

**Contractor Name**

Wisconsin Physicians Service (WPS)

**Contractor Number**

00951, 00952, 00953, 00954

05101, 05201, 05301, 05401, 05102, 05202, 05392, 05302, 05402

**Contractor Type**

Carrier

MAC A

MAC B

**LCD Database ID Number**

Wisconsin

Illinois

Michigan

Minnesota

Iowa

Kansas

Missouri

Nebraska

**LCD Version Number****LCD Title**

Bone Mass Measurement

**Contractor's Determination Number**

MS-004

**AMA CPT/ ADA CDT Copyright Statement**

*CPT codes, descriptions and other data only are copyright 2008 American Medical Association (or such other date of publication of CPT). All Rights Reserved. Applicable FARS/DFARS Clauses Apply. Current Dental Terminology, (CDT) (including procedure codes, nomenclature, descriptors and other data contained therein) is copyright by the American Dental Association. © 2002, 2004 American Dental Association. All rights reserved. Applicable FARS/DFARS apply.*

**CMS National Coverage Policy**

CMS Pub. 100.4 13 §140-140.3; 100-4 13 §10-10.1; 100-4 23 §10-10.1.7;

CMS Pub. 100-3, Medicare National Coverage Determinations, Ch. 1, Part 2, §150.3

\*CMS Pub.100-2, Ch. 15, §80.5

**Primary Geographic Jurisdiction**

Wisconsin

Illinois

Michigan

Minnesota

Iowa

Kansas

E. Missouri

W. Missouri

Nebraska

**Oversight Region**

Region I

Region V

**CMS Consortium**

Midwest

Northwestern

**Original Determination Effective Date**

**Revision Effective Date**

**Indications and Limitations of Coverage and/or Medical Necessity**

Bone mass density (BMD) studies are radiologic, radioisotopic or ultrasonic procedures used to:

1. Quantify bone mineral density, detect bone loss or determine bone quality;
2. Establish the diagnosis of osteoporosis; and
3. Assess an individual's risk of fracture.
4. Assess the response to, or efficacy of, osteoporosis drug therapy.

The following procedures are used to measure bone mineral density:

1. Dual energy x-ray absorptiometry (DEXA)
2. Radiographic absorptiometry (RA)
3. Bone sonometry (ultrasound)
4. Single energy x-ray absorptiometry (SEXA)
5. Quantitative computed tomography (QCT)
6. Single photon absorptiometry (SPA)

**Indications**

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

1. 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).
2. 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. A woman who has been determined by the physician or a qualified non-physician treating her to be estrogen-deficient and at clinical risk for osteoporosis, based on her medical history and other indicators.
  - b. An individual with vertebral abnormalities as demonstrated by an x-ray to be indicative of osteoporosis, osteopenia (low bone mass), or vertebral fracture.
  - c. An individual receiving (or expecting to receive) glucocorticoid (steroid) therapy equivalent to 5 mg of prednisone, or greater, per day for more than three months.
  - d. An individual with primary hyperparathyroidism,

e. An individual being monitored to assess the response to or efficacy of an FDA approved osteoporosis drug therapy.  
FDA-approved osteoporosis drug therapies include, but may not be limited to the following medication list;

1. alendronate (Fosamax)
2. risedronate (Actonel)
3. calcitonin (Calcimar<sup>2</sup>, Miacalcin<sup>2</sup>, Cibacalcin<sup>1</sup>)
4. raloxifene (Evista)
5. iludronate (Skelid)
6. etidronate (Didronel)
7. zoledronate (Zometa)
8. pamidronate (Aredia)
9. parathyroid hormone (Forteo)
10. ibandronate (Boniva)

Calcium and Vitamin D supplements are also recommended but are not defined as FDA-approved osteoporosis drug therapy, and therefore, do not meet this criteria. HRT (estrogen) is no longer FDA approved for osteoporosis treatment, only prevention.

- f. An individual who has **completed** drug therapy for osteoporosis and is being monitored for response to therapy.
- g. An individual with a history of long term anti-convulsant, heparin, gonadotropin releasing hormone (GnRH) therapy or aromatase inhibitors
- h. An individual with impaired renal function use including chronic renal failure, renal osteodystrophy, and other specified disorders resulting from impaired renal function and cystic kidney disease.
- i. An individual with a history of pathologic fracture(s).

3. If 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 section 1861 ® of the Social Security Act.
4. 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.
5. The test is reasonable and necessary for diagnosing, treating or monitoring of a "qualified" individual as defined above.

