

Bone (Mineral) Density Studies (NCD 150.3)

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[Terms and Conditions](#)

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Related Medicare Advantage Policy Guideline
<ul style="list-style-type: none"> Ultrasound Diagnostic Procedures (NCD 220.5)

Related Medicare Advantage Coverage Summary
<ul style="list-style-type: none"> Bone Density Studies/Bone Mass Measurements

Policy Summary

[See Purpose](#)

Overview

Bone Mass Measurement (BMM) means a radiologic, radioisotopic, or other procedure that meets all of the following conditions:

- Is performed to identify bone mass, detect bone loss, or determine bone quality.
- Is performed with either a bone densitometer (other than single-photon or dual-photon absorptiometry) or a bone sonometer system that has been cleared for marketing for BMM by the Food and Drug Administration (FDA) under 21 CFR part 807, or approved for marketing under 21 CFR part 814.
- Includes a physician’s interpretation of the results.

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)

Guidelines

Medicare covers BMM under the following conditions:

- Is ordered by the physician or qualified nonphysician practitioner who is treating the beneficiary following an evaluation of the need for a BMM and determination of the appropriate BMM to be used.
A physician or qualified nonphysician practitioner treating the beneficiary for purposes of this provision is one who furnishes a consultation or treats a beneficiary for a specific medical problem, and who uses the results in the management of the patient. For the purposes of the BMM benefit, qualified nonphysician practitioners include physician assistants, nurse practitioners, clinical nurse specialists, and certified nurse midwives.
- Is performed under the appropriate level of physician supervision as defined in 42 CFR 410.32(b).
- Is reasonable and necessary for diagnosing and treating the condition of a beneficiary who meets the conditions described in §80.5.6.
- In the case of an individual being monitored to assess the response to or efficacy of an FDA-approved osteoporosis drug therapy, is performed with a dual-energy x-ray absorptiometry system (axial skeleton).

- In the case of any individual who meets the conditions of 80.5.6 and who has a confirmatory BMM, is performed by a dual-energy x-ray absorptiometry system (axial skeleton) if the initial BMM was not performed by a dual-energy x-ray absorptiometry system (axial skeleton). A confirmatory baseline BMM is not covered if the initial BMM was performed by a dual-energy x-ray absorptiometry system (axial skeleton).

Medicare pays for a screening BMM once every 2 years (at least 23 months have passed since the month the last covered BMM was performed).

When medically necessary, Medicare may pay for more frequent BMMs. Examples include, but are not limited to, the following medical circumstances:

- Monitoring beneficiaries on long-term glucocorticoid (steroid) therapy of more than 3 months.
- Confirming baseline BMMs to permit monitoring of beneficiaries in the future.

To be covered, a beneficiary must meet at least one of the five conditions listed below:

- A woman who has been determined by the physician or qualified nonphysician 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 nonphysician practitioner from ordering a bone mass measurement for her. If a BMM 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 nonphysician 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, or vertebral fracture.
- An individual receiving (or expecting to receive) glucocorticoid (steroid) therapy equivalent to an average of 5.0 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.

The following BMMs are noncovered under Medicare because they are not considered reasonable and necessary under section 1862(a)(1)(A) of the Act:

- Single photon absorptiometry (78350)
- Dual photon absorptiometry (78351)

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)

CPT Code	Description
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
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
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
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
0558T	Computed tomography scan taken for the purpose of biomechanical computed tomography analysis

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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 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 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 MM11392, International Classification of Diseases, 10th Revision \(ICD-10\) and Other Coding Revisions to National Coverage Determination \(NCDs\)–January 2020 Update](#)

