



MASSACHUSETTS

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Medical Policy

Vitamin D Assay Testing

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Policy Number: 746

BCBSA Reference Number: 2.04.135

NCD/LCD: Local Coverage Determination (LCD): Vitamin D Assay Testing (L37535)

Related Policies

None

Policy¹

Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity Medicare HMO BlueSM and Medicare PPO BlueSM Members

Measurement of 25-OH Vitamin D (CPT 82306) level is considered **MEDICALLY NECESSARY** for patients with **any** of the following conditions:

- Chronic kidney disease stage III or greater
- Cirrhosis
- Hypocalcemia
- Hypercalcemia
- Hypercalciuria
- Hypervitaminosis D
- Parathyroid disorders
- Malabsorption states
- Obstructive jaundice
- Osteomalacia
- Osteoporosis if:
 - T score on DEXA scan <-2.5 or
 - History of fragility fractures or
 - FRAX> 3% 10-year probability of hip fracture or 20% 10-year probability of other major osteoporotic fracture or
 - FRAX> 3% (any fracture) with T-score <-1.5 or
 - Initiating bisphosphonate therapy (Vitamin D level and serum calcium levels should be determined and managed as necessary before bisphosphonate is initiated.)
- Osteosclerosis/petrosis
- Rickets

- Vitamin D deficiency on replacement therapy related to a condition listed above; to monitor the efficacy of treatment.

Measurement of 1, 25-OH Vitamin D (CPT 82652) level is considered **MEDICALLY NECESSARY** for patients with **any** of the following conditions:

- Unexplained hypercalcemia (suspected granulomatous disease or lymphoma)
- Unexplained hypercalciuria (suspected granulomatous disease or lymphoma)
- Suspected genetic childhood rickets
- Suspected tumor-induced osteomalacia
- Nephrolithiasis or hypercalciuria.

Both assays of vitamin D do not need to be performed for each of the above conditions as they are considered **NOT MEDICALLY NECESSARY**.

Once a patient has been shown to be vitamin D deficient, further testing may be considered **MEDICALLY NECESSARY** to ensure adequate replacement has been accomplished.

If the Vitamin D level is between 20 and 50 ng/dl and the patient is clinically stable, repeat testing is considered **NOT MEDICALLY NECESSARY**. If repeat testing is performed, documentation must clearly indicate the medical necessity of the test. If the Vitamin D level <20 ng/dl or > 60 ng/dl is documented, a subsequent level(s) may be **MEDICALLY NECESSARY** until the level is within the normal range.

Routine testing or other screening is considered **NOT MEDICALLY NECESSARY**.

Prior Authorization Information

Inpatient

- For services described in this policy, precertification/preauthorization **IS REQUIRED** for all products if the procedure is performed **inpatient**.

Outpatient

- For services described in this policy, see below for products where prior authorization **might be required** if the procedure is performed **outpatient**.

	Outpatient
Commercial Managed Care (HMO and POS)	Prior authorization is not required .
Commercial PPO and Indemnity	Prior authorization is not required .
Medicare HMO Blue SM	Prior authorization is not required .
Medicare PPO Blue SM	Prior authorization is not required .

CPT Codes / HCPCS Codes / ICD Codes

Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.

Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.

The following codes are included below for informational purposes only; this is not an all-inclusive list.

The above medical necessity criteria MUST be met for the following codes to be covered for Commercial Members: Managed Care (HMO and POS), PPO, Indemnity and Medicare HMO Blue and Medicare PPO Blue:

CPT Codes

CPT codes:	Code Description
82306	Vitamin D; 25 hydroxy, includes fraction(s), if performed

The following ICD Diagnosis Codes are considered medically necessary when submitted with the CPT codes above if medical necessity criteria are met:

ICD-10 Diagnoses Codes

ICD-10	Code Description
A15.0	Tuberculosis of lung
A15.4	Tuberculosis of intrathoracic lymph nodes
A15.5	Tuberculosis of larynx, trachea and bronchus
A15.6	Tuberculous pleurisy
A15.7	Primary respiratory tuberculosis
A15.8	Other respiratory tuberculosis
A17.0	Tuberculous meningitis
A17.1	Meningeal tuberculoma
A17.81	Tuberculoma of brain and spinal cord
A17.82	Tuberculous meningoencephalitis
A17.83	Tuberculous neuritis
A17.89	Other tuberculosis of nervous system
A18.01	Tuberculosis of spine
A18.02	Tuberculous arthritis of other joints
A18.03	Tuberculosis of other bones
A18.09	Other musculoskeletal tuberculosis
A18.11	Tuberculosis of kidney and ureter
A18.12	Tuberculosis of bladder
A18.13	Tuberculosis of other urinary organs
A18.14	Tuberculosis of prostate
A18.15	Tuberculosis of other male genital organs
A18.16	Tuberculosis of cervix
A18.17	Tuberculous female pelvic inflammatory disease
A18.18	Tuberculosis of other female genital organs
A18.2	Tuberculous peripheral lymphadenopathy
A18.31	Tuberculous peritonitis
A18.32	Tuberculous enteritis
A18.39	Retroperitoneal tuberculosis
A18.4	Tuberculosis of skin and subcutaneous tissue
A18.51	Tuberculous episcleritis
A18.52	Tuberculous keratitis
A18.53	Tuberculous chorioretinitis
A18.54	Tuberculous iridocyclitis
A18.59	Other tuberculosis of eye
A18.6	Tuberculosis of (inner) (middle) ear
A18.7	Tuberculosis of adrenal glands
A18.81	Tuberculosis of thyroid gland
A18.82	Tuberculosis of other endocrine glands
A18.83	Tuberculosis of digestive tract organs, not elsewhere classified
A18.84	Tuberculosis of heart
A18.85	Tuberculosis of spleen
A18.89	Tuberculosis of other sites
A19.0	Acute miliary tuberculosis of a single specified site

A19.1	Acute miliary tuberculosis of multiple sites
A19.2	Acute miliary tuberculosis, unspecified
A19.8	Other miliary tuberculosis
B38.0	Acute pulmonary coccidioidomycosis
B38.1	Chronic pulmonary coccidioidomycosis
B38.3	Cutaneous coccidioidomycosis
B38.4	Coccidioidomycosis meningitis
B38.7	Disseminated coccidioidomycosis
B38.81	Prostatic coccidioidomycosis
B38.89	Other forms of coccidioidomycosis
B39.0	Acute pulmonary histoplasmosis capsulati
B39.1	Chronic pulmonary histoplasmosis capsulati
B39.3	Disseminated histoplasmosis capsulati
B39.5	Histoplasmosis duboisii
C82.01	Follicular lymphoma grade I, lymph nodes of head, face, and neck
C82.02	Follicular lymphoma grade I, intrathoracic lymph nodes
C82.03	Follicular lymphoma grade I, intra-abdominal lymph nodes
C82.04	Follicular lymphoma grade I, lymph nodes of axilla and upper limb
C82.05	Follicular lymphoma grade I, lymph nodes of inguinal region and lower limb
C82.06	Follicular lymphoma grade I, intrapelvic lymph nodes
C82.07	Follicular lymphoma grade I, spleen
C82.08	Follicular lymphoma grade I, lymph nodes of multiple sites
C82.09	Follicular lymphoma grade I, extranodal and solid organ sites
C82.11	Follicular lymphoma grade II, lymph nodes of head, face, and neck
C82.12	Follicular lymphoma grade II, intrathoracic lymph nodes
C82.13	Follicular lymphoma grade II, intra-abdominal lymph nodes
C82.14	Follicular lymphoma grade II, lymph nodes of axilla and upper limb
C82.15	Follicular lymphoma grade II, lymph nodes of inguinal region and lower limb
C82.16	Follicular lymphoma grade II, intrapelvic lymph nodes
C82.17	Follicular lymphoma grade II, spleen
C82.18	Follicular lymphoma grade II, lymph nodes of multiple sites
C82.19	Follicular lymphoma grade II, extranodal and solid organ sites
C82.21	Follicular lymphoma grade III, unspecified, lymph nodes of head, face, and neck
C82.22	Follicular lymphoma grade III, unspecified, intrathoracic lymph nodes
C82.23	Follicular lymphoma grade III, unspecified, intra-abdominal lymph nodes
C82.24	Follicular lymphoma grade III, unspecified, lymph nodes of axilla and upper limb
C82.25	Follicular lymphoma grade III, unspecified, lymph nodes of inguinal region and lower limb
C82.26	Follicular lymphoma grade III, unspecified, intrapelvic lymph nodes
C82.27	Follicular lymphoma grade III, unspecified, spleen
C82.28	Follicular lymphoma grade III, unspecified, lymph nodes of multiple sites
C82.29	Follicular lymphoma grade III, unspecified, extranodal and solid organ sites
C82.31	Follicular lymphoma grade IIIa, lymph nodes of head, face, and neck
C82.32	Follicular lymphoma grade IIIa, intrathoracic lymph nodes
C82.33	Follicular lymphoma grade IIIa, intra-abdominal lymph nodes
C82.34	Follicular lymphoma grade IIIa, lymph nodes of axilla and upper limb
C82.35	Follicular lymphoma grade IIIa, lymph nodes of inguinal region and lower limb
C82.36	Follicular lymphoma grade IIIa, intrapelvic lymph nodes
C82.37	Follicular lymphoma grade IIIa, spleen
C82.38	Follicular lymphoma grade IIIa, lymph nodes of multiple sites
C82.39	Follicular lymphoma grade IIIa, extranodal and solid organ sites
C82.41	Follicular lymphoma grade IIIb, lymph nodes of head, face, and neck
C82.42	Follicular lymphoma grade IIIb, intrathoracic lymph nodes
C82.43	Follicular lymphoma grade IIIb, intra-abdominal lymph nodes

