



ND

Medical Policies



Print

Policy Number:

X-24

Policy Name: Bone Mineral Density Studies

Policy Type: Medical

Policy Subtype: Radiology

Effective Date: 09-15-2025

End Date: 11-02-2025

Description

Bone mineral density (BMD) testing is a widely available clinical tool for screening and diagnosing osteoporosis. These studies are also used to predict fracture risk and monitor response to therapy. Bone mineral density can be measured using different techniques in a variety of central (i.e., hip or spine) or peripheral (i.e., wrist, finger, heel) sites.

The following technologies are most commonly used to measure BMD.

Dual-energy x-ray absorptiometry- (DXA) is recommended by the National Osteoporosis Foundation (NOF) for bone density test of the spine, hips and pelvis to diagnose osteoporosis. When testing cannot be done on the spine, hips and pelvis, NOF suggests a central DXA test of the radius bone in the forearm. DXA can also be used to measure peripheral sites, such as the wrist and finger. DXA is non- invasive and provides precise measurements of bone density with minimal radiation.

Portable Peripheral Bone Density testing- portable devices that can determine BMD at peripheral sites such as the radius, phalanges, or calcaneus.

Single Photon Absorptiometry(SPA) and Dual-Photon Absorptiometry (DPA) - measure bone mineral content at the distal radius (SPA) and the spine and hip (DPA) using photons emitted at low energy levels.

Policy Application

All claims submitted under this policy's section will be processed according to the policy effective date and associated revision effective dates in effect on the date of processing, regardless of service date; **and/or**

All claims submitted under this policy's section will be processed according to the policy effective date and associated revision effective dates in effect on the date of service.

Criteria

Coverage is subject to the specific terms of the member's benefit plan.

Routine Bone Density Studies

Routine bone density studies performed as a screening test for osteoporosis are eligible for members with coverage for Preventive Health services according to the preventive scheduled published annually. (Refer to the member's individual benefits for coverage information on this service.)

Frequency Guidelines

Policy Application

All claims submitted under this policy's section will be processed according to the policy effective date and associated revision effective dates in effect on the date of processing, regardless of service date.

Coverage for eligible bone density studies is limited to one (1) test every two (2) years from the date of the previous bone density study, regardless of the anatomic area tested or imaging modality used to perform the study. However, more frequent bone mass measurements may be considered medically necessary under the following circumstances:

- To allow simultaneous axial (spine, hips, pelvis) and peripheral (forearm, radius, wrist) bone density testing for hyperparathyroidism; **or**
- To allow peripheral (forearm, radius, wrist) bone density testing in lieu of the axial skeleton (spine, hips, pelvis) in the very obese individual (defined as an individual with a BMI of 35 or greater) when the individual's weight exceeds the weight limit for the DXA table; **or**
- To allow peripheral (forearm, radius, wrist) bone density testing when the hips or spine cannot be measured or interpreted because of severe arthritis and/or previous surgery.

When a bone density study is reported with a diagnosis code that is covered under the 'general coverage' criteria, but the service falls within the two (2) years frequency limitation and the diagnosis or condition not meeting the expanded criteria described above, it will be denied as not medically necessary.

General Coverage Guidelines

Bone density studies may be considered medically necessary for **ANY ONE** of the following indications:

- Women age 65 and older; **or**
- Men age 70 and older; **or**
- Post-menopausal individuals above age 50-69, based of risk factor profile; **or**
- Post-menopausal individuals age 50 and older who have had an adult age fracture, to diagnoses and determine degree of osteoporosis; **or**
- The individual is on long term steroid therapy three (3) month duration or longer with a dosage of five (5) mg per day of prednisone, or equivalent; **or**

- The individual is on long term anticonvulsant therapy (i.e., Phenytoin, Dilantin) three (3) month duration or longer; **or**
- To determine if significant osteoporosis is present when associated with vertebral abnormalities on x-ray (i.e., compression fractures) or radiographic evidence of osteopenia; **or**
- Fractures of the hip, wrist, or spine in the absence of appropriate severe trauma; **or**
- Documented loss of height of 1.5 inches or greater; **or**
- To monitor and evaluate response to ongoing restorative treatment (i.e., Fosamax) for individuals with documented osteoporosis; **or**
- The individual suffers from one of the following calcium-wasting endocrinopathies:
 - Cushing's Syndrome; **or**
 - Hyperparathyroidism; **or**
 - Hyperthyroidism; **or**
 - Hypogonadism (except for uncomplicated, naturally occurring, or surgically induced post-menopausal clinical cases); **or**
 - Prolactinoma; **or**
 - Celiac Sprue; **or**
- The individual has prostate cancer with androgen deprivation; **or**
- Eating disorders, including anorexia nervosa and bulimia; **or**
- Breast cancer individuals who are on aromatase inhibitors.

