BONE (MINERAL) DENSITY STUDIES (NCD 150.3)

Guideline Number: MPG033.02
Approval Date: January 11, 2017

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INSTRUCTIONS FOR USE

This Policy Guideline is applicable to UnitedHealthcare Medicare Advantage Plans offered by UnitedHealthcare and its affiliates for health care services submitted on CMS 1500 forms and, when specified, to those billed on UB04 forms (CMS 1450), or their electronic comparative. The information presented in this Policy Guideline is believed to be accurate and current as of the date of publication.

This Policy Guideline provides assistance in administering health benefits. All reviewers must first identify member eligibility, any federal or state regulatory requirements, Centers for Medicare and Medicaid Services (CMS) policy, the member specific benefit plan coverage, and individual provider contracts prior to use of this Policy Guideline. When deciding coverage, the member specific benefit plan document must be referenced. The terms of the member specific benefit plan document may differ greatly from the standard benefit plan upon which this Policy Guideline is based. In the event of a conflict, the member specific benefit plan document supersedes this Policy Guideline. Other Policies and Guidelines may apply. UnitedHealthcare reserves the right, in its sole discretion, to modify its Policies and Guidelines as necessary.

UnitedHealthcare follows Medicare coverage guidelines and regularly updates its Medicare Advantage Policy Guidelines to comply with changes in CMS policy. UnitedHealthcare encourages physicians and other healthcare professionals to keep current with any CMS policy changes and/or billing requirements by referring to the CMS or your local carrier website regularly. Physicians and other healthcare professionals can sign up for regular distributions for policy or regulatory changes directly from CMS and/or your local carrier. This Policy Guideline is provided for informational purposes. It does not constitute medical advice.

POLICY SUMMARY

Overview
Bone Mass Measurement (BMM) studies are radiologic, radioisotopic, or other procedures used to:
- Quantify bone mineral density, 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.

CPT 77085 should NOT be billed for screening and is not part of the Preventive Benefit. Member cost share will apply when medically necessary criteria are met.

The following two 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

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 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 treating her to be estrogen-deficient and at clinical risk for osteoporosis, based on her medical history and other indicators.  
    NOTE: Since not every woman who has been prescribed estrogen replacement therapy (ERT) maybe 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 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 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 (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) – CPT code 77080 and 77085.
- If it is furnished by a qualified supplier or provider of such services, under at least general level of supervision of a physician.
- If 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 must 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.

Medicare will cover a confirmatory baseline bone mass measurement when it is performed with a dual energy x-ray absorptiometry system (axial skeletal) to permit monitoring of beneficiaries in the future, if the initial test was performed with a technique that is different from the proposed monitoring method (for example, if the initial test was bone sonometry and the patient will be monitored with bone densitometry, a second test utilizing densitometry will be paid). If the initial bone mass measurement was performed by a dual-energy x-ray absorptiometry system (axial skeletal), a confirmatory BMM is not covered.
It is not medically necessary to have both peripheral and axial BMM tests performed on the same day.

Medical record documentation maintained by the performing physician/qualified nonphysician practitioner must clearly indicate the medical necessity of the service being billed. In addition, documentation that the service was performed must be included in the patient’s medical record. If the service exceeds the frequency parameter listed in this policy, documentation of medical necessity must be submitted. This information is normally found in the office/progress notes, hospital notes, and/or procedure report.

### APPLICABLE CODES

The following list(s) of 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.

