray Absorptiometry (DXA) results documented

OR

- Report the CPT Category II code: 4005F – Pharmacologic therapy (other than minerals/vitamins) for osteoporosis prescribed

Denominator Exception:

Documentation of medical reason(s) for not ordering or performing a central DXA measurement or not prescribing pharmacologic therapy.

- Append modifier to CPT Category II code(s): 3096F-1P or 3095F-1P or 4005F-1P

Documentation of patient reason(s) for not ordering or performing a central DXA measurement or not prescribing pharmacologic therapy.

- Append modifier to CPT Category II code(s): 3096F-2P or 3095F-2P or 4005F-2P

Documentation of system reason(s) for not ordering or performing a central DXA measurement or not prescribing pharmacologic therapy.

- Append modifier to CPT Category II code(s): 3096F-3P or 3095F-3P or 4005F-3P

B. Electronic Health Record System (*in development*)

C. Paper Medical Record (*in development*)

Osteoporosis

Measure #3: Management Following Fracture of Hip, Spine or Distal Radius for Men and Women Aged 50 Years and Older

This measure may be used as an Accountability measure.

Clinical Performance Measure
<p>Numerator: Patients who had a central DXA measurement ordered or performed or pharmacologic therapy prescribed</p> <p>Definitions: Pharmacologic Therapy – U.S. Food and Drug Administration approved pharmacologic options for osteoporosis prevention and/or treatment of postmenopausal osteoporosis include, in alphabetical order: bisphosphonates (alendronate, ibandronate, and risedronate), calcitonin, estrogens (estrogens and/or hormone therapy), parathyroid hormone [PTH (1-34), teriparatide], and selective estrogen receptor modules or SERMs (raloxifene). Prescribed – May include prescription given to the patient for treatment of osteoporosis (as listed above) at one or more encounters during the reporting period, OR documentation that patient is already taking pharmacologic therapy for osteoporosis, as documented in the current medical list.</p> <p>Denominator: All patients aged 50 years and older with a fracture of the hip, spine, or distal radius</p> <p>Denominator Exceptions: Documentation of medical reason(s) for not ordering or performing a central dual energy X-ray absorptiometry (DXA) measurement or not prescribing pharmacologic therapy for osteoporosis Documentation of patient reason(s) for not ordering or performing a central dual energy X-ray absorptiometry (DXA) measurement or not prescribing pharmacologic therapy for osteoporosis Documentation of system reason(s) for not ordering or performing a central dual energy X-ray absorptiometry (DXA) measurement or not prescribing pharmacologic therapy for osteoporosis</p> <p>Measure: Percentage of patients aged 50 years and older with fracture of the hip, spine, or distal radius who had a central dual-energy X-ray absorptiometry (DXA) measurement ordered or performed or pharmacologic therapy prescribed</p>
<p>The following clinical recommendation statements are quoted <u>verbatim</u> from the referenced clinical guidelines and represent the evidence base for the measure:</p> <p>The most important risk factors for osteoporosis-related fractures are a prior low-trauma fracture as an adult and a low BMD in patients with or without fractures. (AAACE¹)</p> <p>BMD measurement should be performed in all women 40 years old or older who have sustained a fracture. (AAACE¹)</p> <p>The single most powerful predictor of a future osteoporotic fracture is the presence of previous such fractures. (AGA³)</p> <p>The decision to measure bone density should follow an individualized approach. It should be considered when it will help the patient decide whether to institute treatment to prevent osteoporotic fracture. It should also be considered in patients receiving glucocorticoid therapy for 2 months or more and patients with other conditions that place them at high risk for osteoporotic fracture. (NIH²)</p> <p>The most commonly used measurement to diagnose osteoporosis and predict fracture risk is based on assessment of BMD by dual-energy X-ray absorptiometry (DXA). (NIH²)</p> <p>Measurements of BMD made at the hip predict hip fracture better than measurements made at other sites while BMD measurement at the spine predicts spine fracture better than measures at other sites. (NIH²)</p> <p>Pharmacologic therapy should be initiated to reduce fracture risk in women with:</p> <ul style="list-style-type: none">• BMD T-scores below -2.0 by central dual x-ray absorptiometry (DXA) with no risk factors• BMD T-scores below -1.5 by central dual x-ray absorptiometry (DXA) with one or more risk factors <p>A prior vertebral or hip fracture (NOF⁵)</p>

