



NATIONAL BONE HEALTH ALLIANCE
STRONG BONES AMERICA



NATIONAL OSTEOPOROSIS FOUNDATION AND NATIONAL BONE HEALTH ALLIANCE QUALITY IMPROVEMENT REGISTRY IN COLLABORATION WITH CECITY

Non-PQRS Narrative Measure Specifications

Table of Contents

Laboratory Investigation for Secondary Causes of Fracture (NQF #2416)	3
Risk Assessment/Treatment after Fracture (NQF #2417).....	4
Discharge Instructions: Emergency Department (NQF #2418).....	5
Osteoporosis management in women who had a fracture (NQF #0053).....	6
Osteoporosis Testing in Older Women (NQF #0037)	8
Hip Fracture Mortality Rate (IQI 19) (NQF #0354).....	10
Osteoporosis: percentage of patients, regardless of age, with a diagnosis of osteoporosis who are either receiving both calcium and vitamin D or had documented counseling regarding both calcium and vitamin D intake, and exercise at least once within 12 months.	11
Osteoporosis: percentage of patients aged 50 years and older with a diagnosis of osteoporosis who were prescribed pharmacologic therapy within 12 months. (NQF #0049)	12

Laboratory Investigation for Secondary Causes of Fracture (NQF #2416)

DESCRIPTION

Patients with fragility fracture who have had appropriate laboratory investigation for secondary causes of fracture ordered/performed prior to discharge from in-patient status.

NQS DOMAIN

Effective Clinical Care

DENOMINATOR

Patients age 50 and over discharged from inpatient status with an ICD-9-CM Principal or Other Diagnosis Code of selected fractures as defined: Vertebral Fracture, Hip Fracture, or Other Fracture.

Denominator Exclusions/Exceptions: Exclusions are those patients with: Age less than 50 years; "Comfort Measures Only" documented; Enrollment in a clinical trial pertaining to osteoporosis; Laboratory testing performed in the prior 12 months; Expired.

NUMERATOR

Patients who have all the specified laboratory tests ordered or performed prior to discharge: Complete blood cell count (CBC); Kidney function test; Liver function test; Serum calcium; and 25(OH) Vitamin D level OR Oral Administration of Vitamin D.

RATIONALE

Patients over 50 presenting with fragility fractures (low-trauma fractures) should have the underlying cause determined so that it can be treated, thereby preventing future fractures, readmissions, mortality, and unnecessary costs associated with treating these fractures.

MEASURE TYPE

Process

Risk Assessment/Treatment after Fracture (NQF #2417)

DESCRIPTION

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.

NQS DOMAIN

Communication and Care Coordination

DENOMINATOR

Patients age 50 and over discharged from inpatient status with an ICD-9-CM Principal or Other Diagnosis Code of selected fractures: Vertebral Fracture, Hip Fracture, or Other Fracture.

Denominator Exclusions/Exceptions: Age less than 50 years; "Comfort Measures Only" documented; Enrollment in a clinical trial pertaining to osteoporosis; On FDA-Approved pharmacotherapy for osteoporosis treatment prior to the fracture date; Bone Mineral density test documented in the 12 months prior to the fracture; Expired.

NUMERATOR

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.

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.

MEASURE TYPE

Process

Discharge Instructions: Emergency Department (NQF #2418)

DESCRIPTION

Proportion of patients age 50 or over with a fracture of the vertebra, pelvis, wrist, ankle, or humerus discharged from the Emergency Department to home, or their caregivers, who have received written discharge instructions regarding the need to follow up with a primary care physician, hospital outpatient department or specialist for possible osteoporosis to reduce the risk of future fracture, or who were contacted by a fracture liaison service.

NQS DOMAIN

Communication and Care Coordination

DENOMINATOR

Patients age 50 or over discharged to home from the Emergency Department with an ICD-9-CM Principal or Other Diagnosis Code of Fracture of the vertebra, pelvis, wrist, humerus or ankle; Vertebral Fracture; or Other Fracture.