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<tr>
<th>CPT Code</th>
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<tr>
<td>76977</td>
<td>Ultrasound bone density measurement and interpretation, peripheral site(s), any method</td>
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<td>77078</td>
<td>Computed tomography, bone mineral density study, 1 or more sites; axial skeleton (e.g., hips, pelvis, spine)</td>
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<td>77080</td>
<td>Dual-energy X-ray absorptiometry (DXA), bone density study, 1 or more sites; axial skeleton (e.g., hips, pelvis, spine)</td>
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<tr>
<td>77081</td>
<td>Dual-energy X-ray absorptiometry (DXA), bone density study, 1 or more sites; appendicular skeleton (peripheral) (e.g., radius, wrist, heel)</td>
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<tr>
<td>77085</td>
<td>Dual-energy X-ray absorptiometry (DXA), bone density study, 1 or more sites; axial skeleton (e.g., hips, pelvis, spine), including vertebral fracture assessment (Should NOT be billed for screening and is not part of the Preventive Benefit. Member cost share will apply when medically necessary criteria are met.)</td>
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<td>78350</td>
<td>Bone density (bone mineral content) study, 1 or more sites; single photon absorptiometry (Non-covered by Medicare)</td>
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<tr>
<td>78351</td>
<td>Bone density (bone mineral content) study, 1 or more sites; dual photon absorptiometry, 1 or more sites (Non-covered by Medicare)</td>
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<tr>
<td>G0130</td>
<td>Single energy x-ray absorptiometry (SEXA) bone density study, one or more sites; appendicular skeleton (peripheral) (e.g., radius, wrist, heel)</td>
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<td>Radiology- diagnostic</td>
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### DEFINITIONS

**Absorptiometry**: A diagnostic technique for measuring bone mineral density in which an image of bone is produced from computerized analysis of absorption rates of photons directed in a focused beam at a body part.

**Bone Densitometer**: The determination of variations in density by comparison with that of another material or with a certain standard.

### REFERENCES

**CMS National Coverage Determinations (NCDs)**

NCD 150.3 Bone (Mineral) Density Studies

**CMS Local Coverage Determinations (LCDs)**

<table>
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<th>LCD</th>
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<td>L36460 (Bone Mass Measurement) CGS</td>
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<td>L36356 (Bone Mineral Density Studies) First Coast</td>
<td>FL, PR, VI</td>
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<tr>
<td>L34639 (Bone Mass Measurement) WPS Retired 04/01/2016</td>
<td>AK, AL, AR, AZ, CT, FL, GA, IA, ID, IL, IN, KS, KY, LA, MA, ME, MI, MN, MO, MS, MT, NC, ND, NE, NH, NJ, OH, OR, RI, SC, SD, TN, UT, VA, V.I., VT, WA, WI, W.VA, WY</td>
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<td>L31620 (Bone Mass Measurement) WPS Retired 09/30/2015</td>
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**CMS Articles**

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<td>A55348 (2017 ICD-10-CM Coding Changes Part A) First Coast</td>
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<td>A54723 (Bone mineral density studies revision to the LCD) First Coast</td>
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<td>A55125 (Bone mineral density studies revision to the Part A and Part B LCD) First Coast</td>
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<td>A51974 (Bone Mass Measurement - Medical Policy Article) NGS Retired 09/30/2015</td>
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<td>A48891 (Educational Article - Bone Mass Measurement) Cahaba Retired 09/30/2015</td>
<td>AL, GA, TN</td>
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**CMS Benefit Policy Manual**

Chapter 15: § 80.5-80.5.B Bone Mass Measurements (BMMs)

**CMS Claims Processing Manual**

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

**CMS Transmittals**

Transmittal 70, Change Request 5521, Dated 05/11/2007 (Bone Mass Measurements (BMMs))
Transmittal 1236, Change Request 5521, Dated 05/11/2007 (Bone Mass Measurements (BMMs))
Transmittal 1416, Change Request 5847, Dated 01/18/2008 (Clarification of Bone Mass Measurement (BMM) Billing Requirements)
Transmittal 1658, Change Request 9540, Dated 04/29/2016 (Coding Revisions to National Coverage Determinations)

**MLN Matters**

Article MM5521, Bone Mass Measurements (BMMs)
Article MM9540, Coding Revisions to National Coverage Determinations
Article SE1525, ICD-10-CM Diagnosis Codes for Bone Mass Measurement

**UnitedHealthcare Commercial Policies**

Preventive Care Services

**Others**

Medicare Bulletin, Jurisdiction 15, December 2015, CGS Medicare Website Preventative Services, Department of Health and Human Services, CMS Website

**GUIDELINE HISTORY/REVISION INFORMATION**

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