Rationale for the measure:

Patients with a history of fracture should have a baseline bone mass measurement and/or receive treatment for osteoporosis. Given that the majority of osteoporotic fractures occur in patients with a diagnosis of osteoporosis by bone mass measurement, exclusion of osteoporosis by bone mass testing does not preclude treatment of osteoporosis in a patient with a history of fracture. There is a high degree of variability and consensus by experts of what constitutes a fragility fracture and predictor of an underlying problem of osteoporosis. The work group determined that only those fractures, which have the strongest consensus and evidence that they are predictive of osteoporosis, should be included in the measure at this time. We anticipate that the list of fractures will expand as further evidence is published supporting the inclusion of other fractures.

Measure Specifications – Measure #3: Management Following Fracture of Hip, Spine or Distal Radius for Men and Women Aged 50 Years and Older

Measure specifications will be provided for multiple data sources.

A. Administrative claims data

Administrative claims data collection requires users to identify the eligible population (denominator) and numerator using codes recorded on claims or billing forms (electronic or paper). Users report a rated based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria.

(Note: The specifications listed below are those needed for performance calculation.)

Denominator (Eligible Population): All patients aged 50 years and older with a fracture of the hip, spine, or distal radius

Option 1 - Denominator Criteria (Eligible Cases):

Patients aged \geq 50 years on date of encounter

AND

Diagnosis for hip, spine or distal radial fracture (line-item ICD-9-CM): 805.00, 805.01, 805.02, 805.03, 805.04, 805.05, 805.06, 805.07, 805.08, 805.2, 805.4, 805.6, 805.8, 813.40, 813.41, 813.42, 813.44, 813.45, 813.50, 813.51, 813.52, 813.54, 820.00, 820.01, 820.02, 820.03, 820.09, 820.20, 820.21, 820.22, 820.8

AND

Patient encounter during the reporting period (CPT) – Service codes: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245

OR

Option 2 - Denominator Criteria (Eligible Cases):

Patients aged \geq 50 years on the date of encounter

AND

Diagnosis for hip, spine or distal radial fracture (line-item ICD-9-CM): 733.00, 733.01, 733.02, 733.03, 733.09, 805.00, 805.01, 805.02, 805.03, 805.04, 805.05, 805.06, 805.07, 805.08, 805.2, 805.4, 805.6, 805.8, 813.40, 813.41, 813.42, 813.44, 813.45, 813.50, 813.51, 813.52, 813.54, 820.00, 820.01, 820.02, 820.03, 820.09, 820.20, 820.21, 820.22, 820.8

AND

Patient encounter during the reporting period (CPT) – Procedure codes: 22305, 22310, 22315, 22318, 22319, 22325, 22326, 22327, 22520, 22521, 22523, 22524, 25600, 25605, 25606, 25607, 25608, 25609, 27230, 27232, 27235, 27236, 27238, 27240, 27244, 27245, 27246, 27248

Numerator: Patients who had a central DXA measurement ordered or performed or pharmacologic therapy prescribed

- Report the CPT Category II code: 3096F – Central Dual-energy X-Ray Absorptiometry (DXA) ordered

OR

- Report the CPT Category II code: 3095F – Central Dual-energy X-Ray Absorptiometry (DXA) results documented

OR

- Report the CPT Category II code: 4005F – Pharmacologic therapy (other than minerals/vitamins) for osteoporosis prescribed

Denominator Exception:

Documentation of medical reason(s) for not ordering or performing a central dual energy X-ray absorptiometry (DXA) measurement or not prescribing pharmacologic therapy for osteoporosis

- Append modifier to CPT Category II code(s): 3096F-1P or 3095F-1P or 4005F-1P

Documentation of patient reason(s) for not ordering or performing a central dual energy X-ray absorptiometry (DXA) measurement or not prescribing pharmacologic therapy for osteoporosis

