Bone (Mineral) Density Studies (NCD 150.3)

Guideline Number: MPG033.10
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➲ Terms and Conditions

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Related Medicare Advantage Policy Guideline

- Ultrasound Diagnostic Procedures (NCD 220.5)

Related Medicare Advantage Coverage Summary

- Bone Density Studies/Bone Mass Measurements

Policy Summary

➲ See Purpose

Overview

Bone Mass Measurement (BMM) studies are radiologic, radioisotopic, or other procedures used to:

- Identify bone mass, detect bone loss, or determine bone quality
- Establish the diagnosis of osteoporosis
- Assess the response to, or efficacy of, osteoporosis drug therapy

The following procedures are used to measure bone mineral density:

- Dual energy x-ray absorptiometry (DXA)
- Radiographic absorptiometry (RA)
- Bone sonometry (ultrasound)
- Single energy x-ray absorptiometry (SEXA)
- Quantitative computed tomography (QCT)

Earlier technologies, such as single and dual photon absorptiometry (CPT code 78350 or 78351), are no longer used.

Guidelines

Each claim must be submitted with the diagnosis codes that reflect the condition of the patient, and indicate the reason(s) for which the service was performed. The patient's medical record must document that the patient meets one of the requirements of a "qualified individual" as described in the guidelines below. Documentation must be available upon request. It is the responsibility of the provider to code to the highest level specified. The correct use of a diagnosis code listed, does not assure coverage of a service. The service must be reasonable and necessary in the specific case and must meet the criteria specified.

BMM tests provided without an accompanying interpretation and report, as part of the test, will be denied as not medically necessary.

The following two studies are not covered:

- 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

Medicare covers a bone mass measurement for a beneficiary once every two years (if at least 23 months have passed since the month the last bone measurement was performed). The criteria for bone mass measurement every two years are listed below:

- It is performed with a bone densitometer, other than single or dual photon absorptiometry (DPA) or a bone sonometer (e.g., ultrasound) device that has been approved or cleared for marketing by the Food and Drug Administration (FDA).
- It is performed on a qualified individual for the purpose of identifying bone mass, detecting bone loss or determining bone quality. The term "qualified individual" means an individual who meets the medical indications for at least one of the criteria listed below:
  - A woman who has been determined by the physician or qualified non-physician practitioner treating her to be estrogen-deficient and at clinical risk for osteoporosis, based on her medical history and other findings
    Note: Since not every woman who has been prescribed estrogen replacement therapy (ERT) may be receiving an "adequate" dose of the therapy, the fact that a woman is receiving ERT should not preclude her treating physician or other qualified treating non-physician practitioner from ordering a bone mass measurement for her. If a bone mass measurement is ordered for a woman following a careful evaluation of her medical need, however, it is expected that the ordering/treating physician (or other qualified treating non-physician practitioner) will document in her medical record why he or she believes that the woman is estrogen-deficient and at clinical risk for osteoporosis.
  - An individual with vertebral abnormalities as demonstrated by an x-ray to be indicative of osteoporosis, osteopenia (low bone mass), or vertebral fracture
  - An individual receiving (or expecting to receive) glucocorticoid (steroid) therapy equivalent to 5 mg of prednisone, or greater, per day for more than 3 months
  - An individual with primary hyperparathyroidism
  - An individual being monitored to assess the response to or efficacy of an FDA approved osteoporosis drug therapy. This service must be performed using dual energy x-ray absorptiometry system (axial skeleton).
- It is furnished by a qualified supplier or provider of such services, under at least the general level of supervision of a physician as defined in 42 CFR 410.32(b)
- The test is ordered by the individual's physician or qualified non-physician practitioner, who is treating the beneficiary following an evaluation of the need for the measurement, including a determination as to the medically appropriate measurement to be used for the individual, and who uses the results in the management of the patient
- The test is reasonable and necessary for diagnosing, treating or monitoring of a "qualified" individual as defined above.

For conditions specified below, Medicare will cover a bone mass measurement for a qualified beneficiary more frequently than every two years, if medically necessary. To be considered, at least eleven months have elapsed since the previous bone mass measurement test. Such conditions are:

- Monitoring beneficiaries on long-term glucocorticoid (steroid) therapy, equal to 5 mg of prednisone or greater, per day for more than three months
- Follow up bone mineral density testing to assess FDA-approved osteoporosis drug therapy until a response to such therapy has been documented over time
- Confirming baseline BMMs to permit monitoring of beneficiaries in the future

A confirmatory baseline BMM is not covered if the initial BMM was performed by a dual-energy x-ray absorptiometry system (axial skeleton).

It is not medically necessary to have both peripheral and axial BMM tests performed on the same day.