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
02/09/2022	<p>Policy Summary</p> <p><i>Overview</i></p> <ul style="list-style-type: none">• Revised language to indicate:<ul style="list-style-type: none">○ Bone Mass Measurement (BMM) means a radiologic, radioisotopic, or other procedure that meets all of the following conditions:<ul style="list-style-type: none">▪ Is performed to identify bone mass, detect bone loss, or determine bone quality▪ Is performed with either a bone densitometer (other than single-photon or dual-photon absorptiometry) or a bone sonometer system that has been cleared for marketing for BMM by the Food and Drug Administration (FDA) under <i>21 Code of Federal Regulations (CFR) part 807</i>, or approved for marketing under <i>21 CFR part 814</i>▪ Includes a physician’s interpretation of the results○ The following procedures are used to measure bone mineral density:<ul style="list-style-type: none">▪ Dual energy x-ray absorptiometry (DXA)▪ Radiographic absorptiometry (RA)▪ Bone sonometry (ultrasound)▪ Single energy x-ray absorptiometry (SEXA)▪ Quantitative computed tomography (QCT) <p><i>Guidelines</i></p> <ul style="list-style-type: none">• Revised language to indicate:<ul style="list-style-type: none">○ Medicare covers BMM under the following conditions:<ul style="list-style-type: none">▪ Is ordered by the physician or qualified nonphysician practitioner who is treating the beneficiary following an evaluation of the need for a BMM and determination of the appropriate BMM to be used▪ A physician or qualified nonphysician practitioner treating the beneficiary for purposes of this provision is one who furnishes a consultation or treats a beneficiary for a specific medical problem, and who uses the results in the management of the patient▪ For the purposes of the BMM benefit, qualified nonphysician practitioners include physician assistants, nurse practitioners, clinical nurse specialists, and certified nurse midwives▪ Is performed under the appropriate level of physician supervision as defined in <i>42 CFR 410.32(b)</i>▪ Is reasonable and necessary for diagnosing and treating the condition of a beneficiary who meets the conditions described in <i>§80.5.6</i>

Date	Summary of Changes
	<ul style="list-style-type: none"> ▪ In the case of an individual being monitored to assess the response to or efficacy of an FDA-approved osteoporosis drug therapy, is performed with a dual-energy x-ray absorptiometry system (axial skeleton) ▪ In the case of any individual who meets the conditions of §80.5.6 and who has a confirmatory BMM, is performed by a dual-energy x-ray absorptiometry system (axial skeleton) if the initial BMM was not performed by a dual-energy x-ray absorptiometry system (axial skeleton) ▪ A confirmatory baseline BMM is not covered if the initial BMM was performed by a dual-energy x-ray absorptiometry system (axial skeleton) ○ Medicare pays for a screening BMM once every 2 years (at least 23 months have passed since the month the last covered BMM was performed) ○ When medically necessary, Medicare may pay for more frequent BMMs; examples include, but are not limited to, the following medical circumstances: <ul style="list-style-type: none"> ▪ Monitoring beneficiaries on long-term glucocorticoid (steroid) therapy of more than 3 months ▪ Confirming baseline BMMs to permit monitoring of beneficiaries in the future ○ To be covered, a beneficiary must meet at least one of the five conditions listed below: <ul style="list-style-type: none"> ▪ A woman who has been determined by the physician or qualified nonphysician practitioner treating her to be estrogen-deficient and at clinical risk for osteoporosis, based on her medical history and other findings <ul style="list-style-type: none"> - 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 nonphysician practitioner from ordering a bone mass measurement for her - If a BMM 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 nonphysician 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, or vertebral fracture ▪ An individual receiving (or expecting to receive) glucocorticoid (steroid) therapy equivalent to an average of 5.0 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 ○ The following BMMs are noncovered under Medicare because they are not considered reasonable and necessary under <i>Section §1862(a)(1)(A) of the Social Security Act</i>: <ul style="list-style-type: none"> ▪ Single photon absorptiometry (78350) ▪ Dual photon absorptiometry (78351) <p>Documentation Requirements</p> <ul style="list-style-type: none"> ● Removed content/language pertaining to documentation requirements <p>Supporting Information</p> <ul style="list-style-type: none"> ● Updated <i>References</i> section to reflect the most current information ● Archived previous policy version MPG033.10

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.

Medicare Advantage Policy Guidelines are the property of UnitedHealthcare. Unauthorized copying, use, and distribution of this information are strictly prohibited.

*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](#).