B. 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;

1. Monitoring beneficiaries on long-term glucocorticoid (steroid) therapy, equal to 5 mg of prednisone or greater , for more than three months
2. Monitoring beneficiaries on FDA-approved osteoporosis drug therapy, to assess response and efficacy of therapy, until a response to such therapy has been documented over time and condition is stabilized.
3. Follow up bone mineral density testing after discontinuation of therapy, until a response to such therapy has been documented.
4. Men with prostate cancer undergoing hormonal manipulation may need yearly examinations.

- C. Medicare will cover a confirmatory baseline bone mass measurement (either central or peripheral) 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 (e.g., if the initial test was bone sonometry and the patient will be monitored with bone densitometry, a second test utilizing densitometry will be paid).

There are limited clinical situations, where it may be appropriate to do both axial and peripheral bone mineral density (BMD) studies on the same date of service, or within thirty days of each other. Medicare will not reimburse for both axial and appendicular testing on the same date of service or within thirty days of each other, unless the medical records substantiate that the BMM initially obtained was unreadable. Conditions that verify to Medicare that a BMM is unreadable and a second BMM is medically necessary include documentation the patient has artificial instrumentation in place in either hip or spine, or other conditions that preclude a reading in those locations.

- D. These other conditions may include the following;
1. Neither hip nor spine (axial testing) can be measured. (Reason must be documented in the medical record).
  2. Hyperparathyroidism
  3. Obese patient over the weight limit of the DEXA exam table.
  4. Extreme arthritic changes which precludes accurate measurement.

This documentation (medical records/history or and x-ray report) must be available for submission with the original and all subsequent claims upon request.

- E. There are multiple techniques for obtaining bone mass or bone density information. There is a difference in the precision, and accuracy of the different techniques and the sensitivity of measurement in axial (central) or peripheral sites. In general, because cancellous bone changes more rapidly in time and with therapeutic intervention, the sites of cancellous bone (lumbar spine, proximal femur) are more likely than peripheral sites or cortical bone to show a response to FDA approved osteoporosis drug therapy and are preferred for baseline and drug monitoring purposes. The most reliable comparative results for drug monitoring are obtained when the same BMD instrument is used. Based on this, Medicare coverage is limited to those techniques which have been rated favorably in clinical studies.

### **Coverage Topic**

Bone Mass Measurement

### **Bill Type Codes:**

**Bill type codes only apply to providers who bill these services to the fiscal intermediary. Bill type codes do not apply to physicians, other professionals and suppliers who bill these services to the carrier.**

**Contractors may specify bill types to help providers identify those bill types typically used to report this service absence of a bill type does not guarantee that the policy does not apply to that bill type. Complete absence of all bill types indicates that coverage is not influenced by bill type and the policy should be assumed to apply equally to all claims.**

12x	Hospital-inpatient or home health visits (Part B only)
13x	Hospital-outpatient (HHA-A also) (under OPPTS 13X must be used for ASC claims submitted for OPPTS payment -- eff. 7/2000)
22x	SNF; npatient or home health visits (Part B only)

23x	SNF; outpatient (HHA-A also)
34x	HHA; other (Part B)
71x	Clinic; rural health
72x	Clinic; hospital based or independent renal dialysis facility
73x	Clinic; independent provider based FQHC (eff 10/91)
85x	Special facility or ASC surgery-rural primary care hospital (eff 10/94)

**Revenue Codes:**

**Contractors may specify Bill Types to help providers identify those Bill Types typically used to report this service. Absence of a Bill Type does not guarantee that the policy does not apply to that Bill type. Complete absence of all Bill Types indicates that coverage is not influenced by Bill Type and the policy should be assumed to apply to all claims.**

**Contractors may specify Revenue Codes to help providers identify those Revenue Codes typically used to report this service. In most instances Revenue Codes are purely advisory; unless specified in the policy services reported under other Revenue Codes are equally subject to this coverage determination. Complete absence of all Revenue Codes indicates that coverage is not influenced by Revenue Code and the policy should be assumed to apply equally to all Revenue Codes.**

Revenue codes only apply to providers who bill these services to the fiscal intermediary. Revenue codes do not apply to physicians, other professionals and suppliers who bill these services to the carrier.

Please note that not all revenue codes apply to every type of bill code. Providers are encouraged to refer to the FISS revenue code file for allowable bill types. Similarly, not all revenue codes apply to each CPT/HCPCS code. Providers are encouraged to refer to the FISS HCPCS file for allowable revenue codes.

Revenue codes 096X, 097X and 098X are to be used only by Critical Access Hospitals (CAHs) choosing the optional payment method (also called Option 2 or Method 2) and only for services performed by physicians or practitioners who have reassigned their billing rights. When a CAH has selected the optional payment method, physicians or other practitioners providing professional services at the CAH may elect to bill their carrier or assign their billing rights to the CAH. When professional services are reassigned to the CAH, the CAH must bill the FI using revenue codes 096X, 097X or 098X.