Documentation Requirements

If the provider of the service is other than the ordering/referring physician/nonphysician practitioner, that provider must maintain a copy of test results and interpretation, along with copies of the ordering/referring physician/nonphysician practitioner's order for the studies. The clinical indication/medical necessity for the study must be indicated in the order for the test.

Applicable Codes

The following list(s) of procedure and/or diagnosis codes is provided for reference purposes only and may not be all inclusive. Listing of a code in this guideline does not imply that the service described by the code is a covered or non-covered health service. Benefit coverage for health services is determined by the member specific benefit plan document and applicable laws

that may require coverage for a specific service. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment. Other Policies and Guidelines may apply.

CPT Code	Description
76977	Ultrasound bone density measurement and interpretation, peripheral site(s), any method
77078	Computed tomography, bone mineral density study, 1 or more sites; axial skeleton (e.g., hips, pelvis, spine)
77080	Dual-energy X-ray absorptiometry (DXA), bone density study, 1 or more sites; axial skeleton (e.g., hips, pelvis, spine)
77081	Dual-energy X-ray absorptiometry (DXA), bone density study, 1 or more sites; appendicular skeleton (peripheral) (e.g., radius, wrist, heel)
77085	Dual-energy X-ray absorptiometry (DXA), bone density study, 1 or more sites; axial skeleton (e.g., hips, pelvis, spine), including vertebral fracture assessment
78350	Bone density (bone mineral content) study, 1 or more sites; single photon absorptiometry (Non-covered)
78351	Bone density (bone mineral content) study, 1 or more sites; dual photon absorptiometry, 1 or more sites (Non-covered)
0508T	Pulse-echo ultrasound bone density measurement resulting in indicator of axial bone mineral density, tibia
0554T	Bone strength and fracture risk using finite element analysis of functional data, and bone-mineral density, utilizing data from a computed tomography scan; retrieval and transmission of the scan data, assessment of bone strength and fracture risk and bone mineral density, interpretation and report (Effective 07/01/2019)
0555T	Bone strength and fracture risk using finite element analysis of functional data, and bone-mineral density, utilizing data from a computed tomography scan; retrieval and transmission of the scan data (Effective 07/01/2019)
0556T	Bone strength and fracture risk using finite element analysis of functional data, and bone-mineral density, utilizing data from a computed tomography scan; assessment of bone strength and fracture risk and bone mineral density (Effective 07/01/2019)
0557T	Bone strength and fracture risk using finite element analysis of functional data, and bone-mineral density, utilizing data from a computed tomography scan; interpretation and report (Effective 07/01/2019)
0558T	Computed tomography scan taken for the purpose of biomechanical computed tomography analysis (Effective 07/01/2019)

HCPCS Code	Description
G0130	Single energy x-ray absorptiometry (SEXA) bone density study, one or more sites; appendicular skeleton (peripheral) (e.g., radius, wrist, heel)

Coding Clarification: For diagnosis codes, refer to the applicable National Coverage Determination (NCD) and Local Coverage Determinations (LCDs).

References

CMS National Coverage Determinations (NCDs)

NCD 150.3 Bone (Mineral) Density Studies

CMS Local Coverage Determinations (LCDs) and Articles

LCD	Article	Contractor	Medicare Part A	Medicare Part B
L36460 Bone Mass Measurement	A57132 Billing and Coding: Bone Mass Measurement	CGS	KY, OH	KY, OH
L36356 Bone Mineral Density Studies	A56484 Billing and Coding Article: Bone Mineral Density Studies	First Coast	FL, PR, VI	FL, PR, VI

CMS Benefit Policy Manual

Chapter 15; § 80.5-80.5.9 Bone Mass Measurements (BMMs)

CMS Claims Processing Manual

Chapter 13; § 140-140.1 Bone Mass Measurements (BMMs)/Payment Methodology and HCPCS Coding

CMS Transmittal(s)

Transmittal 1658, Change Request 9540, Dated 04/29/2016 (Coding Revisions to National Coverage Determinations)
Transmittal 2298, Change Request 11229, Dated 05/03/2019 (International Classification of Diseases, 10th Revision (ICD-10) and Other Coding Revisions to National Coverage Determination (NCDs))
Transmittal 2348, Change Request 11392, Dated 08/09/2019 (ICD-10 and Other Coding Revisions to National Coverage Determinations (NCDs)-January 2020 Update)
Transmittal 2362, Change Request 11392, Dated 09/19/2019 (International Classification of Diseases, 10th Revision (ICD-10) and Other Coding Revisions to National Coverage Determination (NCDs)-January 2020 Update)

MLN Matters

Article MM9540, Coding Revisions to National Coverage Determinations
Article MM10473, ICD-10 and Other Coding Revisions to National Coverage Determinations (NCDs)
Article MM11392, International Classification of Diseases, 10th Revision (ICD-10) and Other Coding Revisions to National Coverage Determination (NCDs)-January 2020 Update
Article SE1525, ICD-10-CM Diagnosis Codes for Bone Mass Measurement

UnitedHealthcare Commercial Policy

Preventive Care Services

Other(s)

Medicare Learning Network Preventive Services Educational Tool, CMS website

Guideline History/Revision Information

Revisions to this summary document do not in any way modify the requirement that services be provided and documented in accordance with the Medicare guidelines in effect on the date of service in question.

