

Policy: MP284

Section: Medical Benefit Policy

Subject: Bone Mineral Density Measurement

Applicable Lines of Business

Commercial	X	CHIP	X
Medicare	X	ACA	X
Medicaid	X		

I. Policy: Bone Mineral Density Measurement

II. Purpose/Objective:

To provide a policy of coverage regarding Bone Mineral Density Measurement

III. Responsibility:

- A. Medical Directors
- B. Medical Management

IV. Required Definitions

1. Attachment – a supporting document that is developed and maintained by the policy writer or department requiring/authoring the policy.
2. Exhibit – a supporting document developed and maintained in a department other than the department requiring/authoring the policy.
3. Devised – the date the policy was implemented.
4. Revised – the date of every revision to the policy, including typographical and grammatical changes.
5. Reviewed – the date documenting the annual review if the policy has no revisions necessary.

V. Additional Definitions

Medical Necessity or Medically Necessary means Covered Services rendered by a Health Care Provider that the Plan determines are:

- a. appropriate for the symptoms and diagnosis or treatment of the Member's condition, illness, disease or injury;
- b. provided for the diagnosis, and the direct care and treatment of the Member's condition, illness disease or injury;
- c. in accordance with current standards of good medical treatment practiced by the general medical community.
- d. not primarily for the convenience of the Member, or the Member's Health Care Provider; and
- e. the most appropriate source or level of service that can safely be provided to the Member. When applied to hospitalization, this further means that the Member requires acute care as an inpatient due to the nature of the services rendered or the Member's condition, and the Member cannot receive safe or adequate care as an outpatient.

Medicaid Business Segment

Medically Necessary — A service, item, procedure, or level of care that is necessary for the proper treatment or management of an illness, injury, or disability is one that:

- Will, or is reasonably expected to, prevent the onset of an illness, condition, injury or disability.
- Will, or is reasonably expected to, reduce or ameliorate the physical, mental or developmental effects of an illness, condition, injury or disability.
- Will assist the Member to achieve or maintain maximum functional capacity in performing daily activities, taking into account both the functional capacity of the Member and those functional capacities that are appropriate for Members of the same age

DESCRIPTION:

Bone mineral density measurement is non-invasive and is used to measure bone mineral content and density to detect osteoporosis and predict the risk of fractures. The most common screening test that is used is the Dual-energy absorptiometry (DXA. DEXA).

INDICATIONS:

Central bone mineral density measurements are considered medically necessary for the following indications:

- Osteoporosis screening performed in accordance with USPSTF recommendations
- Members who have a fracture after the age of 50
- Members with one or more risk factors including but not limited to the following:
 - long-term corticosteroid therapy
 - long-term hormone replacement therapy
 - androgen deprivation therapy
 - other pharmacologic therapies known to negatively affect bone mass (e.g., anti-convulsants, heparin, aromatase inhibitors, etc.)
 - disease processes known to negatively affect bone mass (e.g., alcoholism, celiac sprue, malabsorption syndromes, renal failure, etc.)
 - spinal compression fracture

RECOMMENDED SCREENING FREQUENCY:

1. Members that are at a low risk for accelerated bone loss may be screened every 3-5 years
2. Members that are at a high risk for accelerated bone loss may be screened every 2 years
3. More frequent screening may be medically necessary based on risk factors when the information is required for treatment decision making.

Peripheral bone density measurement of cortical bone (e.g., forearm) is considered medically necessary only when one of the following criteria is met:

1. spinal instrumentation or bilateral hip prosthetics preclude reliable central DEXA measurements
2. members with asymptomatic primary hyperparathyroidism

EXCLUSIONS:

Vertebral Fracture Assessment:

Screening for vertebral fractures as an adjunct to bone mineral density measurement is considered not medically necessary and is therefore NOT COVERED. There is insufficient evidence in the published peer reviewed scientific literature regarding the clinical utility using DEXA for evaluation of vertebral fractures.