C82.44	Follicular lymphoma grade IIIb, lymph nodes of axilla and upper limb
C82.45	Follicular lymphoma grade IIIb, lymph nodes of inguinal region and lower limb
C82.46	Follicular lymphoma grade IIIb, intrapelvic lymph nodes
C82.47	Follicular lymphoma grade IIIb, spleen
C82.48	Follicular lymphoma grade IIIb, lymph nodes of multiple sites
C82.49	Follicular lymphoma grade IIIb, extranodal and solid organ sites
C82.51	Diffuse follicle center lymphoma, lymph nodes of head, face, and neck
C82.52	Diffuse follicle center lymphoma, intrathoracic lymph nodes
C82.53	Diffuse follicle center lymphoma, intra-abdominal lymph nodes
C82.54	Diffuse follicle center lymphoma, lymph nodes of axilla and upper limb
C82.55	Diffuse follicle center lymphoma, lymph nodes of inguinal region and lower limb
C82.56	Diffuse follicle center lymphoma, intrapelvic lymph nodes
C82.57	Diffuse follicle center lymphoma, spleen
C82.58	Diffuse follicle center lymphoma, lymph nodes of multiple sites
C82.59	Diffuse follicle center lymphoma, extranodal and solid organ sites
C82.61	Cutaneous follicle center lymphoma, lymph nodes of head, face, and neck
C82.62	Cutaneous follicle center lymphoma, intrathoracic lymph nodes
C82.63	Cutaneous follicle center lymphoma, intra-abdominal lymph nodes
C82.64	Cutaneous follicle center lymphoma, lymph nodes of axilla and upper limb
C82.65	Cutaneous follicle center lymphoma, lymph nodes of inguinal region and lower limb
C82.66	Cutaneous follicle center lymphoma, intrapelvic lymph nodes
C82.67	Cutaneous follicle center lymphoma, spleen
C82.68	Cutaneous follicle center lymphoma, lymph nodes of multiple sites
C82.69	Cutaneous follicle center lymphoma, extranodal and solid organ sites
C82.81	Other types of follicular lymphoma, lymph nodes of head, face, and neck
C82.82	Other types of follicular lymphoma, intrathoracic lymph nodes
C82.83	Other types of follicular lymphoma, intra-abdominal lymph nodes
C82.84	Other types of follicular lymphoma, lymph nodes of axilla and upper limb
C82.85	Other types of follicular lymphoma, lymph nodes of inguinal region and lower limb
C82.86	Other types of follicular lymphoma, intrapelvic lymph nodes
C82.87	Other types of follicular lymphoma, spleen
C82.88	Other types of follicular lymphoma, lymph nodes of multiple sites
C82.89	Other types of follicular lymphoma, extranodal and solid organ sites
C82.91	Follicular lymphoma, unspecified, lymph nodes of head, face, and neck
C82.92	Follicular lymphoma, unspecified, intrathoracic lymph nodes
C82.93	Follicular lymphoma, unspecified, intra-abdominal lymph nodes
C82.94	Follicular lymphoma, unspecified, lymph nodes of axilla and upper limb
C82.95	Follicular lymphoma, unspecified, lymph nodes of inguinal region and lower limb
C82.96	Follicular lymphoma, unspecified, intrapelvic lymph nodes
C82.97	Follicular lymphoma, unspecified, spleen
C82.98	Follicular lymphoma, unspecified, lymph nodes of multiple sites
C82.99	Follicular lymphoma, unspecified, extranodal and solid organ sites
D80.0	Hereditary hypogammaglobulinemia
D80.1	Nonfamilial hypogammaglobulinemia
D80.2	Selective deficiency of immunoglobulin A [IgA]
D80.3	Selective deficiency of immunoglobulin G [IgG] subclasses
D80.4	Selective deficiency of immunoglobulin M [IgM]
D80.5	Immunodeficiency with increased immunoglobulin M [IgM]
D80.6	Antibody deficiency with near-normal immunoglobulins or with hyperimmunoglobulinemia
D80.7	Transient hypogammaglobulinemia of infancy
D80.8	Other immunodeficiencies with predominantly antibody defects
D80.9	Immunodeficiency with predominantly antibody defects, unspecified
D89.810	Acute graft-versus-host disease

D89.811	Chronic graft-versus-host disease
D89.812	Acute on chronic graft-versus-host disease
D89.813	Graft-versus-host disease, unspecified
E20.0	Idiopathic hypoparathyroidism
E20.8	Other hypoparathyroidism
E20.9	Hypoparathyroidism, unspecified
E21.0	Primary hyperparathyroidism
E21.1	Secondary hyperparathyroidism, not elsewhere classified
E21.2	Other hyperparathyroidism
E21.3	Hyperparathyroidism, unspecified
E41	Nutritional marasmus
E43	Unspecified severe protein-calorie malnutrition
E55.0	Rickets, active
E55.9	Vitamin D deficiency, unspecified
E66.01	Morbid (severe) obesity due to excess calories
E66.09	Other obesity due to excess calories
E66.1	Drug-induced obesity
E66.2	Morbid (severe) obesity with alveolar hypoventilation
E66.8	Other obesity
E67.3	Hypervitaminosis D
E67.8	Other specified hyperalimentation
E68	Sequelae of hyperalimentation
E83.30	Disorder of phosphorus metabolism, unspecified
E83.31	Familial hypophosphatemia
E83.32	Hereditary vitamin D-dependent rickets (type 1) (type 2)
E83.39	Other disorders of phosphorus metabolism
E83.50	Unspecified disorder of calcium metabolism
E83.51	Hypocalcemia
E83.52	Hypercalcemia
E84.0	Cystic fibrosis with pulmonary manifestations
E84.11	Meconium ileus in cystic fibrosis
E84.19	Cystic fibrosis with other intestinal manifestations
E84.8	Cystic fibrosis with other manifestations
E84.9	Cystic fibrosis, unspecified
E89.2	Postprocedural hypoparathyroidism
E89.820	Postprocedural hematoma of an endocrine system organ or structure following an endocrine system procedure
E89.821	Postprocedural hematoma of an endocrine system organ or structure following other procedure
E89.822	Postprocedural seroma of an endocrine system organ or structure following an endocrine system procedure
E89.823	Postprocedural seroma of an endocrine system organ or structure following other procedure
J63.2	Berylliosis
K50.00	Crohn's disease of small intestine without complications
K50.011	Crohn's disease of small intestine with rectal bleeding
K50.012	Crohn's disease of small intestine with intestinal obstruction
K50.013	Crohn's disease of small intestine with fistula
K50.014	Crohn's disease of small intestine with abscess
K50.018	Crohn's disease of small intestine with other complication
K50.019	Crohn's disease of small intestine with unspecified complications
K50.10	Crohn's disease of large intestine without complications
K50.111	Crohn's disease of large intestine with rectal bleeding
K50.112	Crohn's disease of large intestine with intestinal obstruction