DXA for pediatrics (until age 19) may be considered medically necessary when **ANY ONE** of the following is met:

- Prolonged use of glucocorticoid or corticosteroid therapy; **or**
- Chronic inflammatory disease; **or**
- Hypogonadism; **or**
- Idiopathic juvenile osteoporosis; **or**
- Long term immobilization; **or**
- Osteogenesis imperfecta; **or**
- Completion of chemotherapy two (2) years prior to ordering DXA.

The provider must submit medical records and/or additional documentation to determine coverage in the above situations.

Bone density studies not meeting the criteria as indicated in this policy are considered not medically necessary.

Procedure Codes

77078	77080	77081	77089	77090	77091	77092
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Single Photon Absorptiometry (SPA)

Policy Application

All claims submitted under this policy's section will be processed according to the policy effective date and associated revision effective dates in effect on the date of service.

Single Photon Absorptiometry (SPA), Dual-Photon Absorptiometry (DPA), and radiographic absorptiometry (i.e., photodensitometry, radiogrammetry) are considered not medically necessary.

Procedure Codes

78350	78351
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BMD measurement

Policy Application

All claims submitted under this policy's section will be processed according to the policy effective date and associated revision effective dates in effect on the date of processing, regardless of service date.

BMD measurement using ultrasound densitometry and/or quantitative computed tomography are considered experimental/investigational and, therefore, non-covered because the safety and/or effectiveness of this service cannot be established by the available published peer-reviewed literature.

Procedure Codes

0554T	0555T	0556T	0557T	0558T	0743T	0749T
0750T						

Professional Statements and Societal Positions Guidelines

Not Applicable

Diagnosis Codes

Covered Diagnosis Codes for Procedure Codes: 77078; 77089; 77090; 77091; and 77092

C75.1	C75.2	D35.2	D35.3	D44.3	D44.4	D49.7
E05.00	E05.01	E05.10	E05.11	E05.20	E05.21	E05.30
E05.31	E05.40	E05.41	E05.80	E05.81	E05.90	E05.91
E21.0	E21.1	E21.2	E21.3	E24.0	E24.2	E24.3
E24.4	E24.8	E24.9	E28.310	E28.319	E28.39	E29.1
E74.20	E74.21	E74.29	E89.40	E89.41	E89.5	F50.00
F50.010	F50.011	F50.012	F50.013	F50.014	F50.019	F50.020

F50.021	F50.022	F50.023	F50.024	F50.029	F50.20	F50.21
F50.22	F50.23	F50.24	F50.25	F50.810	F50.811	F50.812
F50.813	F50.814	F50.819	F50.82	F50.89	G40.001	G40.009
G40.011	G40.019	K50.00	K50.011	K50.012	K50.013	K50.014
K50.018	K50.019	K50.10	K50.111	K50.112	K50.113	K50.114
K50.118	K50.119	K50.90	K50.911	K50.912	K50.913	K50.914
K50.918	K50.919	K90.0	K90.49	K90.89	K90.9	M48.50XA
M48.51XA	M48.52XA	M48.53XA	M48.54XA	M48.55XA	M48.56XA	M48.57XA
M48.58XA	M80.00XA	M80.00XD	M80.0AXA	M80.0AXD	M80.0AXG	M80.0AXK
M80.0AXP	M80.0AXS	M80.0B1A	M80.0B1D	M80.0B1G	M80.0B1K	M80.0B1P
M80.0B1S	M80.0B2A	M80.0B2D	M80.0B2G	M80.0B2K	M80.0B2P	M80.0B2S
M80.0B9A	M80.0B9D	M80.0B9G	M80.0B9K	M80.0B9P	M80.0B9S	M80.8B1A
M80.8B1D	M80.8B1G	M80.8B1K	M80.8B1P	M80.8B1S	M80.8B2A	M80.8B2D
M80.8B2G	M80.8B2K	M80.8B2P	M80.8B9A	M80.8B9D	M80.8B9G	M80.8B9K
M80.8B9P	M80.8B9S	M80.011A	M80.011D	M80.011G	M80.011K	M80.011P
M80.011S	M80.012A	M80.012D	M80.012G	M80.012K	M80.012P	M80.012S
M80.021A	M80.021D	M80.021G	M80.021K	M80.021P	M80.021S	M80.022A
M80.022D	M80.022G	M80.022K	M80.022P	M80.022S	M80.031A	M80.031D
M80.031G	M80.031K	M80.031P	M80.031S	M80.032A	M80.032D	M80.032G
M80.032K	M80.032P	M80.032S	M80.039A	M80.041A	M80.041D	M80.041G
M80.041K	M80.041P	M80.041S	M80.042A	M80.042D	M80.042G	M80.042K
M80.042P	M80.042S	M80.051A	M80.051D	M80.051G	M80.051K	M80.051P
M80.051S	M80.052A	M80.052D	M80.052G	M80.052K	M80.052P	M80.052S
M80.059A	M80.059D	M80.061A	M80.061D	M80.061G	M80.061K	M80.061P