- Append modifier to CPT Category II code(s): 3096F-2P or 3095F-2P or 4005F-2P

Documentation of system reason(s) for not ordering or performing a central dual energy X-ray absorptiometry

(DXA) measurement or not prescribing pharmacologic therapy for osteoporosis

- Append modifier to CPT Category II code(s): 3096F-3P or 3095F-3P or 4005F-3P

B. Electronic Health Record System *(in development)*

C. Paper Medical Record *(in development)*

Osteoporosis

Measure #4: Pharmacologic Therapy for Men and Women Aged 50 Years and Older

This measure may be used as an Accountability measure.

Clinical Performance Measure
<p>Numerator: Patients who were prescribed pharmacologic therapy within 12 months</p> <p>Definitions: Pharmacologic Therapy – U.S. Food and Drug Administration approved pharmacologic options for osteoporosis prevention and/or treatment of postmenopausal osteoporosis include, in alphabetical order: bisphosphonates (alendronate, ibandronate, and risedronate), calcitonin, estrogens (estrogens and/or hormone therapy), parathyroid hormone [PTH (1-34), teriparatide], and selective estrogen receptor modules or SERMs (raloxifene). Prescribed – May include prescription given to the patient for treatment of osteoporosis (as listed above) at one or more encounters during the reporting period, OR documentation that patient is already taking pharmacologic therapy for osteoporosis, as documented in the current medical list.</p> <p>Denominator: All patients aged 50 years and older with the diagnosis of osteoporosis</p> <p>Denominator Exceptions: Documentation of medical reason(s) for not prescribing pharmacologic therapy for osteoporosis Documentation of patient reason(s) for not prescribing pharmacologic therapy for osteoporosis Documentation of system reason(s) for not prescribing pharmacologic therapy for osteoporosis</p> <p>Measure: Percentage of patients aged 50 years and older with a diagnosis of osteoporosis who were prescribed pharmacologic therapy within 12 months</p>
<p>The following clinical recommendation statements are quoted <u>verbatim</u> from the referenced clinical guidelines and represent the evidence base for the measure:</p> <p>Agents approved by the FDA for osteoporosis prevention and/or treatment include (in alphabetical order) bisphosphonates (alendronate, ibandronate, risedronate), salmon calcitonin, estrogen, raloxifene, and teriparatide. All act by reducing bone resorption, except for teriparatide, which has anabolic effects on bone. Although estrogen is not approved for treatment of osteoporosis, there is level 1 evidence for its efficacy in reducing vertebral fractures, nonvertebral fractures, and hip fractures. Level 1 evidence of efficacy in reducing the risk of vertebral fractures is available for all the agents approved for treatment of osteoporosis (bisphosphonates, calcitonin, raloxifene, and teriparatide). Prospective trials have demonstrated the effectiveness of bisphosphonates and teriparatide in reducing the risk of nonvertebral fractures (level 1), but only bisphosphonates have been shown to reduce the risk of hip fractures in prospective controlled trials (level 1). (AACE¹)</p> <p>US Food and Drug Administration-approved pharmacologic options for osteoporosis prevention and/or treatment of postmenopausal osteoporosis include, in alphabetical order: bisphosphonates (alendronate, alendronate plus D, ibandronate, and risedronate, risedronate with 500 mg of calcium as the carbonate), calcitonin, estrogens (estrogens and/or hormone therapy), parathyroid hormone [PTH (1-34), teriparatide], and selective estrogen receptor modulators or SERMS (raloxifene). (NOF⁵)</p>
<p>Rationale for the measure: Pharmacologic therapy is an evidence-based recommendation for the treatment of osteoporosis.</p>

Measure Specifications – Measure #4: Pharmacologic Therapy for Men and Women Aged 50 Years and Older
Measure specifications will be provided for multiple data sources.

A. Administrative claims data

Administrative claims data collection requires users to identify the eligible population (denominator) and numerator using codes recorded on claims or billing forms (electronic or paper). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria.

(Note: The specifications listed below are those needed for performance calculation.)