K50.113	Crohn's disease of large intestine with fistula
K50.114	Crohn's disease of large intestine with abscess
K50.118	Crohn's disease of large intestine with other complication
K50.119	Crohn's disease of large intestine with unspecified complications
K50.80	Crohn's disease of both small and large intestine without complications
K50.811	Crohn's disease of both small and large intestine with rectal bleeding
K50.812	Crohn's disease of both small and large intestine with intestinal obstruction
K50.813	Crohn's disease of both small and large intestine with fistula
K50.814	Crohn's disease of both small and large intestine with abscess
K50.818	Crohn's disease of both small and large intestine with other complication
K50.819	Crohn's disease of both small and large intestine with unspecified complications
K50.90	Crohn's disease, unspecified, without complications
K50.911	Crohn's disease, unspecified, with rectal bleeding
K50.912	Crohn's disease, unspecified, with intestinal obstruction
K50.913	Crohn's disease, unspecified, with fistula
K50.914	Crohn's disease, unspecified, with abscess
K50.918	Crohn's disease, unspecified, with other complication
K52.0	Gastroenteritis and colitis due to radiation
K70.2	Alcoholic fibrosis and sclerosis of liver
K70.30	Alcoholic cirrhosis of liver without ascites
K70.31	Alcoholic cirrhosis of liver with ascites
K74.1	Hepatic sclerosis
K74.2	Hepatic fibrosis with hepatic sclerosis
K74.3	Primary biliary cirrhosis
K74.4	Secondary biliary cirrhosis
K74.5	Biliary cirrhosis, unspecified
K74.60	Unspecified cirrhosis of liver
K74.69	Other cirrhosis of liver
K76.9	Liver disease, unspecified
K83.5	Biliary cyst
K83.8	Other specified diseases of biliary tract
K85.00	Idiopathic acute pancreatitis without necrosis or infection
K85.01	Idiopathic acute pancreatitis with uninfected necrosis
K85.02	Idiopathic acute pancreatitis with infected necrosis
K85.10	Biliary acute pancreatitis without necrosis or infection
K85.11	Biliary acute pancreatitis with uninfected necrosis
K85.12	Biliary acute pancreatitis with infected necrosis
K85.20	Alcohol induced acute pancreatitis without necrosis or infection
K85.21	Alcohol induced acute pancreatitis with uninfected necrosis
K85.22	Alcohol induced acute pancreatitis with infected necrosis
K85.30	Drug induced acute pancreatitis without necrosis or infection
K85.31	Drug induced acute pancreatitis with uninfected necrosis
K85.32	Drug induced acute pancreatitis with infected necrosis
K85.80	Other acute pancreatitis without necrosis or infection
K85.81	Other acute pancreatitis with uninfected necrosis
K85.82	Other acute pancreatitis with infected necrosis
K85.90	Acute pancreatitis without necrosis or infection, unspecified
K85.91	Acute pancreatitis with uninfected necrosis, unspecified
K85.92	Acute pancreatitis with infected necrosis, unspecified
K86.0	Alcohol-induced chronic pancreatitis
K86.1	Other chronic pancreatitis
K86.2	Cyst of pancreas
K86.3	Pseudocyst of pancreas

K86.81	Exocrine pancreatic insufficiency
K86.89	Other specified diseases of pancreas
K90.0	Celiac disease
K90.1	Tropical sprue
K90.2	Blind loop syndrome, not elsewhere classified
K90.3	Pancreatic steatorrhea
K90.41	Non-celiac gluten sensitivity
K90.49	Malabsorption due to intolerance, not elsewhere classified
K90.89	Other intestinal malabsorption
K90.9	Intestinal malabsorption, unspecified
K91.2	Postsurgical malabsorption, not elsewhere classified
L40.0	Psoriasis vulgaris
L40.1	Generalized pustular psoriasis
L40.2	Acrodermatitis continua
L40.3	Pustulosis palmaris et plantaris
L40.4	Guttate psoriasis
L40.50	Arthropathic psoriasis, unspecified
L40.51	Distal interphalangeal psoriatic arthropathy
L40.52	Psoriatic arthritis mutilans
L40.53	Psoriatic spondylitis
L40.54	Psoriatic juvenile arthropathy
L40.59	Other psoriatic arthropathy
L40.8	Other psoriasis
L40.9	Psoriasis, unspecified
M80.00XA	Age-Related Osteoporosis with Current Pathological Fracture, Unspecified Site, Initial Encounter for Fracture
M80.00XD	Age-Related Osteoporosis with Current Pathological Fracture, Unspecified Site, Subsequent Encounter for Fracture with Routine Healing
M80.00XG	Age-Related Osteoporosis with Current Pathological Fracture, Unspecified Site, Subsequent Encounter for Fracture with Delayed Healing
M80.00XK	Age-Related Osteoporosis with Current Pathological Fracture, Unspecified Site, Subsequent Encounter for Fracture with Nonunion
M80.00XP	Age-Related Osteoporosis with Current Pathological Fracture, Unspecified Site, Subsequent Encounter for Fracture with Malunion
M80.00XS	Age-Related Osteoporosis with Current Pathological Fracture, Unspecified Site, Sequela
M80.011A	Age-Related Osteoporosis with Current Pathological Fracture, Right Shoulder, Initial Encounter for Fracture
M80.011D	Age-Related Osteoporosis with Current Pathological Fracture, Right Shoulder, Subsequent Encounter for Fracture with Routine Healing
M80.011G	Age-Related Osteoporosis with Current Pathological Fracture, Right Shoulder, Subsequent Encounter for Fracture with Delayed Healing
M80.011K	Age-Related Osteoporosis with Current Pathological Fracture, Right Shoulder, Subsequent Encounter for Fracture with Nonunion
M80.011P	Age-Related Osteoporosis with Current Pathological Fracture, Right Shoulder, Subsequent Encounter for Fracture with Malunion
M80.011S	Age-Related Osteoporosis with Current Pathological Fracture, Right Shoulder, Sequela
M80.012A	Age-Related Osteoporosis with Current Pathological Fracture, Left Shoulder, Initial Encounter for Fracture
M80.012D	Age-Related Osteoporosis with Current Pathological Fracture, Left Shoulder, Subsequent Encounter for Fracture with Routine Healing
M80.012G	Age-Related Osteoporosis with Current Pathological Fracture, Left Shoulder, Subsequent Encounter for Fracture with Delayed Healing
M80.012K	Age-Related Osteoporosis with Current Pathological Fracture, Left Shoulder, Subsequent Encounter for Fracture with Nonunion

M80.012P	Age-Related Osteoporosis with Current Pathological Fracture, Left Shoulder, Subsequent Encounter for Fracture with Malunion
M80.012S	Age-Related Osteoporosis with Current Pathological Fracture, Left Shoulder, Sequela
M80.019A	Age-Related Osteoporosis with Current Pathological Fracture, Unspecified Shoulder, Initial Encounter for Fracture
M80.019D	Age-Related Osteoporosis with Current Pathological Fracture, Unspecified Shoulder, Subsequent Encounter for Fracture with Routine Healing
M80.019G	Age-Related Osteoporosis with Current Pathological Fracture, Unspecified Shoulder, Subsequent Encounter for Fracture with Delayed Healing
M80.019K	Age-Related Osteoporosis with Current Pathological Fracture, Unspecified Shoulder, Subsequent Encounter for Fracture with Nonunion
M80.019P	Age-Related Osteoporosis with Current Pathological Fracture, Unspecified Shoulder, Subsequent Encounter for Fracture with Malunion
M80.019S	Age-Related Osteoporosis with Current Pathological Fracture, Unspecified Shoulder, Sequela
M80.021A	Age-Related Osteoporosis with Current Pathological Fracture, Right Humerus, Initial Encounter for Fracture
M80.021D	Age-Related Osteoporosis with Current Pathological Fracture, Right Humerus, Subsequent Encounter for Fracture with Routine Healing
M80.021G	Age-Related Osteoporosis with Current Pathological Fracture, Right Humerus, Subsequent Encounter for Fracture with Delayed Healing
M80.021K	Age-Related Osteoporosis with Current Pathological Fracture, Right Humerus, Subsequent Encounter for Fracture with Nonunion
M80.021P	Age-Related Osteoporosis with Current Pathological Fracture, Right Humerus, Subsequent Encounter for Fracture with Malunion
M80.021S	Age-Related Osteoporosis with Current Pathological Fracture, Right Humerus, Sequela
M80.022A	Age-Related Osteoporosis with Current Pathological Fracture, Left Humerus, Initial Encounter for Fracture
M80.022D	Age-Related Osteoporosis with Current Pathological Fracture, Left Humerus, Subsequent Encounter for Fracture With Routine Healing
M80.022G	Age-Related Osteoporosis with Current Pathological Fracture, Left Humerus, Subsequent Encounter For Fracture With Delayed Healing
M80.022K	Age-Related Osteoporosis with Limitations: <ul style="list-style-type: none"> • Both assays of vitamin D need not be performed for each of the above conditions. • Once a beneficiary has been shown to be vitamin D deficient, further testing may be medically necessary only to ensure adequate replacement has been accomplished. • If Vitamin D level is between 20 and 50 ng/dl and patient is clinically stable, repeat testing is often unnecessary; if performed, documentation must clearly indicate the necessity of the test. • If level <20 ng/dl or > 60 ng/dl are noted, a subsequent level(s) may be reimbursed until the level is within the normal range. • Testing may not be used for routine or other screening. Current Pathological Fracture, Left Humerus, Subsequent Encounter for Fracture with Nonunion
M80.022P	Age-Related Osteoporosis with Current Pathological Fracture, Left Humerus, Subsequent Encounter for Fracture with Malunion
M80.022S	Age-Related Osteoporosis with Current Pathological Fracture, Left Humerus, Sequela
M80.029A	Age-Related Osteoporosis with Current Pathological Fracture, Unspecified Humerus, Initial Encounter for Fracture
M80.029D	Age-Related Osteoporosis with Current Pathological Fracture, Unspecified Humerus, Subsequent Encounter for Fracture with Routine Healing
M80.029G	Age-Related Osteoporosis with Current Pathological Fracture, Unspecified Humerus, Subsequent Encounter for Fracture With Delayed Healing
M80.029K	Age-Related Osteoporosis with Current Pathological Fracture, Unspecified Humerus, Subsequent Encounter For Fracture With Nonunion