Note: Any explanatory text for this field now allows comments.

0320	Radiology diagnostic-general classification
0333	Radiology therapeutic-radiation therapy
034X	Nuclear medicine- general classification
035X	Computed tomographic (CT) scan-general classification
040X	Other imaging services – general classification
052X	Free-standing clinic- general classification
061X	Magnetic resonance technology (MRT) general classification
0960	Professional fees –general classification

0969	Professional fees –other
0972	Professional fees- radiology daignostic
0982	Professional fees – outpatient services
0983	Professional fees - clinic

### CPT/HCPCS Codes

77078	Computerized tomography, bone mineral density study, one or more sites, axial skeleton (e.g. Hips, pelvis, spine)
77079	Appendicular skeleton (peripheral) (e.g. radius, wrist, heel)
77080	Dual energy x-ray absorptiometry (DEXA), bone density study, one or more sites, axial skeleton (e.g. hips, pelvis, spine)
77081	Appendicular skeleton (peripheral) (e.g. radius, wrist, heel)
77083	Radiographic absorptiometry (e.g. photodensitometry. Radiogrammetry), one or more sites
76977	Ultrasound bone density measurement and interpretation, peripheral site(s), any method
78350	Bone density (bone mineral content) study, one or more sites, single photon absorptiometry (*See Billing and Coding Guidelines for MS-004)
78351	Dual photon absorptiometry, one or more sites (*See Billing and Coding Guidelines for MS-004)
G0130	Single energy X-ray absorptiometry (sexa) bone density study, one or more sites; appendicular skeleton (peripheral) (e.g. radius, wrist, heel)

### Does the CPT 30% Rule Apply

No

### ICD-9 Codes that Support Medical Necessity

*Note: ICD-9 codes must be coded to the highest level of specificity.*

When one of the non DEXA procedures below (77078, 77079, 77081, 77083, 76977 or G0130) is done as an **initial diagnostic test** that determines a diagnosis of 255.0, 733.00, 733.01, 733.02, 733.03, 733.09 or 733.90, code as a secondary diagnosis the reason for the bone mass density test.

### For Use with CPT Codes 77078, 77079, 77080, 77081, 77083, 76977, G0130

242.00	Toxic diffuse goiter without Thyrotoxicosis mention of crisis or storm
242.01	Toxic diffuse goiter with thyrotoxicosis mention of crisis or storm
242.10-242.11	Toxic uninodular goiter
242.20-242.21	Toxic multinodular goiter
242.30-242.31	Toxic nodular goiter, unspecified
242.40-242.41	Thyrotoxicosis from ectopic thyroid nodule
242.80-242.81	Thyrotoxicosis of other specified origin
242.90-242.91	Thyrotoxicosis without mention of goiter or other cause
246.0	Disorders of thyrocalcitonin secretion
252.00-252.02	Hyperparathyroidism
252.08	Other hyperparathyroidism
253.2	Panhypopituitarism
256.2	Postablative ovarian failure
256.31	Premature menopause

256.39	Other ovarian failure
257.2	Other testicular hypofunction
259.3	Ectopic hormone secretion, not elsewhere classified
262	Other severe protein-calorie malnutrition
263.0-263.9	Other and unspecified protein-calorie malnutrition
268.2	Osteomalacia, unspecified
268.9	Unspecified vitamin D deficiency
275.40-275.49	Disorders of calcium metabolism
555.0-555.9	Regional enteritis
556.0-556.9	Ulcerative colitis
579.0-579.9	Intestinal malabsorption
585.1-585.9	Chronic renal failure
588.0	Renal osteodystrophy
588.81	Secondary hyperparathyroidism of renal origin
588.89	Other specified disorders resulting from impaired renal function
626.0	Absence of menstruation
627.0-627.9	Menopausal and postmenopausal disorders
731.0	Osteitis deformans without mention of bone tumor
733.10-733.19	Pathological fractures
733.93-733.95	Stress fracture; tibia or fibula or metatarsals or other bone
737.10	Kyphosis (acquired) (postural)
753.12-753.19	Cystic kidney disease
758.6	Gonadal dysgenesis
781.91	Loss of height
805.00-805.08	Fracture of vertebral without mention of spinal cord injury (cervical vertebra)
805.10-805.9	Fracture of neck and trunk
806.00-806.09	Fracture of vertebral column with spinal cord injury
806.10-806.19	Cervical fracture closed with spinal cord injury
806.20-806.29	Dorsal (thoracic) closed fracture
806.30-806.39	Dorsal (thoracic) open fracture
806.4 & 806.5	Lumbar fracture, closed or open
806.60-806.69	Sacrum and coccyx fracture, closed
806.70-806.9	Sacrum and coccyx fracture, open
962.0	Poisoning; adrenal cortical steroids
995.20	Unspecified adverse effect of unspecified drug, medicinal and biological substance
V45.77	Acquired absence of genital organs
V49.81	Postmenopausal status (age related) (natural)
V50.42	Prophylactic removal of ovary
V58.61, V58.65, V58.69	Long-term (current) use of medication
V67.51, V67.59, V71.89, V82.81	Follow-up exams/observation/special screening