Denominator Exceptions/Exclusions: Age less than 50 years; "Comfort Measures Only" documented; Participation in a clinical trial pertaining to osteoporosis.

NUMERATOR

Patients or their caregivers who have received written discharge instructions regarding the need to follow up with a primary care physician, other specialist physician, or hospital outpatient department for possible osteoporosis to reduce the risk of future fracture, or who were seen by, contacted by, or linked to a fracture liaison service.

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. The incidence of low bone mass among wrist fracture patients has been cited as 70-80%. However, across multiple studies, the rate of testing and treatment for osteoporosis after fragility fracture is 20% or less.

MEASURE TYPE

Process

Osteoporosis management in women who had a fracture (NQF #0053)

DESCRIPTION

This measure is used to assess the percentage of women 67 years of age and older who suffered a fracture and who had either a bone mineral density (BMD) test or prescription for a drug to treat or prevent osteoporosis in the six months after the fracture.

NQS DOMAIN

Effective Clinical Care

DENOMINATOR

Women 67 years of age and older as of December 31 of the measurement year, with a Negative Diagnosis History, who had an outpatient visit, an observation visit, an emergency department (ED) visit, a nonacute inpatient encounter or an acute inpatient encounter for a fracture during the 12 months beginning July 1 of the year prior to the measurement year and ending June 30 of the measurement year.

Denominator Exceptions/Exclusions: Exclude members with an outpatient visit (Outpatient Value Set), an observation visit (Observation Value Set), an emergency department (ED) visit (ED Value Set), a nonacute inpatient encounter (Nonacute Inpatient Value Set) or an acute inpatient encounter (Acute Inpatient Value Set) for a fracture during the 60 days prior to the IESD. Exclude members who had a bone mineral density (BMD) test (Bone Mineral Density Tests Value Set) or a claim/encounter for osteoporosis therapy (Osteoporosis Medications Value Set) or received a dispensed prescription to treat osteoporosis (refer to Table OMW-C in the original measure documentation for U.S. Food and Drug Administration [FDA]-approved osteoporosis therapies) during the 365 days (12 months) prior to the IESD. Fractures of finger, toe, face and skull are not included in this measure.

NUMERATOR

Appropriate testing or treatment for osteoporosis after the fracture defined by any of the following criteria: A bone mineral density (BMD) test on the Index Episode Start Date (IESD) or in the 180-day period after the IESD or A BMD test during the inpatient stay for the fracture (applies only to

fractures requiring hospitalization) or Osteoporosis therapy on the IESD or in the 180-day period after the IESD or A dispensed prescription to treat osteoporosis on the IESD or in the 180-day period after the IESD.

RATIONALE

Osteoporosis is a skeletal disorder characterized by compromised bone strength that puts a person at increased risk for fractures. Morbidity and mortality related to osteoporotic fractures are a major health issue. Ten million Americans have osteoporosis, and another 18 million are at risk for osteoporosis due to low bone mass. Eighty percent of people with osteoporosis are women. Women who suffer a fracture are at increased risk of suffering additional fractures.

MEASURE TYPE

Process

Osteoporosis Testing in Older Women (NQF #0037)

DESCRIPTION

Assesses the percentage of Medicare women age 65 and above who report ever having received a bone density test to check for osteoporosis.

NQS DOMAIN

Effective Clinical Care

DENOMINATOR

The number of female members 65 and older as of December 31 of the measurement year who responded "Yes" or "No" to the question "Have you ever had a bone density test to check for osteoporosis, sometimes thought of as 'brittle bones'? This test may have been done to your back, hip, wrist, heel or finger."

Denominator Exceptions/Exclusions: Members assigned one of the following disposition status codes are ineligible for the survey: Deceased*; Not enrolled in the Medicare Advantage Organization (MAO); Language barrier; Removed from sample; Duplicate, beneficiary listed twice in the sample frame; Bad address and nonworking/unlisted phone number, or member is unknown at the dialed phone number; Nonresponse: (Partial complete survey (between 50 percent and 80 percent completed or 80 percent or more completed with an Activities of Daily Living [ADL] item unanswered), Break-off (less than 50 percent completed), Refusal, Respondent unavailable, Respondent physically or mentally incapacitated, Respondent institutionalized, Nonresponse after maximum attempts).

