OSTEOPOROSIS

Provider's guide to diagnose and code osteoporosis

Osteoporosis is the thinning of bone density, which leads to an increased risk of fracture. Osteoporosis occurs when the body fails to regenerate bone tissue. It is the most common type of bone disease and is most likely to affect the hip, wrist and vertebrae.

Osteoporosis affects:

- 9% of adults aged 50 and older (CDC, 1999 - current)
- 10% of women and 2% of men over age 50 may develop a hip fracture (Looker et al., 2012)

Pathophysiology

- Calcium is an important mineral for building bone
- Vitamin D is necessary for the body to absorb calcium ions

Risk factors include:

- Advancing age
- Post-menopausal women, secondary to low circulating estrogen amounts. This condition is known as senile osteoporosis
- Low testosterone levels in men, noted following orchiectomy
- Men with current or prior use of androgen deprivation medications for prostate cancer, such as flutamide, bicalutamide; or lutenizing hormone releasing analogs such as leuprolide
- Genetic predisposition
- > History of prior fracture
- > Rheumatoid arthritis
- Hypocalcemia
- Osteomalacia
- Vitamin D deficiency
- > Immobile or bed-ridden patients

- > Patients using glucocorticoids
- Alcohol abuse/dependence
- Tobacco abuse/dependence
- The website and mobile application FRAX® (http://www.shef.ac.uk/FRAX/) is a well validated assessment tool used to assess the 10 year fracture risk for individuals. This was developed by the World Health Organization.

Symptoms include:

- Often there are no symptoms, and typically patients learn of the disease as a result of fracture
- > Kyphosis spinal posture

Diagnostic testing:

- Bone mineral density testing can diagnose bone loss and predict risk of future bone loss
 - Women over the age of 65 and postmenopausal women should be surveyed for bone mineral density loss
- > Plain radiographs such as spine and hip films

Treatment:

Osteoporosis can be prevented or treated with medication such as:

- > Bisphosphonate medications
- Estrogens and estrogen receptor modulators
- Parathyroid agonists
- > Vitamin D replacement
- Calcitonin



Wellness recommendations:

- Increase exercise to improve mobility and strengthening
- > Educate patients on how to prevent falls
 - Avoid or limit sedating medications
 - Remove household hazards such as throw rugs
 - Anticipate household hazards such as bathrooms - consider installing railing or supportive devices
 - Leave lights on at night to promote safe travel within the home
 - Have vision checked on an annual basis
 - Wear shoes that fit well and have heel supports
 - Avoid walking on slippery ground, such as ice or water

Coding and documentation tips:

- Be clear, concise and legible with documentation
- Provide a diagnosis that supports the ICD-10 nomenclature
- Ensure that the clinical document is signed and dated by a credentialed provider
- Provide a treatment and follow-up plan for each diagnosis
- Verify patient demographics such as name and date of birth
- The clinician needs to indicate the cause of the osteoporosis (age-related vs. drug-induced) as well as any current pathological fracture and their linked association
- The clinician needs to add the site and laterality of the pathological fracture using the M80.0-- (osteoporosis age related with current pathological fracture), or M80.8-- (osteoporosis [other] with current pathological fracture) ICD-10 code set.

Osteoporosis without current pathological fracture

2015 ICD-10-CM		
ICD-10- CM Code	ICD-10-CM Description	Definition / tip
M81.0	Age-related osteoporosis w/o current pathological fracture	Postmenopausal Senile
M81.6	Localized osteoporosis (Lequesne)	
M81.8	Other osteoporosis w/o current pathological fracture	 Drug-induced Idiopathic Postsurgical malabsorption Post-traumatic Postoophorectomy

References

Centers for Disease Control and Prevention, National Center for Health Statistics. 1999 – Current National Health and Nutrition Examination Survey (NHANES). Available from: http://www.cdc.gov/nchs/nhanes/nhanes/1999-2000/nhanes99 00.htm.

Kleerekopper, M. Screening for osteoporosis. In: UpToDate, Rosen, C. J. & Schmader, K. E. (Eds.), UpToDate, Waltham, MA. Accessed on 2/19/2015.)

Looker, A. C., Borrud, L. G., Dawson-Hughes, B., Shepherd, J. A., & Wright, N. C. (2012). Osteoporosis of low bone mass at the femur neck or lumbar spine in older adults: United States. 2005–2008... 1-8.

Kanis, J.A., Johnell, O., Oden, A., Johansson, H., & McCloskey, E. (2008). FRAXTM and the assessment of fracture probability in men and women from the UK. Osteoporosis International 19: 385-397.