M80.061S	M80.062A	M80.062D	M80.062G	M80.062K	M80.062P	M80.062S
M80.069A	M80.071A	M80.071D	M80.071G	M80.071K	M80.071P	M80.071S
M80.072A	M80.072D	M80.072G	M80.072K	M80.072P	M80.072S	M80.08XA
M80.08XD	M80.08XG	M80.08XK	M80.08XP	M80.08XS	M80.80XS	M80.8AXA
M80.8AXD	M80.8AXG	M80.8AXK	M80.8AXP	M80.8AXS	M80.811A	M80.811D
M80.811G	M80.811K	M80.811P	M80.811S	M80.812A	M80.812D	M80.812G
M80.812K	M80.812P	M80.812S	M80.819P	M80.819S	M80.821A	M80.821D
M80.821G	M80.821K	M80.821P	M80.821S	M80.822A	M80.822D	M80.822G
M80.822K	M80.822P	M80.822S	M80.831A	M80.831D	M80.831G	M80.831K
M80.831P	M80.831S	M80.832A	M80.832D	M80.832G	M80.832K	M80.832P
M80.832S	M80.839A	M80.841A	M80.841D	M80.841G	M80.841K	M80.841P
M80.841S	M80.842A	M80.842D	M80.842G	M80.842K	M80.842P	M80.842S
M80.851A	M80.851D	M80.851G	M80.851K	M80.851P	M80.851S	M80.852A
M80.852D	M80.852G	M80.852K	M80.852P	M80.852S	M80.859A	M80.859G
M80.861A	M80.861D	M80.861G	M80.861K	M80.861P	M80.861S	M80.862A
M80.862D	M80.862G	M80.862K	M80.862P	M80.862S	M80.871A	M80.871D
M80.871G	M80.871K	M80.871P	M80.871S	M80.872A	M80.872D	M80.872G
M80.872K	M80.872P	M80.872S	M80.88XA	M81.0	M81.6	M81.8
M84.431A	M84.432A	M84.433A	M84.434A	M84.439A	M84.451A	M84.452A
M84.459A	M84.48XA	M84.531A	M84.532A	M84.533A	M84.534A	M84.539A
M84.551A	M84.552A	M84.553A	M84.559A	M84.58XA	M84.631A	M84.632A
M84.633A	M84.634A	M84.639A	M84.651A	M84.652A	M84.653A	M84.659A
M84.68XA	M85.831	M85.832	M85.841	M85.842	M85.851	M85.852
M85.859	M85.861	M85.862	M85.869	M85.871	M85.872	M85.879

M85.88	M85.89	M85.9	M89.9	M94.9	Q78.0	R29.890
R93.6	R93.7	Z78.0	Z79.51	Z79.52	Z79.811	Z79.818
Z79.890	Z79.899	Z92.21	Z92.240	Z92.241		

Covered Diagnosis Codes for Procedure Codes: 77080; and 77081 (along with those diagnosis codes listed above).