NUMERATOR

The number of members in the denominator who responded "Yes" to the question "Have you ever had a bone density test to check for osteoporosis, sometimes thought of as 'brittle bones'? This test may have been done to your back, hip, wrist, heel or finger."

RATIONALE

Osteoporosis is the most common of the bone diseases that will affect Americans. In the United States (U.S.), 10 million people are estimated to have osteoporosis; another 34 million are estimated to have low bone mass, placing them at risk for osteoporosis and related fractures. The prevalence of osteoporosis is high among older women. Published economic assessments suggest

that diagnosis and treatment of women at risk for osteoporosis would be more cost-effective by targeting treatment to those with the lowest bone measurement results.

MEASURE TYPE

Process

Hip Fracture Mortality Rate (IQI 19) (NQF #0354)

DESCRIPTION

In-hospital deaths per 1,000 hospital discharges with hip fracture as a principal diagnosis for patients ages 65 years and older. Excludes periprosthetic fracture discharges, obstetric discharges, and transfers to another hospital.

NQS DOMAIN

Effective Clinical Care

DENOMINATOR

Number of deaths (DISP=20) among cases meeting the inclusion and exclusion rules for the denominator.

Denominator Exceptions/Exclusions: Exclude cases: 1. with any-listed ICD-9-CM diagnosis codes for periprosthetic fracture, 2. transferring to another short-term hospital (DISP=2), 3. MDC 14 (pregnancy, childbirth, and puerperium), 4. with missing discharge disposition (DISP=missing), gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing) or principal diagnosis (DX1=missing)

NUMERATOR

Discharges, for patients ages 65 years and older, with a principal ICD-9-CM diagnosis code for hip fracture.

RATIONALE

Hip fracture occurs frequently in the elderly population. Complications of fracture and treatments sometimes include embolism, pneumonia, and myocardial ischemia. These conditions and other comorbidities lead to a relatively high mortality rate, and there is some evidence that some of these complications are preventable. An observational study using a 20 percent sample of Medicare claims (from 1985 through 2005) found an annual hip fracture incidence of 957.3 per 100,000 women and 414.4 per 100,000 men and indicated a decline has occurred from 1995 through 2005.

MEASURE TYPE

Outcome

Osteoporosis: percentage of patients, regardless of age, with a diagnosis of osteoporosis who are either receiving both calcium and vitamin D or had documented counseling regarding both calcium and vitamin D intake, and exercise at least once within 12 months.

DESCRIPTION

This measure is used to assess the percentage of patients regardless of age, with a diagnosis of osteoporosis who are either receiving both calcium and vitamin D or had documented counseling regarding both calcium and vitamin D intake, and exercise at least once within 12 months.

NQS DOMAIN

Effective Clinical Care

DENOMINATOR

All patients, regardless of age, with the diagnosis of osteoporosis (see the related "Denominator Inclusions/Exclusions" field)

Denominator Exceptions/Exclusions: 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 (e.g., patient has dementia and is unable to receive counseling)

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.

RATIONALE

Vitamin D and calcium and exercise are important in the treatment of osteoporosis.

MEASURE TYPE

Process

Osteoporosis: percentage of patients aged 50 years and older with a diagnosis of osteoporosis who were prescribed pharmacologic therapy within 12 months. (NQF #0049)

DESCRIPTION

This measure is used to assess the percentage of patients aged 50 years and older with a diagnosis of osteoporosis who were prescribed pharmacologic therapy within 12 months.

NQS DOMAIN

Effective Clinical Care

DENOMINATOR

All patients aged 50 years and older with the diagnosis of osteoporosis.

Denominator Exceptions/Exclusions: 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.

NUMERATOR

Patients who were prescribed pharmacologic therapy within 12 months.

RATIONALE

Pharmacologic therapy is an evidence-based recommendation for the treatment of osteoporosis.

MEASURE TYPE

Process