M80.029P	Age-Related Osteoporosis with Current Pathological Fracture, Unspecified Humerus, Subsequent Encounter for Fracture with Malunion
M80.029S	Age-Related Osteoporosis with Current Pathological Fracture, Unspecified Humerus, Sequela
M80.031A	Age-Related Osteoporosis with Current Pathological Fracture, Right Forearm, Initial Encounter for Fracture
M80.031D	Age-Related Osteoporosis with Current Pathological Fracture, Right Forearm, Subsequent Encounter for Fracture with Routine Healing
M80.031G	Age-Related Osteoporosis with Current Pathological Fracture, Right Forearm, Subsequent Encounter for Fracture with Delayed Healing
M80.031K	Age-Related Osteoporosis with Current Pathological Fracture, Right Forearm, Subsequent Encounter for Fracture with Nonunion
M80.031P	Age-Related Osteoporosis with Current Pathological Fracture, Right Forearm, Subsequent Encounter for Fracture with Malunion
M80.031S	Age-Related Osteoporosis with Current Pathological Fracture, Right Forearm, Sequela
M80.032A	Age-Related Osteoporosis with Current Pathological Fracture, Left Forearm, Initial Encounter for Fracture
M80.032D	Age-Related Osteoporosis with Current Pathological Fracture, Left Forearm, Subsequent Encounter for Fracture with Routine Healing
M80.032G	Age-Related Osteoporosis with Current Pathological Fracture, Left Forearm, Subsequent Encounter for Fracture with Delayed Healing
M80.032K	Age-Related Osteoporosis with Current Pathological Fracture, Left Forearm, Subsequent Encounter for Fracture with Nonunion
M80.032P	Age-Related Osteoporosis with Current Pathological Fracture, Left Forearm, Subsequent Encounter for Fracture with Malunion
M80.032S	Age-Related Osteoporosis with Current Pathological Fracture, Left Forearm, Sequela
M80.039A	Age-Related Osteoporosis with Current Pathological Fracture, Unspecified Forearm, Initial Encounter for Fracture
M80.039D	Age-Related Osteoporosis with Current Pathological Fracture, Unspecified Forearm, Subsequent Encounter for Fracture with Routine Healing
M80.039G	Age-Related Osteoporosis with Current Pathological Fracture, Unspecified Forearm, Subsequent Encounter for Fracture with Delayed Healing
M80.039K	Age-Related Osteoporosis with Current Pathological Fracture, Unspecified Forearm, Subsequent Encounter for Fracture with Nonunion
M80.039P	Age-Related Osteoporosis with Current Pathological Fracture, Unspecified Forearm, Subsequent Encounter for Fracture with Malunion
M80.039S	Age-Related Osteoporosis with Current Pathological Fracture, Unspecified Forearm, Sequela
M80.041A	Age-Related Osteoporosis with Current Pathological Fracture, Right Hand, Initial Encounter for Fracture
M80.041D	Age-Related Osteoporosis with Current Pathological Fracture, Right Hand, Subsequent Encounter for Fracture with Routine Healing
M80.041G	Age-Related Osteoporosis with Current Pathological Fracture, Right Hand, Subsequent Encounter for Fracture with Delayed Healing
M80.041K	Age-Related Osteoporosis with Current Pathological Fracture, Right Hand, Subsequent Encounter for Fracture with Nonunion
M80.041P	Age-Related Osteoporosis with Current Pathological Fracture, Right Hand, Subsequent Encounter for Fracture with Malunion
M80.041S	Age-Related Osteoporosis with Current Pathological Fracture, Right Hand, Sequela
M80.042A	Age-Related Osteoporosis with Current Pathological Fracture, Left Hand, Initial Encounter for Fracture
M80.042D	Age-Related Osteoporosis with Current Pathological Fracture, Left Hand, Subsequent Encounter for Fracture with Routine Healing
M80.042G	Age-Related Osteoporosis with Current Pathological Fracture, Left Hand, Subsequent Encounter for Fracture with Delayed Healing

M80.042K	Age-Related Osteoporosis With Current Pathological Fracture, Left Hand, Subsequent Encounter For Fracture With Nonunion
M80.042P	Age-Related Osteoporosis With Current Pathological Fracture, Left Hand, Subsequent Encounter For Fracture With Malunion
M80.042S	Age-Related Osteoporosis With Current Pathological Fracture, Left Hand, Sequela
M80.049A	Age-Related Osteoporosis With Current Pathological Fracture, Unspecified Hand, Initial Encounter For Fracture
M80.049D	Age-Related Osteoporosis With Current Pathological Fracture, Unspecified Hand, Subsequent Encounter For Fracture With Routine Healing
M80.049G	Age-Related Osteoporosis With Current Pathological Fracture, Unspecified Hand, Subsequent Encounter For Fracture With Delayed Healing
M80.049K	Age-Related Osteoporosis With Current Pathological Fracture, Unspecified Hand, Subsequent Encounter For Fracture With Nonunion
M80.049P	Age-Related Osteoporosis With Current Pathological Fracture, Unspecified Hand, Subsequent Encounter For Fracture With Malunion
M80.049S	Age-Related Osteoporosis With Current Pathological Fracture, Unspecified Hand, Sequela
M80.051A	Age-Related Osteoporosis With Current Pathological Fracture, Right Femur, Initial Encounter For Fracture
M80.051D	Age-Related Osteoporosis With Current Pathological Fracture, Right Femur, Subsequent Encounter For Fracture With Routine Healing
M80.051G	Age-Related Osteoporosis With Current Pathological Fracture, Right Femur, Subsequent Encounter For Fracture With Delayed Healing
M80.051K	Age-Related Osteoporosis With Current Pathological Fracture, Right Femur, Subsequent Encounter For Fracture With Nonunion
M80.051P	Age-Related Osteoporosis With Current Pathological Fracture, Right Femur, Subsequent Encounter For Fracture With Malunion
M80.051S	Age-Related Osteoporosis With Current Pathological Fracture, Right Femur, Sequela
M80.052A	Age-Related Osteoporosis With Current Pathological Fracture, Left Femur, Initial Encounter For Fracture
M80.052D	Age-Related Osteoporosis With Current Pathological Fracture, Left Femur, Subsequent Encounter For Fracture With Routine Healing
M80.052G	Age-Related Osteoporosis With Current Pathological Fracture, Left Femur, Subsequent Encounter For Fracture With Delayed Healing
M80.052K	Age-Related Osteoporosis With Current Pathological Fracture, Left Femur, Subsequent Encounter For Fracture With Nonunion
M80.052P	Age-Related Osteoporosis With Current Pathological Fracture, Left Femur, Subsequent Encounter For Fracture With Malunion
M80.052S	Age-Related Osteoporosis With Current Pathological Fracture, Left Femur, Sequela
M80.059A	Age-Related Osteoporosis With Current Pathological Fracture, Unspecified Femur, Initial Encounter For Fracture
M80.059D	Age-Related Osteoporosis With Current Pathological Fracture, Unspecified Femur, Subsequent Encounter For Fracture With Routine Healing
M80.059G	Age-Related Osteoporosis With Current Pathological Fracture, Unspecified Femur, Subsequent Encounter For Fracture With Delayed Healing
M80.059K	Age-Related Osteoporosis With Current Pathological Fracture, Unspecified Femur, Subsequent Encounter For Fracture With Nonunion
M80.059P	Age-Related Osteoporosis With Current Pathological Fracture, Unspecified Femur, Subsequent Encounter For Fracture With Malunion
M80.059S	Age-Related Osteoporosis With Current Pathological Fracture, Unspecified Femur, Sequela
M80.061A	Age-Related Osteoporosis With Current Pathological Fracture, Right Lower Leg, Initial Encounter For Fracture