Date	Summary of Changes
04/01/2021	Template Update • Reformatted policy; transferred content to new template
02/10/2021	Policy Summary *Guidelines* • Replaced references to "[services covered by] UnitedHealthcare" with "[services covered by] Medicare" • Revised list of indications for determining a "qualified individual" for bone mass measurement; replaced "a woman who has been determined by the physician or qualified non-physician treating her to be estrogen-deficient and at clinical risk for osteoporosis, based on her medical history and

Date	Summary of Changes

	other findings" with "a woman who has been determined by the physician or qualified non-physician *practitioner* treating her to be estrogen-deficient and at clinical risk for osteoporosis, based on her medical history and other findings"
	Documentation Requirements
	• Revised language to indicate:
	  ○ If the provider of the service is other than the ordering/referring physician/nonphysician practitioner, that provider must maintain a copy of test results and interpretation, along with copies of the ordering/referring physician/nonphysician practitioner's order for the studies
	  ○ The clinical indication/medical necessity for the study must be indicated in the order for the test
	Applicable Codes
	• Removed list of applicable Revenue codes: 320
	• Removed list of applicable ICD-10 diagnosis codes; added instruction to refer to the National Coverage Determinations (NCDs) and Local Coverage Determinations (LCDs) for applicable details
	Supporting Information
	• Updated *References* section to reflect the most current information
	• Archived previous policy version MPG033.09

Purpose

The Medicare Advantage Policy Guideline documents are generally used to support UnitedHealthcare Medicare Advantage claims processing activities and facilitate providers' submission of accurate claims for the specified services. The document can be used as a guide to help determine applicable:

- Medicare coding or billing requirements, and/or
- Medical necessity coverage guidelines; including documentation requirements.

UnitedHealthcare follows Medicare guidelines such as NCDs, LCDs, LCAs, and other Medicare manuals for the purposes of determining coverage. It is expected providers retain or have access to appropriate documentation when requested to support coverage. Please utilize the links in the References section below to view the Medicare source materials used to develop this resource document. This document is not a replacement for the Medicare source materials that outline Medicare coverage requirements. Where there is a conflict between this document and Medicare source materials, the Medicare source materials will apply.

Terms and Conditions

The Medicare Advantage Policy Guidelines are applicable to UnitedHealthcare Medicare Advantage Plans offered by UnitedHealthcare and its affiliates.

These Policy Guidelines are provided for informational purposes, and do not constitute medical advice. Treating physicians and healthcare providers are solely responsible for determining what care to provide to their patients. Members should always consult their physician before making any decisions about medical care.

Benefit coverage for health services is determined by the member specific benefit plan document* and applicable laws that may require coverage for a specific service. The member specific benefit plan document identifies which services are covered, which are excluded, and which are subject to limitations. In the event of a conflict, the member specific benefit plan document supersedes the Medicare Advantage Policy Guidelines.

Medicare Advantage Policy Guidelines are developed as needed, are regularly reviewed and updated, and are subject to change. They represent a portion of the resources used to support UnitedHealthcare coverage decision making. UnitedHealthcare may modify these Policy Guidelines at any time by publishing a new version of the policy on this website. Medicare source materials used to develop these guidelines include, but are not limited to, CMS National Coverage Determinations (NCDs), Local Coverage Determinations (LCDs), Medicare Benefit Policy Manual, Medicare Claims Processing Manual, Medicare Program Integrity Manual, Medicare Managed Care Manual, etc. The information presented in the Medicare

Advantage Policy Guidelines is believed to be accurate and current as of the date of publication and is provided on an "AS IS" basis. Where there is a conflict between this document and Medicare source materials, the Medicare source materials will apply.

You are responsible for submission of accurate claims. Medicare Advantage Policy Guidelines are intended to ensure that coverage decisions are made accurately based on the code or codes that correctly describe the health care services provided. UnitedHealthcare Medicare Advantage Policy Guidelines use Current Procedural Terminology (CPT®), Centers for Medicare and Medicaid Services (CMS), or other coding guidelines. References to CPT® or other sources are for definitional purposes only and do not imply any right to reimbursement or guarantee claims payment.

*For more information on a specific member's benefit coverage, please call the customer service number on the back of the member ID card or refer to the Administrative Guide.