Denominator (Eligible Population): All patients aged 50 years and older with the diagnosis of osteoporosis

Denominator Criteria (Eligible Cases):

Patients aged \geq 50 years on date of encounter

AND

Diagnosis for osteoporosis (line-item ICD-9-CM): 733.00, 733.01, 733.02, 733.03, 733.09

AND

Patient encounter during the reporting period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245

Numerator: Patients who were prescribed pharmacologic therapy within 12 months

- CPT II 4005F: Pharmacologic therapy (other than minerals/vitamins) for osteoporosis prescribed

Denominator Exception:

Documentation of medical reason(s) for not prescribing pharmacologic therapy for osteoporosis

- Append modifier to CPT Category II code: 4005F-1P

Documentation of patient reason(s) for not prescribing pharmacologic therapy for osteoporosis

- Append modifier to CPT Category II code: 4005F-2P

Documentation of system reason(s) for not prescribing pharmacologic therapy for osteoporosis

- Append modifier to CPT Category II code: 4005F-3P

B. Electronic Health Record System (*in development*)

C. Paper Medical Record (*in development*)

Osteoporosis

Measure #5: Counseling for Vitamin D and Calcium Intake and Exercise for Men and Women

This measure may be used as an Accountability measure.

Clinical Performance Measure
<p>Numerator: Patients who are either receiving both calcium and vitamin D or have been counseled regarding both calcium and vitamin D intake, and exercise at least once within 12 months</p> <p>Denominator: All patients, regardless of age, with the diagnosis of osteoporosis</p> <p>Denominator Exceptions: Documentation of medical reason(s) for patient not receiving both calcium and vitamin D and not needing counseling regarding both calcium and vitamin D intake, and exercise (EG, patient has dementia and is unable to receive counseling)</p> <p>Measure: Percentage of patients, regardless of age, with a diagnosis of osteoporosis who are either receiving both calcium and vitamin D intake or had documented counseling regarding both calcium and vitamin D intake, and exercise at least once within 12 months</p>
<p>The following clinical recommendation statements are quoted <u>verbatim</u> from the referenced clinical guidelines and represent the evidence base for the measure:</p> <p>The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and support the rationale:</p> <p>Promote a diet with adequate calcium content (500 to 1,000 mg/day). Promote adequate vitamin D intake (at least 400 IU/day; as much as 800 IU/day in the elderly). (AACE¹)</p> <p>Advise all patients to obtain an adequate intake of dietary calcium (at least 1200 mg per day, including supplements if necessary) and vitamin D (400 to 800 IU per day for individuals at risk of deficiency). (NOF⁵)</p> <p>Supplementation with both calcium and vitamin D (plain or activated form) should be required for glucocorticoid-treated patients. (ACR⁸)</p> <p>All patients require education regarding Vitamin D and calcium supplementation. (AGA³)</p> <p>All patients require education regarding the importance of lifestyle changes (e.g., regular exercise, smoking cessation) as well as vitamin D and calcium supplementation. (Level D Evidence) (AGA⁶)</p> <p>All patients should receive education on the importance of lifestyle changes (e.g., engaging in regular weight-bearing exercise, quitting smoking, avoiding excessive alcohol intake). (Level D Evidence) (AGA³)</p> <p>Advocate regular weight-bearing exercise. Minimize risk of falls and injuries with gait and balance training. (AACE¹)</p> <p>Advise patients to engage in weight-bearing and muscle-strengthening exercise reduce the risk of falls and fractures. (NOF⁵)</p>
<p>Rationale for the measure: Vitamin D and calcium and exercise are important in the treatment of osteoporosis. Data elements required for the measure can be captured and the measure is actionable by the physician.</p>

Measure Specifications – Measure #5: Counseling for Vitamin D and Calcium Intake and Exercise for Men and Women
Measure specifications will be provided for multiple data sources.

A. Administrative claims data

Administrative claims data collection requires users to identify the eligible population (denominator) and numerator using codes recorded on claims or billing forms (electronic or paper). Users report a rated based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria.

(Note: The specifications listed below are those needed for performance calculation.)