M80.061D	Age-Related Osteoporosis With Current Pathological Fracture, Right Lower Leg, Subsequent Encounter For Fracture With Routine Healing
M80.061G	Age-Related Osteoporosis With Current Pathological Fracture, Right Lower Leg, Subsequent Encounter For Fracture With Delayed Healing
M80.061K	Age-Related Osteoporosis With Current Pathological Fracture, Right Lower Leg, Subsequent Encounter For Fracture With Nonunion
M80.061P	Age-Related Osteoporosis With Current Pathological Fracture, Right Lower Leg, Subsequent Encounter For Fracture With Malunion
M80.061S	Age-Related Osteoporosis With Current Pathological Fracture, Right Lower Leg, Sequela
M80.062A	Age-Related Osteoporosis With Current Pathological Fracture, Left Lower Leg, Initial Encounter For Fracture
M80.062D	Age-Related Osteoporosis With Current Pathological Fracture, Left Lower Leg, Subsequent Encounter For Fracture With Routine Healing
M80.062G	Age-Related Osteoporosis With Current Pathological Fracture, Left Lower Leg, Subsequent Encounter For Fracture With Delayed Healing
M80.062K	Age-Related Osteoporosis With Current Pathological Fracture, Left Lower Leg, Subsequent Encounter For Fracture With Nonunion
M80.062P	Age-Related Osteoporosis With Current Pathological Fracture, Left Lower Leg, Subsequent Encounter For Fracture With Malunion
M80.062S	Age-Related Osteoporosis With Current Pathological Fracture, Left Lower Leg, Sequela
M80.069A	Age-Related Osteoporosis With Current Pathological Fracture, Unspecified Lower Leg, Initial Encounter For Fracture
M80.069D	Age-Related Osteoporosis With Current Pathological Fracture, Unspecified Lower Leg, Subsequent Encounter For Fracture With Routine Healing
M80.069G	Age-Related Osteoporosis With Current Pathological Fracture, Unspecified Lower Leg, Subsequent Encounter For Fracture With Delayed Healing
M80.069K	Age-Related Osteoporosis With Current Pathological Fracture, Unspecified Lower Leg, Subsequent Encounter For Fracture With Nonunion
M80.069P	Age-Related Osteoporosis With Current Pathological Fracture, Unspecified Lower Leg, Subsequent Encounter For Fracture With Malunion
M80.069S	Age-Related Osteoporosis With Current Pathological Fracture, Unspecified Lower Leg, Sequela
M80.071A	Age-Related Osteoporosis With Current Pathological Fracture, Right Ankle And Foot, Initial Encounter For Fracture
M80.071D	Age-Related Osteoporosis With Current Pathological Fracture, Right Ankle And Foot, Subsequent Encounter For Fracture With Routine Healing
M80.071G	Age-Related Osteoporosis With Current Pathological Fracture, Right Ankle And Foot, Subsequent Encounter For Fracture With Delayed Healing
M80.071K	Age-Related Osteoporosis With Current Pathological Fracture, Right Ankle And Foot, Subsequent Encounter For Fracture With Nonunion
M80.071P	Age-Related Osteoporosis With Current Pathological Fracture, Right Ankle And Foot, Subsequent Encounter For Fracture With Malunion
M80.071S	Age-Related Osteoporosis With Current Pathological Fracture, Right Ankle And Foot, Sequela
M80.072A	Age-Related Osteoporosis With Current Pathological Fracture, Left Ankle And Foot, Initial Encounter For Fracture
M80.072D	Age-Related Osteoporosis With Current Pathological Fracture, Left Ankle And Foot, Subsequent Encounter For Fracture With Routine Healing
M80.072G	Age-Related Osteoporosis With Current Pathological Fracture, Left Ankle And Foot, Subsequent Encounter For Fracture With Delayed Healing
M80.072K	Age-Related Osteoporosis With Current Pathological Fracture, Left Ankle And Foot, Subsequent Encounter For Fracture With Nonunion
M80.072P	Age-Related Osteoporosis With Current Pathological Fracture, Left Ankle And Foot, Subsequent Encounter For Fracture With Malunion

M80.072S	Age-Related Osteoporosis With Current Pathological Fracture, Left Ankle And Foot, Sequela
M80.079A	Age-Related Osteoporosis With Current Pathological Fracture, Unspecified Ankle And Foot, Initial Encounter For Fracture
M80.079D	Age-Related Osteoporosis With Current Pathological Fracture, Unspecified Ankle And Foot, Subsequent Encounter For Fracture With Routine Healing
M80.079G	Age-Related Osteoporosis With Current Pathological Fracture, Unspecified Ankle And Foot, Subsequent Encounter For Fracture With Delayed Healing
M80.079K	Age-Related Osteoporosis With Current Pathological Fracture, Unspecified Ankle And Foot, Subsequent Encounter For Fracture With Nonunion
M80.079P	Age-Related Osteoporosis With Current Pathological Fracture, Unspecified Ankle And Foot, Subsequent Encounter For Fracture With Malunion
M80.079S	Age-Related Osteoporosis With Current Pathological Fracture, Unspecified Ankle And Foot, Sequela
M80.08XA	Age-Related Osteoporosis With Current Pathological Fracture, Vertebra(E), Initial Encounter For Fracture
M80.08XD	Age-Related Osteoporosis With Current Pathological Fracture, Vertebra(E), Subsequent Encounter For Fracture With Routine Healing
M80.08XG	Age-Related Osteoporosis With Current Pathological Fracture, Vertebra(E), Subsequent Encounter For Fracture With Delayed Healing
M80.08XK	Age-Related Osteoporosis With Current Pathological Fracture, Vertebra(E), Subsequent Encounter For Fracture With Nonunion
M8008XP	Age-Related Osteoporosis With Current Pathological Fracture, Vertebra(E), Subsequent Encounter For Fracture With Malunion
M80.08XS	Age-Related Osteoporosis With Current Pathological Fracture, Vertebra(E), Sequela
M80.80XA	Other Osteoporosis With Current Pathological Fracture, Unspecified Site, Initial Encounter For Fracture
M80.80XD	Other Osteoporosis With Current Pathological Fracture, Unspecified Site, Subsequent Encounter For Fracture With Routine Healing
M80.80XG	Other Osteoporosis With Current Pathological Fracture, Unspecified Site, Subsequent Encounter For Fracture With Delayed Healing
M80.80XK	Other Osteoporosis With Current Pathological Fracture, Unspecified Site, Subsequent Encounter For Fracture With Nonunion
M80.80XP	Other Osteoporosis With Current Pathological Fracture, Unspecified Site, Subsequent Encounter For Fracture With Malunion
M80.80XS	Other Osteoporosis With Current Pathological Fracture, Unspecified Site, Sequela
M80.811A	Other Osteoporosis With Current Pathological Fracture, Right Shoulder, Initial Encounter For Fracture
M80.811D	Other Osteoporosis With Current Pathological Fracture, Right Shoulder, Subsequent Encounter For Fracture With Routine Healing
M80.811G	Other Osteoporosis With Current Pathological Fracture, Right Shoulder, Subsequent Encounter For Fracture With Delayed Healing
M80.811K	Other Osteoporosis With Current Pathological Fracture, Right Shoulder, Subsequent Encounter For Fracture With Nonunion
M80.811P	Other Osteoporosis With Current Pathological Fracture, Right Shoulder, Subsequent Encounter For Fracture With Malunion
M80.811S	Other Osteoporosis With Current Pathological Fracture, Right Shoulder, Sequela
M80.812A	Other Osteoporosis With Current Pathological Fracture, Left Shoulder, Initial Encounter For Fracture
M80.812D	Other Osteoporosis With Current Pathological Fracture, Left Shoulder, Subsequent Encounter For Fracture With Routine Healing
M80.812G	Other Osteoporosis With Current Pathological Fracture, Left Shoulder, Subsequent Encounter For Fracture With Delayed Healing
M80.812K	Other Osteoporosis With Current Pathological Fracture, Left Shoulder, Subsequent Encounter For Fracture With Nonunion