The following two studies are not covered because they are not considered reasonable and necessary

- single photon absorptiometry
- dual photon absorptiometry

Medicare Business Segment:

Coverage for bone mineral density testing will be in accordance to Centers for Medicare & Medicaid Services NCD 150.3, and chapter 15, section 80.5 of the Medicare Benefit Policy Manual.

[NCD - Bone \(Mineral\) Density Studies \(150.3\) \(cms.gov\)](https://www.cms.gov/medicare-coverage-database/details/nondurable-codes/nondurable-codes-150-3)

The following two studies are not covered by Medicare because they are not considered reasonable and necessary under section 1862(a)(1)(A) of the Act:

- single photon absorptiometry
- dual photon absorptiometry

Medicaid Business Segment:

Any requests for services, that do not meet criteria set in the PARP, may be evaluated on a case by case basis.

Note: A complete description of the process by which a given technology or service is evaluated and determined to be experimental, investigational or unproven is outlined in MP 15 - Experimental Investigational or Unproven Services or Treatment.

CODING ASSOCIATED WITH: Bone Mineral Density Measurement _

The following codes are included below for informational purposes and may not be all inclusive. Inclusion of a procedure or device code(s) does not constitute or imply coverage nor does it imply or guarantee provider reimbursement. Coverage is determined by the member specific benefit plan document and any applicable laws regarding coverage of specific services. Please note that per Medicare coverage rules, only specific CPT/HCPCS Codes may be covered for the Medicare Business Segment. Please consult the CMS website at www.cms.gov or the local Medicare Administrative Carrier (MAC) for more information on Medicare coverage and coding requirements.

77080 Dual energy x-ray absorptiometry (DEXA), bone density study, one or more sites; axial (central) skeleton (e.g., hips, pelvis, spine)

77081 Dual energy absorptiometry (DEXA), bone density study, one or more sites; appendicular (peripheral) skeleton (e.g., radius, wrist, heel)

76977 Ultrasound bone density measurement and interpretation, peripheral site(s), any method

77085 Dual-energy X-ray absorptiometry (DXA), bone density study, 1 or more sites; axial skeleton (eg, hips, pelvis, spine), including vertebral fracture assessment

77086 Vertebral fracture assessment via dual-energy X-ray absorption (DXA)

The following studies are not covered by Medicare:

78350 Bone density (bone mineral content) study, 1 or more sites; single photon absorptiometry

78351 Bone density (bone mineral content) study, 1 or more sites; dual photon absorptiometry

G0130 single energy x-ray absorptiometry (sexa) bone density study, one or more sites; appendicular skeleton (peripheral) (e.g., radius, wrist, heel)

0508T Pulse echo ultrasound bone density measurement resulting in indicator of axial bone mineral density, tibia [Bindex®]

Current Procedural Terminology (CPT®) © American Medical Association: Chicago, IL

LINE OF BUSINESS:

Eligibility and contract specific benefits, limitations and/or exclusions will apply. Coverage statements found in the line of business specific benefit document will supersede this policy. For Medicare, applicable LCD's and NCD's will supercede this policy. For PA Medicaid Business segment, this policy applies as written.

REFERENCES:

National Osteoporosis Foundation (NOF). Clinician's guide to prevention and treatment of osteoporosis. 2013. Update Apr 2014

National Institute of Health (NIH). Osteoporosis prevention, diagnosis, and therapy. NIH Consensus Statement. 2000; 17(1):1-45. Available at <http://consensus.nih.gov/2000/2000Osteoporosis111PDF.pdf>

Management of osteoporosis in postmenopausal women: 2010 position statement of The North American Menopause Society. Menopause. 2010; 17(1):25-54. Available at: <http://www.menopause.org/docs/default-document-library/psosteo10.pdf?sfvrsn=2>.

