

# Medical Policy

**Policy:** 94022

**Effective Date:** 11/01/2023

**SUBJECT:** Bone Mineral Density Studies

**Annual Review Date:** 09/18/2024

**Last Revised Date:** 09/18/2024

**Prior approval is required for some or all procedure codes listed in this Corporate Medical Policy.**

**Some or all procedure codes listed in this Corporate Medical Policy may be considered not standard of care and not eligible for reimbursement.**

**Definition:** Bone mineral density (BMD) measurement is a noninvasive technique used to assess bone mineralization. Quantitative measurement of BMD is useful to detect the presence of osteopenia and osteoporosis, assist in the assessment of osteoporotic fracture risk, and monitor the response to therapy. Techniques used to measure bone mass include ultrasound bone densitometry (quantitative ultrasound), quantitative computed tomography (QCT), dual energy X-ray (DXA), photodensitometry, and single energy X-ray absorptiometry (SEXA).

**Medical Necessity:** The Company considers BMD studies (CPT Codes 76977, 77080, 77081, and HCPCS Code G0130) medically necessary and eligible for reimbursement providing that *at least one* of the following medical criteria is met:

- Female aged 65 years and older, or female younger than 65 years of age with at least 1 osteoporosis risk factor<sup>†</sup>; or
- Male aged 70 years and older, or male aged 50 to 69 years with at least 1 osteoporosis risk factor<sup>†</sup>; or
- Adults (age 18 years and older) with spinal cord injury resulting in permanent motor or sensory dysfunction; or
- Radiographic vertebral abnormalities indicative of osteoporosis, osteopenia, or vertebral fracture; or
- Receiving (or expected to receive) systemic glucocorticoid therapy equivalent to prednisone at least 5 mg per day for greater than 3 months; or
- Prolonged use of medications associated with low bone mass or bone loss (e.g., anticonvulsants, heparin, lithium, gonadotropin-releasing hormone agonists); or
- Primary hyperparathyroidism; or
- Assessment of response to osteoporosis drug therapy; or
- History of pathologic fracture.

<sup>†</sup>Risk factors include but are not limited to: history of fracture as an adult, history of fragility fracture in a first-degree relative<sup>††</sup>, history of rheumatoid arthritis, body mass index less than 18.5 kg/m<sup>2</sup>, current smoker, impaired vision, estrogen deficiency at an early age, hypogonadism or premature menopause (younger than 45 years), dementia, poor health/frailty, recent falls, chronic low calcium intake, low physical activity, increased alcohol consumption (more than 2 drinks per day), or medical conditions associated with increased osteoporosis risk (e.g., chronic obstructive pulmonary disease,

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gastrectomy, multiple myeloma, celiac disease, type I [insulin dependent] diabetes, osteogenesis imperfecta in adults, untreated long-standing hyperthyroidism, chronic malnutrition or malabsorption, chronic liver disease, androgen deprivation therapy for prostate cancer).

††First-degree relative is defined as a biological mother, father, sister, brother, daughter or son.

**NOTE:** Vertebral fracture assessments using DXA as an adjunct to BMD measurement (**CPT Codes 77085, 77086**) is considered **medically necessary** and eligible for reimbursement, providing that **at least one** of the following medical criteria is met;

- Female aged 65 years and older or male aged 80 years and older, if T-score at the lumbar spine, total hip, or femoral neck is  $\leq -1.0$ ; or
- Male aged 70 to 79 years if T-score at the lumbar spine, total hip, or femoral neck is  $\leq -1.5$ ; or
- Postmenopausal female or male aged 50 years and older, with **at least one** of the following specific risk factors:
  - Fracture during adulthood (age 50 years and older); or
  - Historical height loss of 1.5 in. or more; or
  - Prospective height loss of 0.8 in. or more; or
  - Recent or ongoing long-term glucocorticoid treatment; or
  - Medical conditions associated with bone loss, such as hyperparathyroidism.

**Frequency limitations:** The Company considers repeat BMD studies and/or vertebral fracture assessments using DXA as an adjunct to BMD performed more frequently than **once every 24 months not standard of care** and **not** eligible for reimbursement.

BMD assessments may be warranted more often than every 24 months in certain clinical situations. Bone density studies performed more frequently than **once every 24 months** may be considered **medically necessary** and eligible for reimbursement in the presence of **at least one** of the following:

- Confirmatory bone density measurement if the initial bone density was performed with a technique that is different from the proposed testing method to be used to monitor the individual over time; or
- Uncorrected primary hyperparathyroidism.

**NOTE:** BMD studies are reimbursed based upon the member's benefit plan. If the member does not have a benefit for screening bone density, the claim will be denied.

The Company considers the following to be **not standard of care** and **not** eligible for reimbursement:

- BMD studies performed as a screening procedure in males age less than 50 years;
- Trabecular bone score (**CPT Codes 77089, 77090, 77091, 77092**);
- Single and dual photon absorptiometry (SPA, DPA) (**CPT Codes 78350 and 78351**).

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Prior approval is required for **CPT Codes 76977, 77080, 77081, 77086, 77086, and HCPCS Code G0130** when performed more frequently than every 24 months.

**NOTE:** Prior approval for **CPT 77078** (*Computed tomography, bone mineral density study, 1 or more sites; axial skeleton (e.g., hips, pelvis, spine)*) is managed by eviCore.

**NOTE:** Bone strength and fracture risk assessment services using the following procedure codes (**CPT Codes 0554T, 0555T, 0556T, 0557T, 0558T, 0743T, 0749T, 0750T, 0815T**) are considered investigational and not eligible for reimbursement.

## **Documentation Requirements:**

The Company reserves the right to request additional documentation as part of its coverage determination process. The Company may deny reimbursement when it has determined that the services performed were not standard of care, investigational or experimental, not within the scope of benefits afforded to the member, and/or a pattern of billing or other practice has been found to be either inappropriate or excessive. Additional documentation supporting medical necessity for the services provided must be made available upon request to the Company. Documentation requested may include patient records, test results, and/or credentials of the provider ordering or performing a service. The Company also reserves the right to modify, revise, change, apply, and interpret this policy at its sole discretion, and the exercise of this discretion shall be final and binding.

**NOTE:** After reviewing the relevant documentation, the Company reserves the right to apply this policy to the service, or procedure, supply, product, or accommodation performed or furnished regardless of how the service, or procedure, supply, product, or accommodation was coded by the Provider.

*Approval or clearance by the U.S. Food and Drug Administration alone is not a basis for coverage.*

*Coverage may differ for Medicare Advantage plan members; please see any applicable national and/or local coverage determinations for details. This information may be available at the Centers for Medicare & Medicaid Services (CMS) website.*

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## Sources of Information:

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- Yu EW. (2021). Screening for osteoporosis in postmenopausal women and men. In: UpToDate, Rosen CJ, Schumacher KE (Eds), UpToDate, Waltham MA.

<b>Applicable Code(s):</b>	
<b>CPT:</b>	<b>0554T, 0555T, 0556T, 0557T, 0558T, 0743T, 0749T, 0750T, 0815T, 76977, 77078, 77080, 77081, 77085, 77086, 77089, 77090, 77091, 77092, 78350, 78351</b>
<b>HCPCS:</b>	<b>G0130</b>