M80.812P	Other Osteoporosis With Current Pathological Fracture, Left Shoulder, Subsequent Encounter For Fracture With Malunion
M80.812S	Other Osteoporosis With Current Pathological Fracture, Left Shoulder, Sequela
M80.819A	Other Osteoporosis With Current Pathological Fracture, Unspecified Shoulder, Initial Encounter For Fracture
M80.819D	Other Osteoporosis With Current Pathological Fracture, Unspecified Shoulder, Subsequent Encounter For Fracture With Routine Healing
M80.819G	Other Osteoporosis With Current Pathological Fracture, Unspecified Shoulder, Subsequent Encounter For Fracture With Delayed Healing
M80.819K	Other Osteoporosis With Current Pathological Fracture, Unspecified Shoulder, Subsequent Encounter For Fracture With Nonunion
M80.819P	Other Osteoporosis With Current Pathological Fracture, Unspecified Shoulder, Subsequent Encounter For Fracture With Malunion
M80.819S	Other Osteoporosis With Current Pathological Fracture, Unspecified Shoulder, Sequela
M80.821A	Other Osteoporosis With Current Pathological Fracture, Right Humerus, Initial Encounter For Fracture
M80.821D	Other Osteoporosis With Current Pathological Fracture, Right Humerus, Subsequent Encounter For Fracture With Routine Healing
M80.821G	Other Osteoporosis With Current Pathological Fracture, Right Humerus, Subsequent Encounter For Fracture With Delayed Healing
M80.821K	Other Osteoporosis With Current Pathological Fracture, Right Humerus, Subsequent Encounter For Fracture With Nonunion
M80.821P	Other Osteoporosis With Current Pathological Fracture, Right Humerus, Subsequent Encounter For Fracture With Malunion
M80.821S	Other Osteoporosis With Current Pathological Fracture, Right Humerus, Sequela
M80.822A	Other Osteoporosis With Current Pathological Fracture, Left Humerus, Initial Encounter For Fracture
M80.822D	Other Osteoporosis With Current Pathological Fracture, Left Humerus, Subsequent Encounter For Fracture With Routine Healing
M80.822G	Other Osteoporosis With Current Pathological Fracture, Left Humerus, Subsequent Encounter For Fracture With Delayed Healing
M80.822K	Other Osteoporosis With Current Pathological Fracture, Left Humerus, Subsequent Encounter For Fracture With Nonunion
M80.822P	Other Osteoporosis With Current Pathological Fracture, Left Humerus, Subsequent Encounter For Fracture With Malunion
M80.822S	Other Osteoporosis With Current Pathological Fracture, Left Humerus, Sequela
M80.829A	Other Osteoporosis With Current Pathological Fracture, Unspecified Humerus, Initial Encounter For Fracture
M80.829D	Other Osteoporosis With Current Pathological Fracture, Unspecified Humerus, Subsequent Encounter For Fracture With Routine Healing
M80.829G	Other Osteoporosis With Current Pathological Fracture, Unspecified Humerus, Subsequent Encounter For Fracture With Delayed Healing
M80.829K	Other Osteoporosis With Current Pathological Fracture, Unspecified Humerus, Subsequent Encounter For Fracture With Nonunion
M80.829P	Other Osteoporosis With Current Pathological Fracture, Unspecified Humerus, Subsequent Encounter For Fracture With Malunion
M80.829S	Other Osteoporosis With Current Pathological Fracture, Unspecified Humerus, Sequela
M80.831A	Other Osteoporosis With Current Pathological Fracture, Right Forearm, Initial Encounter For Fracture
M80.831D	Other Osteoporosis With Current Pathological Fracture, Right Forearm, Subsequent Encounter For Fracture With Routine Healing
M80.831G	Other Osteoporosis With Current Pathological Fracture, Right Forearm, Subsequent Encounter For Fracture With Delayed Healing
M80.831K	Other Osteoporosis With Current Pathological Fracture, Right Forearm, Subsequent Encounter For Fracture With Nonunion

M80.831P	Other Osteoporosis With Current Pathological Fracture, Right Forearm, Subsequent Encounter For Fracture With Malunion
M80.831S	Other Osteoporosis With Current Pathological Fracture, Right Forearm, Sequela
M80.832A	Other Osteoporosis With Current Pathological Fracture, Left Forearm, Initial Encounter For Fracture
M80.832D	Other Osteoporosis With Current Pathological Fracture, Left Forearm, Subsequent Encounter For Fracture With Routine Healing
M80.832G	Other Osteoporosis With Current Pathological Fracture, Left Forearm, Subsequent Encounter For Fracture With Delayed Healing
M80.832K	Other Osteoporosis With Current Pathological Fracture, Left Forearm, Subsequent Encounter For Fracture With Nonunion
M80.832P	Other Osteoporosis With Current Pathological Fracture, Left Forearm, Subsequent Encounter For Fracture With Malunion
M80.832S	Other Osteoporosis With Current Pathological Fracture, Left Forearm, Sequela
M80.839A	Other Osteoporosis With Current Pathological Fracture, Unspecified Forearm, Initial Encounter For Fracture
M80.839D	Other Osteoporosis With Current Pathological Fracture, Unspecified Forearm, Subsequent Encounter For Fracture With Routine Healing
M80.839G	Other Osteoporosis With Current Pathological Fracture, Unspecified Forearm, Subsequent Encounter For Fracture With Delayed Healing
M80.839K	Other Osteoporosis With Current Pathological Fracture, Unspecified Forearm, Subsequent Encounter For Fracture With Nonunion
M80.839P	Other Osteoporosis With Current Pathological Fracture, Unspecified Forearm, Subsequent Encounter For Fracture With Malunion
M80.839S	Other Osteoporosis With Current Pathological Fracture, Unspecified Forearm, Sequela
M80.841A	Other Osteoporosis With Current Pathological Fracture, Right Hand, Initial Encounter For Fracture
M80.841D	Other Osteoporosis With Current Pathological Fracture, Right Hand, Subsequent Encounter For Fracture With Routine Healing
M80.841G	Other Osteoporosis With Current Pathological Fracture, Right Hand, Subsequent Encounter For Fracture With Delayed Healing
M80.841K	Other Osteoporosis With Current Pathological Fracture, Right Hand, Subsequent Encounter For Fracture With Nonunion
M80.841P	Other Osteoporosis With Current Pathological Fracture, Right Hand, Subsequent Encounter For Fracture With Malunion
M80.841S	Other Osteoporosis With Current Pathological Fracture, Right Hand, Sequela
M80.842A	Other Osteoporosis With Current Pathological Fracture, Left Hand, Initial Encounter For Fracture
M80.842D	Other Osteoporosis With Current Pathological Fracture, Left Hand, Subsequent Encounter For Fracture With Routine Healing
M80.842G	Other Osteoporosis With Current Pathological Fracture, Left Hand, Subsequent Encounter For Fracture With Delayed Healing
M80.842K	Other Osteoporosis With Current Pathological Fracture, Left Hand, Subsequent Encounter For Fracture With Nonunion
M80.842P	Other Osteoporosis With Current Pathological Fracture, Left Hand, Subsequent Encounter For Fracture With Malunion
M80.842S	Other Osteoporosis With Current Pathological Fracture, Left Hand, Sequela
M80.849A	Other Osteoporosis With Current Pathological Fracture, Unspecified Hand, Initial Encounter For Fracture
M80.849D	Other Osteoporosis With Current Pathological Fracture, Unspecified Hand, Subsequent Encounter For Fracture With Routine Healing
M80.849G	Other Osteoporosis With Current Pathological Fracture, Unspecified Hand, Subsequent Encounter For Fracture With Delayed Healing
M80.849K	Other Osteoporosis With Current Pathological Fracture, Unspecified Hand, Subsequent Encounter For Fracture With Nonunion