Z00.00	Z00.01	Z13.820	Z82.62
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Payment For An Additional Bone Density Study Within The One (1) Every Two (2) Years Frequency Limitation For The Following Diagnosis Codes:

Covered Diagnosis Codes for Procedure Codes: 77078, 77080, and 77081

E21.0	E21.1	E21.2	E21.3	Z68.35	Z68.36	Z68.37
Z68.38	Z68.39	Z68.41	Z68.42	Z68.43	Z68.44	Z68.45

CURRENT CODING

CPT:

0554T	BONE STRENGTH & FRACTURE RISK ANALYSIS	Medicaid Expansion
0555T	BONE STRENGTH & FRACTURE RSK RETRV&TRANSMIS DATA	Medicaid Expansion
0556T	BONE STRENGTH & FRACTURE RISK ASSESSMENT	Medicaid Expansion
0557T	BONE STRENGTH & FRACTURE RISK I&R	Medicaid Expansion
0558T	CT SCAN FOR PURPOSE BIOMECHANICAL CT ANALYSIS	Medicaid Expansion
0743T	BONE STRENGTH & FRACTURE RSK CNCRNT VRT FX ASSMT	Medicaid Expansion
0749T	B1 STR & FX RISK ASSESSMENT USING DXR-BMD ALYS	Medicaid Expansion
0750T	B1 STR&FX RSK ASSMT DXR-BMD ALYS W/1VW XRAY HAND	Medicaid Expansion

77078	CT BONE MINERL DENSITY STUDY 1/> SITS AXIAL SKE	Medicaid Expansion
77080	DXA BONE DENSITY STUDY 1/> SITES AXIAL SKEL	Medicaid Expansion
77081	DXA BONE DENSITY STUDY 1/>SITES APPENDICLR SKEL	Medicaid Expansion
77089	TBS DXA/OTHER IMG CALCULATION W/I&R FX RISK	Medicaid Expansion
77090	TBS TECHL PREP&TRANSMIS DATA ALYS PFRMD ELSEWHR	Medicaid Expansion
77091	TBS TECHNICAL CALCULATION ONLY	Medicaid Expansion
77092	TBS INTERPRETATION & REPORT FX RISK BY OTHER QHP	Medicaid Expansion
78350	BONE DENSITY 1/> SITES 1 PHOTON ABSORPTIOMETRY	Medicaid Expansion
78351	BONE DENSTY 1/> SITES DUAL PHOTON ABSORPTIOMETR	Medicaid Expansion
0554T	BONE STRENGTH & FRACTURE RISK ANALYSIS	Commercial
0555T	BONE STRENGTH & FRACTURE RSK RETRV&TRANSMIS DATA	Commercial
0556T	BONE STRENGTH & FRACTURE RISK ASSESSMENT	Commercial
0557T	BONE STRENGTH & FRACTURE RISK I&R	Commercial
0558T	CT SCAN FOR PURPOSE BIOMECHANICAL CT ANALYSIS	Commercial
0743T	BONE STRENGTH & FRACTURE RSK CNCRNT VRT FX ASSMT	Commercial
0749T	B1 STR & FX RISK ASSESSMENT USING DXR-BMD ALYS	Commercial
0750T	B1 STR&FX RSK ASSMT DXR-BMD ALYS W/1VW XRAY HAND	Commercial
77078	CT BONE MINERL DENSITY STUDY 1/> SITS AXIAL SKE	Commercial
77080	DXA BONE DENSITY STUDY 1/> SITES AXIAL SKEL	Commercial

77081	DXA BONE DENSITY STUDY 1/>SITES APPENDICLR SKEL	Commercial
77089	TBS DXA/OTHER IMG CALCULATION W/I&R FX RISK	Commercial
77090	TBS TECHL PREP&TRANSMIS DATA ALYS PFRMD ELSEWHR	Commercial
77091	TBS TECHNICAL CALCULATION ONLY	Commercial
77092	TBS INTERPRETATION & REPORT FX RISK BY OTHER QHP	Commercial
78350	BONE DENSITY 1/> SITES 1 PHOTON ABSORPTIOMETRY	Commercial
78351	BONE DENSTY 1/> SITES DUAL PHOTON ABSORPTIOMETR	Commercial

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11. Hayes, Inc. Hayes Health Technology Brief. Trabecular Bone Score to Predict Fracture Risk in Postmenopausal Patients. Lansdale, PA: Hayes, Inc.; 01/25/2022.
12. Parikh K, Reinhardt D, Templeton K, Toby B, Brubacher J. Rate of bone mineral density testing and subsequent fracture-free interval after distal forearm fracture in the Medicare population. J Hand Surg Am. 2021;46(4):267-277.