American College of Radiology (ACR) Society of Skeletal Radiology (SSR) practice guideline for the performance of dual-energy x-ray absorptiometry (DXA) (Amended 2014). Amended 2018

Expert Panel on Musculoskeletal Imaging: Ward RJ, Roberts CC, et al. ACR Appropriateness Criteria® Osteoporosis and Bone Mineral Density. J Am Coll Radiol. 2017; 14(5S):S189-S202.

Camacho PM, Petak SM, Binkley N, et al. American Association of Clinical Endocrinologists and American College of Endocrinology Clinical Practice Guidelines for the Diagnosis and Treatment of Postmenopausal Osteoporosis - 2016. Endocr Pract. Sep 02 2016;22(Suppl 4):1-42.

American College of Obstetricians and Gynecologists (ACOG). Osteoporosis. Washington (DC): American College of Obstetricians and Gynecologists (ACOG); FAQ048, December 2018

UptoDate. Rosen HN, Drezner MK. Clinical manifestations, diagnosis, and evaluation of osteoporosis in postmenopausal women. Jul 11, 2019

UptoDate. Kleerekoper M. Screening for osteoporosis. Sep 07, 2018

Clinical review: Clinical Applications of Vertebral Fracture assessment by Dual Energy X-ray Absorptometry; J Clin Endocrinol Metab 2006 Nov, 91(11):4215-22. Epub 2006 Aug 29

Vokes TJ, Dixon LB, and Favus MJ. Clinical utility of dual-energy vertebral assessment (DVA). Osteoporos Int 2003; 14(11): 871-878.

U.S. Preventive Services Task Force. Screening for osteoporosis: U.S. preventive services task force recommendation statement. June 2018

Centers for Medicare and Medicaid Services. Medicare Benefit Policy Manual Chapter 15 Covered Medical and Other Health Services. 80.5 Bone Mass Measurements

Amir Qaseem, Mary Ann Forciea, Robert M. McLean, Thomas D. Denberg, Treatment of Low Bone Density or Osteoporosis to Prevent Fractures in Men and Women: A Clinical Practice Guideline Update From the American College of Physicians. Ann Intern Med. 2017;166:818–839.

UptoDate. Osteoporotic fracture risk assessment. Mar.29, 2021.

Management of Postmenopausal Osteoporosis: ACOG Clinical Practice Guideline No. 2. Obstet Gynecol. 2022; 139(4):698-717

This policy will be revised as necessary and reviewed no less than annually.

Devised: July 2015

Revised: 8/16, 8/22 (Added Medicare Segment)

Reviewed: 8/17, 8/18, 8/19, 8/20, 8/21, 8/23

Geisinger Health Plan may refer collectively to health care coverage sponsors Geisinger Health Plan, Geisinger Quality Options, Inc., and Geisinger Indemnity Insurance Company, unless otherwise noted. Geisinger Health Plan is part of Geisinger, an integrated health care delivery and coverage organization.

Coverage for experimental or investigational treatments, services and procedures is specifically excluded under the member's certificate with Geisinger Health Plan. Unproven services outside of an approved clinical trial are also specifically excluded under the member's certificate with Geisinger Health Plan. This policy does not expand coverage to services or items specifically excluded from coverage in the member's certificate with Geisinger Health Plan. Additional information can be found in MP015 Experimental, Investigational or Unproven Services.

Prior authorization and/or pre-certification requirements for services or items may apply. Pre-certification lists may be found in the member's contract specific benefit document. Prior authorization requirements can be found at <https://www.geisinger.org/health-plan/providers/ghp-clinical-policies>

Please be advised that the use of the logos, service marks or names of Geisinger Health Plan, Geisinger Quality Options, Inc. and Geisinger Indemnity Insurance Company on a marketing, press releases or any communication piece regarding the contents of this medical policy is strictly prohibited without the prior written consent of Geisinger Health Plan. Additionally, the above medical policy does not confer any endorsement by Geisinger Health Plan, Geisinger Quality Options, Inc. and Geisinger Indemnity Insurance Company regarding the medical service, medical device or medical lab test described under this medical policy.