M80.849P	Other Osteoporosis With Current Pathological Fracture, Unspecified Hand, Subsequent Encounter For Fracture With Malunion
M80.849S	Other Osteoporosis With Current Pathological Fracture, Unspecified Hand, Sequela
M80.851A	Other Osteoporosis With Current Pathological Fracture, Right Femur, Initial Encounter For Fracture
M80.851D	Other Osteoporosis With Current Pathological Fracture, Right Femur, Subsequent Encounter For Fracture With Routine Healing
M80.851G	Other Osteoporosis With Current Pathological Fracture, Right Femur, Subsequent Encounter For Fracture With Delayed Healing
M80.851K	Other Osteoporosis With Current Pathological Fracture, Right Femur, Subsequent Encounter For Fracture With Nonunion
M80.851P	Other Osteoporosis With Current Pathological Fracture, Right Femur, Subsequent Encounter For Fracture With Malunion
M80.851S	Other Osteoporosis With Current Pathological Fracture, Right Femur, Sequela
M80.852A	Other Osteoporosis With Current Pathological Fracture, Left Femur, Initial Encounter For Fracture
M80.852D	Other Osteoporosis With Current Pathological Fracture, Left Femur, Subsequent Encounter For Fracture With Routine Healing
M80.852G	Other Osteoporosis With Current Pathological Fracture, Left Femur, Subsequent Encounter For Fracture With Delayed Healing
M80.852K	Other Osteoporosis With Current Pathological Fracture, Left Femur, Subsequent Encounter For Fracture With Nonunion
M80.852P	Other Osteoporosis With Current Pathological Fracture, Left Femur, Subsequent Encounter For Fracture With Malunion
M80.852S	Other Osteoporosis With Current Pathological Fracture, Left Femur, Sequela
M80.859A	Other Osteoporosis With Current Pathological Fracture, Unspecified Femur, Initial Encounter For Fracture
M80.859D	Other Osteoporosis With Current Pathological Fracture, Unspecified Femur, Subsequent Encounter For Fracture With Routine Healing
M80.859G	Other Osteoporosis With Current Pathological Fracture, Unspecified Femur, Subsequent Encounter For Fracture With Delayed Healing
M80.859K	Other Osteoporosis With Current Pathological Fracture, Unspecified Femur, Subsequent Encounter For Fracture With Nonunion
M80.859P	Other Osteoporosis With Current Pathological Fracture, Unspecified Femur, Subsequent Encounter For Fracture With Malunion
M80.859S	Other Osteoporosis With Current Pathological Fracture, Unspecified Femur, Sequela
M80.861A	Other Osteoporosis With Current Pathological Fracture, Right Lower Leg, Initial Encounter For Fracture
M80.861D	Other Osteoporosis With Current Pathological Fracture, Right Lower Leg, Subsequent Encounter For Fracture With Routine Healing
M80.861G	Other Osteoporosis With Current Pathological Fracture, Right Lower Leg, Subsequent Encounter For Fracture With Delayed Healing
M80.861K	Other Osteoporosis With Current Pathological Fracture, Right Lower Leg, Subsequent Encounter For Fracture With Nonunion
M80.861P	Other Osteoporosis With Current Pathological Fracture, Right Lower Leg, Subsequent Encounter For Fracture With Malunion
M80.861S	Other Osteoporosis With Current Pathological Fracture, Right Lower Leg, Sequela
M80.862A	Other Osteoporosis With Current Pathological Fracture, Left Lower Leg, Initial Encounter For Fracture
M80.862D	Other Osteoporosis With Current Pathological Fracture, Left Lower Leg, Subsequent Encounter For Fracture With Routine Healing
M80.862G	Other Osteoporosis With Current Pathological Fracture, Left Lower Leg, Subsequent Encounter For Fracture With Delayed Healing
M80.862K	Other Osteoporosis With Current Pathological Fracture, Left Lower Leg, Subsequent Encounter For Fracture With Nonunion

M80.862P	Other Osteoporosis With Current Pathological Fracture, Left Lower Leg, Subsequent Encounter For Fracture With Malunion
M80.862S	Other Osteoporosis With Current Pathological Fracture, Left Lower Leg, Sequela
M80.869A	Other Osteoporosis With Current Pathological Fracture, Unspecified Lower Leg, Initial Encounter For Fracture
M80.869D	Other Osteoporosis With Current Pathological Fracture, Unspecified Lower Leg, Subsequent Encounter For Fracture With Routine Healing
M80.869G	Other Osteoporosis With Current Pathological Fracture, Unspecified Lower Leg, Subsequent Encounter For Fracture With Delayed Healing
M80.869K	Other Osteoporosis With Current Pathological Fracture, Unspecified Lower Leg, Subsequent Encounter For Fracture With Nonunion
M80.869P	Other Osteoporosis With Current Pathological Fracture, Unspecified Lower Leg, Subsequent Encounter For Fracture With Malunion
M80.869S	Other Osteoporosis With Current Pathological Fracture, Unspecified Lower Leg, Sequela
M80.871A	Other Osteoporosis With Current Pathological Fracture, Right Ankle And Foot, Initial Encounter For Fracture
M80.871D	Other Osteoporosis With Current Pathological Fracture, Right Ankle And Foot, Subsequent Encounter For Fracture With Routine Healing
M80.871G	Other Osteoporosis With Current Pathological Fracture, Right Ankle And Foot, Subsequent Encounter For Fracture With Delayed Healing
M80.871K	Other Osteoporosis With Current Pathological Fracture, Right Ankle And Foot, Subsequent Encounter For Fracture With Nonunion
M80.871P	Other Osteoporosis With Current Pathological Fracture, Right Ankle And Foot, Subsequent Encounter For Fracture With Malunion
M80.871S	Other Osteoporosis With Current Pathological Fracture, Right Ankle And Foot, Sequela
M80.872A	Other Osteoporosis With Current Pathological Fracture, Left Ankle And Foot, Initial Encounter For Fracture
M80.872D	Other Osteoporosis With Current Pathological Fracture, Left Ankle And Foot, Subsequent Encounter For Fracture With Routine Healing
M80.872G	Other Osteoporosis With Current Pathological Fracture, Left Ankle And Foot, Subsequent Encounter For Fracture With Delayed Healing
M80.872K	Other Osteoporosis With Current Pathological Fracture, Left Ankle And Foot, Subsequent Encounter For Fracture With Nonunion
M80.872P	Other Osteoporosis With Current Pathological Fracture, Left Ankle And Foot, Subsequent Encounter For Fracture With Malunion
M80.872S	Other Osteoporosis With Current Pathological Fracture, Left Ankle And Foot, Sequela
M80.879A	Other Osteoporosis With Current Pathological Fracture, Unspecified Ankle And Foot, Initial Encounter For Fracture
M80.879D	Other Osteoporosis With Current Pathological Fracture, Unspecified Ankle And Foot, Subsequent Encounter For Fracture With Routine Healing
M80.879G	Other Osteoporosis With Current Pathological Fracture, Unspecified Ankle And Foot, Subsequent Encounter For Fracture With Delayed Healing
M80.879K	Other Osteoporosis With Current Pathological Fracture, Unspecified Ankle And Foot, Subsequent Encounter For Fracture With Nonunion
M80.879P	Other Osteoporosis With Current Pathological Fracture, Unspecified Ankle And Foot, Subsequent Encounter For Fracture With Malunion
M80.879S	Other Osteoporosis With Current Pathological Fracture, Unspecified Ankle And Foot, Sequela
M80.88XA	Other Osteoporosis With Current Pathological Fracture, Vertebra(E), Initial Encounter For Fracture
M80.88XD	Other Osteoporosis With Current Pathological Fracture, Vertebra(E), Subsequent Encounter For Fracture With Routine Healing
M80.88XG	Other Osteoporosis With Current Pathological Fracture, Vertebra(E), Subsequent Encounter For Fracture With Delayed Healing