ND Committee Review

Pre/Post Medical Policy Review 8-10-2020 Update to Criteria

Internal Medical Policy Committee 9-01-2020 Coding update,

- **Added** Diagnosis codes M80.0AXA; M80.0AXD; M80.0AXG; M80.0AXK; M80.0AXP; M80.0AXS; M80.8AXA; M80.8AXD; M80.8AXG; M80.8AXK; M80.8AXP; and M80.8AXS.

Internal Medical Policy Committee 9-21-2021 Annual Review, no changes in criteria

Internal Medical Policy Committee 01-20-2022 Coding update **Effective January 01, 2022**

- **Adding:** New Codes: 77089; 77090; 77091; 77092 specific to North Dakota; **and**
- **Adding:** Procedure codes 0508T; 0554T; 0555T; 0556T; 0557T; 0558T which are already in North Dakota's Experimental/Investigational policy; **and**
- **Adding** Diagnosis codes: G40.001; G40.009; G40.011; G40.019; Z79.818; Z79.890; Z79.899; **and**
- **Removing** Diagnosis codes: M85.85; M85.86; M85.87

Internal Medical Policy Committee 11-29-2022 Revision with Coding Update- **Effective January 01, 2023**

- **Added** Procedure codes 0743T; 0749T and 0750T; **and**
- **Added** Diagnosis codes E28.310; E28.319

Internal Medical Policy Committee 11-15-2023 Coding Update- **Effective October 01, 2023**

- **Added** Diagnosis codes (from October new codes) to procedure codes 77078; 77080; & 77081
M80.0B1A; M80.0B1D; M80.0B1G; M80.0B1K; M80.0B1P; M80.0B1S; M80.0B2A; M80.0B2D; M80.0B2G;
M80.0B2K; M80.0B2P; M80.0B2S; M80.0B9A; M80.0B9D; M80.0B9G; M80.0B9K; M80.0B9P; M80.0B9S;
M80.8B1A; M80.8B1D; M80.8B1G; M80.8B1K; M80.8B1P; M80.8B1S; M80.8B2A; M80.8B2D; M80.8B2G;
M80.8B2K; M80.8B2P; M80.8B2S; M80.8B9A; M80.8B9D; M80.8B9G; M80.8B9K; M80.8B9P; and
M80.8B9S.

Internal Medical Policy Committee 1-16-2024 Coding update - **Effective January 01, 2024**

- **Removed** procedure code 0508T

Internal Medical Policy Committee 5-14-2024 Coding update - **Effective July 01, 2024**

- **Added procedure codes 77090; 77091; and 77092 to Covered Diagnosis Codes for Procedure codes: 77078; 77089; and**
- **Added specific diagnosis codes for procedure codes 77080; and 77081**
 - **Added** diagnosis codes Z00.00; Z00.01; Z13.820; and Z82.62.

Internal Medical Policy Committee 9-17-2024 Coding update - **Effective October 01, 2024**

- **Removed** diagnosis codes F50.01; F50.02; F50.2; and F50.81; **and**
- **Added** diagnosis codes F50.010; F50.011; F50.012; F50.013; F50.014; F50.019; F50.020; F50.021; F50.022; F50.024; F50.029; F50.20; F50.21; F50.22; F50.23; F50.24; F50.25; F50.810; F50.811; F50.812; F50.813; F50.814; F50.819; **and**
- **Added** Policy Application

Disclaimer

Current medical policy is to be used in determining a Member's contract benefits on the date that services are rendered. Contract language, including definitions and specific inclusions/exclusions, as well as state and federal law, must be considered in determining eligibility for coverage. Members must consult their applicable benefit plans or contact a Member Services representative for specific coverage information. Likewise, medical policy, which addresses the issue(s) in any specific case, should be considered before utilizing medical opinion in adjudication. Medical technology is constantly evolving, and the Company reserves the right to review and update medical policy periodically.