Denominator (Eligible Population): All patients, regardless of age, with the diagnosis of osteoporosis

Denominator Criteria (Eligible Cases):

All patients, regardless of age, with the diagnosis of osteoporosis

AND

Diagnosis for osteoporosis (line-item ICD-9-CM): 733.00, 733.01, 733.02, 733.03, 733.09

AND

Patient encounter during the reporting period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245

Numerator: Calcium and Vitamin D Received or Counseling Regarding Calcium Vitamin D Use, and Exercise

- CPT II 4019F: Documentation of receipt of counseling on exercise AND either both calcium and vitamin D use or counseling regarding both calcium and vitamin D use

Denominator Exception:

Documentation of medical reason(s) for patient not receiving both calcium and vitamin D and not needing counseling regarding both calcium and vitamin D intake, and exercise (EG, patient has dementia and is unable to receive counseling)

- Append modifier to CPT Category II code: 4019F-1P

B. Electronic Health Record System *(in development)*

C. Paper Medical Record *(in development)*

Osteoporosis
Measure #6: Glucocorticosteroids and Other Secondary Causes

This measure was not designed as an Accountability measure.

Data Elements	Clinical Performance Measure	Feedback
<p>Per Patient, Per Year</p> <p>Yes/No - Patient with one of the following conditions or therapies: - receiving oral glucocorticosteroid therapy for greater than 3 months - hypogonadism - fracture history (radius, vertebral bodies, hip, or humerus) - transplant history - obesity surgery - malabsorption disease OR - aromatase therapy for breast cancer</p> <p>Yes/No – Patient had central DXA measurement ordered</p> <p>Yes/No – Patient had central DXA measurement performed</p> <p>Yes/No – Patient was prescribed one of the following medications: *U.S. Food and Drug Administration approved pharmacologic options for osteoporosis prevention and/or treatment of postmenopausal osteoporosis include, in alphabetical order: bisphosphonates (alendronate, ibandronate, and risedronate), calcitonin, estrogens (estrogens and/or hormone therapy), parathyroid hormone [PTH (1-34), teriparatide], and selective estrogen receptor modulators or SERMs (raloxifene).</p> <p>Yes/No – Documentation of medical reason(s) for not ordering or performing central DXA or not prescribing pharmacologic therapy</p> <p>Yes/No – Documentation of patient reason(s) for not ordering or performing central DXA or not prescribing pharmacologic therapy</p> <p>Yes/No – Documentation of system reason(s) for not ordering or performing central DXA or not prescribing pharmacologic therapy</p>	<p>Numerator: Patients who had a central DXA measurement ordered or performed or pharmacologic therapy prescribed within 12 months</p> <p>Denominator: All patients aged 18 years and older with one of the following conditions or therapies: - receiving oral glucocorticosteroid therapy for greater than 3 months - hypogonadism - fracture history (radius, vertebral bodies, hip, or humerus) - transplant history - obesity surgery - malabsorption disease OR - aromatase therapy for breast cancer</p> <p>Denominator Exceptions: Documentation of medical reason(s) for not ordering or performing central DXA measurement or not prescribing pharmacologic therapy</p> <p>Documentation of patient reason(s) for not ordering performing central DXA or ordering or not prescribing pharmacologic therapy</p> <p>Documentation of system reason(s) for not ordering or performing central DXA or not prescribing pharmacologic therapy</p> <p>Measure: Percentage of patients aged 18 years and older with one of the following conditions or therapies: receiving oral glucocorticosteroid therapy for greater than 3 months OR hypogonadism OR fracture history OR transplant history OR obesity surgery OR malabsorption disease OR receiving aromatase therapy for breast cancer who had a central DXA ordered or performed or pharmacologic therapy prescribed within 12 months</p>	<p>Per Patient Whether or not the patient aged 18 years and older with one of the following conditions or therapies: receiving oral glucocorticosteroid therapy for greater than 3 months OR hypogonadism OR fracture history OR transplant history OR obesity surgery OR malabsorption disease OR receiving aromatase therapy for breast cancer who had a central DXA ordered or performed or pharmacologic therapy prescribed within 12 months</p> <p>Per Patient Population Percentage of patients aged 18 years and older with one of the following conditions or therapies: receiving oral glucocorticosteroid therapy for greater than 3 months OR hypogonadism OR fracture history OR transplant history OR obesity surgery OR malabsorption disease OR receiving aromatase therapy for breast cancer who had a central DXA ordered or performed or pharmacologic therapy prescribed within 12 months</p>

