ULTRASOUND BONE DENSITY MEASUREMENT (Peripheral Sites)

Date of Origin: 4/1/2019  Last Review Date: 4/22/2020  Effective Date: 5/1/2020

Dates Reviewed: 4/2020

Developed By: Medical Necessity Criteria Committee

I. Description
   Risk factors for fracture include low bone mass, low bone strength, a personal history of fracture as an adult, or a history of a fracture in a first-degree relative. Osteoporosis, defined as low bone mass leading to an increased risk of fragility fractures, is an extremely common disease in the elderly population due to age-related bone loss in both sexes and menopause related bone loss in women. The World Health Organization has diagnostic thresholds for osteoporosis based on BMD measurements compared with a T score, which is the standard deviation difference between an individual’s BMD and that of a young-adult reference population. Conditions that can cause or contribute to osteoporosis include lifestyle factors such as low intake of calcium, high intake of alcohol or cigarette smoking, and thinness. Other risk factors for osteoporosis include certain endocrine, hematologic, gastrointestinal tract and genetic disorders, hypogonadal states, and medications.

   BMD can be measured either centrally (i.e. hip or spine) or peripherally (i.e. wrist, finger, heel) sites. While BMD measurements are predictive of fragility fractures at all sites, central measurements of the hip and spine are the most predictive. Fractures of the hip and spine (i.e. vertebral fractures) are also considered to be the most clinically relevant. BMD is typically expressed as a T score.

   The utility of screening BMD measurements can be established by demonstrating that screening identifies a population at increased risk of fracture and that, by treating those at-risk individuals, the rate of fractures is reduced thereby lowering fracture-related morbidity and mortality. These potential benefits of screening should outweigh the risks of screening (radiation exposure) or false positives (initiation of unnecessary treatment).

II. Criteria: CWQI HCS-0251
   A. Moda Health considers Ultrasound Bone Density Measurement medically necessary for ANY of the following populations:
      a. Women age 65 years old and older
      b. Men age 70 years old and older
      c. Individuals receiving (or expected to receive) glucocorticoid therapy for at least 3 months
      d. Women younger than 65 years of age who have additional risk factors for osteoporosis based on medical history and other findings including any of the following:
         i. Estrogen deficiency
ii. History of maternal hip fracture that occurred after age 50 years
iii. Low body mass (<127 lbs or 57.6 kg)
iv. History of amenorrhea which lasted for more than 1 year and occurred before age 42

e. Women younger than 65 years old or men younger than 70 years old who have additional risk factors such as:
   i. Current use of cigarettes
   ii. Loss of height, thoracic kyphosis
   iii. Alcohol intake 3 or more drinks per day (women only)

f. Individuals of any age with bone mass osteopenia or fragility fractures on imaging studies such as radiographs, CT, or MRI

h. Individuals of any age who develop 1 or more insufficiency fractures

i. Premenopausal females or males age 20-50 years with any of the following risk factors:
   i. Individuals with medical conditions that could alter bone mineral density such as:
      1. Chronic renal failure
      2. Rheumatoid arthritis and other inflammatory arthritides
      3. Eating disorders, including anorexia nervosa and bulimia
      4. Organ transplantation
      5. Prolonged immobilization
      6. Conditions associated with secondary osteoporosis, such as:
         a. Gastrointestinal malabsorption or malnutrition
         b. Celiac sprue
         c. Osteomalacia
         d. Vitamin D deficiency
         e. Endometriosis
         f. Acromegaly
         g. Chronic alcoholism
         h. Established cirrhosis
         i. Multiple myeloma
      7. Individuals who have had gastric bypass surgery for obesity
      8. Individuals with an endocrine disorder known to adversely affect bone mineral density, such as:
         a. Hyperparathyroidism
         b. Hyperthyroidism
         c. Cushing syndrome
   ii. Hypogonadal men older than 18 years and men with surgically or chemotherapeutically induced castration
   iii. Individuals beginning or receiving long-term therapy with medications known to adversely affect BMD, such as:
      1. Anticonvulsant drugs
      2. Androgen deprivation therapy
      3. Aromatase inhibitor therapy
      4. Chronic heparin
III. Information Submitted with the Prior Authorization Request:
   1. Provider Chart Notes

IV. CPT or HCPC codes covered:

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<th>Description</th>
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<td>76977</td>
<td>Ultrasound bone density measurement and interpretation, peripheral sites any method (not covered for monitoring osteoporosis drug therapy)</td>
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V. CPT or HCPC codes NOT covered:

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VI. Annual Review History

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<th>Revisions</th>
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<td>4/1/2019</td>
<td>Newly developed criteria</td>
<td>7/1/2019</td>
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VII. References


Appendix 1 – Applicable Diagnosis Codes:
Appendix 2 – Centers for Medicare and Medicaid Services (CMS)

Medicare coverage for outpatient (Part B) drugs is outlined in the Medicare Benefit Policy Manual (Pub. 100-2), Chapter 15, §50 Drugs and Biologicals. In addition, National Coverage Determination (NCD) and Local Coverage Determinations (LCDs) may exist and compliance with these policies is required where applicable. They can be found at: http://www.cms.gov/medicare-coverage-database/search/advanced-search.aspx. Additional indications may be covered at the discretion of the health plan.

Medicare Part B Covered Diagnosis Codes (applicable to existing NCD/LCD):

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NCD/LCD Document(s):

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