**For Use with CPT Code 77080 (DEXA)**

255.0	Cushing's syndrome
733.00	Osteoporosis, unspecified

733.01	Senile osteoporosis
733.02	Idiopathic osteoporosis
733.03	Disuse osteoporosis
733.09	Osteoporosis other, drug induced osteoporosis
733.90	Disorder of bone and cartilage, unspecified

### **Diagnoses that Support Medical Necessity**

Diagnoses listed above

### **ICD-9 Codes that DO NOT Support Medical Necessity**

ICD-9 Codes not listed above

### **Diagnoses that DO NOT Support Medical Necessity**

Diagnoses not listed above

### **Documentation Requirements**

1. Physicians' Services and diagnostic tests must be submitted with an ICD-9 code to support the medical necessity for the service and must be coded to the greatest level of accuracy and highest level of digit completeness. This means the precise ICD-9 code that fully explains the narrative description of the diagnosis contained in the medical record or the test interpretation and report including the 4<sup>th</sup> or 5<sup>th</sup> digit sub-classification for the diagnosis category. The ICD-9 code based on the results of the test should be the primary diagnosis. If the diagnostic test results are normal or inconclusive the ICD-9 code representing the sign, symptom, illness or injury prompting the ordering of the test should be reported as the primary diagnosis.
2. Medical records should be legible, contain the relevant history, physical findings conforming to the criteria stated in the "Indications and Limitation of Coverage/Medical Necessity" section of this policy and must be made available to the Carrier on request.
3. Documentation supporting medical necessity including the reason for testing, the method used, and the site(s) evaluated, plus a test report should be in the patient's record.
4. The patient's medical record must document that patient meets one of the requirements of a "qualified individual" as described in the Indications and Limitations of Coverage section of this policy.

### **Utilization Guidelines**

Refer to "Indications and Limitations of Coverage and/or Medical Necessity" sections A and B.

### **Sources of Information and Basis for Decision**

1. American College of Radiology, ACR Appropriateness Criteria™ - Osteoporosis and bone Mineral Density (2001)
2. DEXA National Workgroup Memo, American Association of Clinical Endocrinologists - Osteoporosis Clinical Practice Guidelines (2001).
3. Institute for Clinical System Improvement, Health Care Guidelines: Diagnosis and Treatment of Osteoporosis (July 2002)

4. National Osteoporosis Foundation – Physicians Guide to Prevention and Treatment of Osteoporosis 2000, Update on Medication (2002)
5. The U.S. Preventive Services Task Force (USPSTF) Recommendation: Screening for Osteoporosis in Postmenopausal Women (September 2002)
6. This LCD is an adaptation of the existing Wisconsin Physician’s Service LCD in effect as of 12/01/2007 for Wisconsin, Illinois, Michigan and Minnesota.

**Advisory Committee Meeting Notes**

Meeting Date:

Wisconsin  
Illinois  
Michigan  
Minnesota  
Iowa  
Kansas  
Missouri  
Nebraska

**Start Date of Comment Period**

Wisconsin  
Illinois  
Michigan  
Minnesota  
Iowa  
Kansas  
Missouri  
Nebraska

**End Date of Comment Period**

Wisconsin  
Illinois  
Michigan  
Minnesota  
Iowa  
Kansas  
Missouri  
Nebraska

**Start Date of Notice Period**

(Published)  
Wisconsin  
Illinois  
Michigan  
Minnesota  
Iowa  
Kansas  
Missouri  
Nebraska

**Revision History Number/Explanation**

**Last Reviewed On**

**Notes**

See companion document titled [Billing and Coding Guidelines for MS-004, Bone Mineral Density \(BMD\) Studies](#)

Italicized lettering indicates CMS wording

\* Indicates most recent publishing or revision

**Does this LCD contain a "Least Costly Alternative" Provision?**

No

This policy does not reflect the sole opinion of the contractor or contractor medical director. Although the final decision rests with the contractor, this policy was developed in consideration of the active LCDs maintained by the preceding Medicare contractors for Jurisdiction 5.

DRAFT