<p>Sources</p> <p>Electronic medical record</p> <p>Paper medical record</p> <p>Flowsheet</p> <p>Administrative claims data*</p> <p>*adequate data source only if new codes are developed specific to the intent of this measure</p>	
<p>The following clinical recommendation statements are quoted <u>verbatim</u> from the referenced clinical guidelines and support the rationale:</p> <p>DXA scans should be done in patients with the GI disorders reviewed earlier who have experienced a vertebral fracture, are postmenopausal, or have been on chronic corticosteroid therapy (>3months). (AGA³)</p> <p>Physicians should obtain a baseline BMD measurement at the lumbar spine and/or hip when initiating long-term (i.e., >6 months) glucocorticoid therapy. (ACR⁸)</p> <p>The decision to measure bone density should follow an individualized approach. It should be considered when it will help the patient decide whether to institute treatment to prevent osteoporotic fracture. It should also be considered in patients receiving glucocorticoid therapy for 2 months or more and patients with other conditions that place them at high risk for osteoporotic fracture. (NIH²)</p> <p>The most commonly used measurement to diagnose osteoporosis and predict fracture risk is based on assessment of BMD by dual-energy X-ray absorptiometry (DXA). (NIH²)</p> <p>Measurements of BMD made at the hip predict hip fracture better than measurements made at other sites while BMD measurement at the spine predicts spine fracture better than measures at other sites. (NIH²)</p> <p>Cyclic etidronate, alendronate, and risedronate have been shown to increase BMD at the spine and hip in a dose-dependent manner. They consistently reduce the risk of vertebral fractures by 30 to 50 percent. Alendronate and risedronate reduce the risk of subsequent nonvertebral fractures in women with osteoporosis and adults with glucocorticoid-induced osteoporosis. (NIH²)</p> <p>Because hypogonadism frequently results in low bone density and increased fracture risk, baseline hip and spine bone densitometry studies should be performed to assess the initial situation and all future interventions to be based on any deterioration in bone density that may occur over time. (AAACE⁷)</p>	
<p>Rationale for the measure:</p> <p>The reason this measure is a quality improvement measure is that the denominator was difficult to capture through existing administrative data sources.</p>	

References

- 1 American Association of Clinical Endocrinologists. *Medical Guidelines for Clinical Practice for the Prevention and Treatment of Postmenopausal Osteoporosis*. 2001 Edition, with selected updates for 2003.
- 2 National Institutes of Health. *Osteoporosis Prevention, Diagnosis and Therapy*. NIH Consensus Statement. March 2000;17:1-45.
- 3 American Gastroenterological Association. (2003). American Gastroenterological Association Medical Position Statement: Guidelines on Osteoporosis in Gastrointestinal Diseases. *Gastroenterology* 124, pp 791-794.
- 4 U.S. Preventive Services Task Force. *Screening for Osteoporosis in Postmenopausal Women*. Agency for Healthcare Research and Quality. 2002 Update.
- 5 National Osteoporosis Foundation. *Osteoporosis: Physician's Guide to Prevention and Treatment of Osteoporosis*. 2003
- 6 American Gastroenterological Association. (2003). American Gastroenterological Association Medical Position Statement: Osteoporosis in Hepatic Disorders. *Gastroenterology* 125, pp 937-940.
- 7 American Association of Clinical Endocrinologists. *Medical Guidelines for Clinical Practice for the Evaluation and Treatment of Hypogonadism in Adult Male Patients*. 2002 Update. *Endocrine Practice* 2002; 8, 6, pp 439-456.
- 8 American College of Rheumatology. *Recommendations for the Prevention and Treatment of Glucocorticoid-Induced Osteoporosis*. 2001 Update. *Arthritis & Rheumatism* 2001; 44, 7, pp 1496-1503.