M80.88XK	Other Osteoporosis With Current Pathological Fracture, Vertebra(E), Subsequent Encounter For Fracture With Nonunion
M80.88XP	Other Osteoporosis With Current Pathological Fracture, Vertebra(E), Subsequent Encounter For Fracture With Malunion
M80.88XS	Other Osteoporosis With Current Pathological Fracture, Vertebra(E), Sequela
M81.0	Age-related osteoporosis without current pathological fracture
M81.6	Localized osteoporosis [Lequesne]
M81.8	Other osteoporosis without current pathological fracture
M83.0	Puerperal osteomalacia
M83.1	Senile osteomalacia
M83.2	Adult osteomalacia due to malabsorption
M83.3	Adult osteomalacia due to malnutrition
M83.4	Aluminum bone disease
M83.5	Other drug-induced osteomalacia in adults
M83.8	Other adult osteomalacia
M83.9	Adult osteomalacia, unspecified
M85.80	Other specified disorders of bone density and structure, unspecified site
M85.831	Other specified disorders of bone density and structure, right forearm
M85.832	Other specified disorders of bone density and structure, left forearm
M85.839	Other specified disorders of bone density and structure, unspecified forearm
M85.851	Other specified disorders of bone density and structure, right thigh
M85.852	Other specified disorders of bone density and structure, left thigh
M85.859	Other specified disorders of bone density and structure, unspecified thigh
M85.88	Other specified disorders of bone density and structure, other site
M85.89	Other specified disorders of bone density and structure, multiple sites
M85.9	Disorder of bone density and structure, unspecified
M89.9	Disorder of bone, unspecified
N18.30	Chronic kidney disease, stage 3 unspecified
N18.31	Chronic kidney disease, stage 3a
N18.32	Chronic kidney disease, stage 3b
N18.4	Chronic kidney disease, stage 4 (severe)
N18.5	Chronic kidney disease, stage 5
N18.6	End stage renal disease
N25.81	Secondary hyperparathyroidism of renal origin
Q78.2	Osteopetrosis
Z68.30	Body mass index (BMI) 30.0-30.9, adult
Z68.31	Body mass index (BMI) 31.0-31.9, adult
Z68.32	Body mass index (BMI) 32.0-32.9, adult
Z68.33	Body mass index (BMI) 33.0-33.9, adult
Z68.34	Body mass index (BMI) 34.0-34.9, adult
Z68.35	Body mass index (BMI) 35.0-35.9, adult
Z68.36	Body mass index (BMI) 36.0-36.9, adult
Z68.37	Body mass index (BMI) 37.0-37.9, adult
Z68.38	Body mass index (BMI) 38.0-38.9, adult
Z68.39	Body mass index (BMI) 39.0-39.9, adult
Z68.41	Body mass index (BMI) 40.0-44.9, adult
Z68.42	Body mass index (BMI) 45.0-49.9, adult
Z68.43	Body mass index (BMI) 50-59.9, adult
Z68.44	Body mass index (BMI) 60.0-69.9, adult
Z68.45	Body mass index (BMI) 70 or greater, adult
Z79.3	Long term (current) use of hormonal contraceptives
Z79.4	Long term (current) use of insulin
Z79.51	Long term (current) use of inhaled steroids
Z79.52	Long term (current) use of systemic steroids

Z79.810	Long term (current) use of selective estrogen receptor modulators (SERMs)
Z79.811	Long term (current) use of aromatase inhibitors
Z79.818	Long term (current) use of other agents affecting estrogen receptors and estrogen levels
Z79.82	Long term (current) use of aspirin
Z79.83	Long term (current) use of bisphosphonates
Z79.84	Long term (current) use of oral hypoglycemic drugs
Z79.890	Hormone replacement therapy
Z79.891	Long term (current) use of opiate analgesic
Z79.899	Other long term (current) drug therapy

The above **medical necessity criteria** **MUST** be met for the following codes to be covered for Commercial Members: Managed Care (HMO and POS), PPO, Indemnity and Medicare HMO Blue and Medicare PPO Blue:

CPT Codes

CPT codes:	Code Description
82652	Vitamin D; 1, 25 dihydroxy, includes fraction(s), if performed

The following ICD Diagnosis Codes are considered medically necessary when submitted with the CPT codes above if **medical necessity criteria** are met:

ICD-10 Diagnoses Codes

ICD-10	Code Description
E55.0	Rickets, active
E55.9	Vitamin D deficiency, unspecified
E83.50	Unspecified disorder of calcium metabolism
E83.52	Hypercalcemia
M83.0	Puerperal osteomalacia
M83.1	Senile osteomalacia
M83.2	Adult osteomalacia due to malabsorption
M83.3	Adult osteomalacia due to malnutrition
M83.4	Aluminum bone disease
M83.5	Other drug-induced osteomalacia in adults
M83.8	Other adult osteomalacia
M83.9	Adult osteomalacia, unspecified
N20.0	Calculus of kidney
N20.1	Calculus of ureter
N20.2	Calculus of kidney with calculus of ureter
N20.9	Urinary calculus, unspecified
N22	Calculus of urinary tract in diseases classified elsewhere

Description

Vitamin D

Vitamin D, also known as calciferol, is a fat-soluble vitamin that has a variety of physiologic effects, most prominently in calcium homeostasis and bone metabolism. In addition to the role vitamin D plays in bone metabolism, other physiologic effects include inhibition of smooth muscle proliferation, regulation of the renin-angiotensin system, a decrease in coagulation, and a decrease in inflammatory markers.

Vitamin D Levels

Vitamin D deficiency is best assessed by measuring serum levels of 25-hydroxyvitamin D. However, there is no consensus on the minimum vitamin D level or on the optimal serum level for overall health. A 2011 Institute of Medicine (IOM) report concluded that a serum level of 20 ng/mL is sufficient for most healthy

adults. Some experts, such as the National Osteoporosis Foundation and the American Geriatrics Society, have recommended a higher level (30 ng/mL).

Vitamin D deficiency, as defined by suboptimal serum levels, is common in the United States. In the National Health and Nutrition Examination Survey covering the period of 2000-2004, 30% of individuals over the age of 12 had 25-hydroxyvitamin D levels less than 20 ng/mL. Vitamin D deficiency occurs most commonly as a result of inadequate dietary intake coupled with inadequate sun exposure. Evidence from the National Nutrition Monitoring System and the National Health and Nutrition Examination Survey has indicated that the average consumption is below recommended levels of intake. Yetley (2008) estimated that average daily intake for U.S. adults ranged from 228 to 335 IU/d, depending on gender and ethnicity. This level is below the average daily requirement, estimated by IOM (400 IU/d for healthy adults), and well below IOM's required daily allowance (estimated to be 600 IU for nonelderly adults and 800 IU for elderly adults).

Vitamin D deficiency may occur less commonly for other reasons. Kidney or liver disease can cause deficiency as a result of the impaired conversion of inactive vitamin D to its active products. In rare situations, there is vitamin D resistance at the tissue level, which causes a functional vitamin D deficiency despite "adequate" serum levels.

The safe upper level for serum vitamin D is also not standardized. The IOM report concluded there is potential harm associated with levels greater than 50 ng/mL and recommended that serum levels be maintained in the 20- to 40-ng/mL range. However, conclusions on this point have differed. A 2011 Agency for Healthcare Research and Quality systematic review of vitamin D and bone health concluded that "There is little evidence from existing trials that vitamin D above current reference intakes is harmful." The Women's Health Initiative concluded that hypercalcemia and hypercalciuria in patients receiving calcium and vitamin D were not associated with adverse clinical events. The Women's Health Initiative did find a small increase in kidney stones for women ages 50 to 79 years who received vitamin D and calcium.

Associations of vitamin D levels with various aspects of health have been noted over the last several decades and these findings have led to the question of whether supplementation improves health outcomes. For example, a relation between vitamin D levels and overall mortality has been reported in most observational studies examining this association. Mortality is lowest at vitamin D levels in the 25- to 40-nmol/L range. At lower levels of serum vitamin D, mortality increases steeply, and overall mortality in the lowest quintile was more than 3 times that in the middle quintiles. Theodoratou et al (2014) identified 107 systematic reviews of observational studies examining the association between vitamin D levels and more than 100 different outcomes.

Vitamin D Replacement

IOM has recommended reference values for intake of vitamin D and serum levels, based on available literature and expert consensus. Recommended daily allowances are 600 IU/d for individuals between 1 and 70 years of age, and 800 IU/d for individuals older than 70 years.

Estimates of vitamin D requirements are complicated by the many other factors that affect serum levels. Sun exposure is the most prominent of factors that affect serum levels, and this is because individuals can meet their vitamin D needs entirely through adequate sun exposure. Other factors such as age, skin pigmentation, obesity, physical activity, and nutritional status also affect vitamin D levels and can result in variable dietary intake requirements to maintain adequate serum levels.

Excessive intake of vitamin D can be toxic. Toxic effects are usually due to hypercalcemia and may include confusion, weakness, polyuria, polydipsia, anorexia, and vomiting. In addition, high levels of vitamin D may promote calcium deposition and has the potential to exacerbate conditions such as calcium kidney stones and atherosclerotic vascular disease.

IOM defined 3 parameters of nutritional needs for vitamin D, on the assumption of minimal sun exposure. These parameters were the estimated average requirement, defined as the minimum intake required to

maintain adequate levels; the recommended daily allowance, defined as the optimal dose for replacement therapy; and the upper-level intake, defined as the maximum daily dose to avoid toxicity. These recommendations are summarized in Table 1.

Table 1. Institute of Medicine Recommendations for Vitamin D Dietary Intake

Patient Group	Estimated Average Requirement, IU/d	Recommended Daily Allowance, IU/d	Upper Limit Intake, IU/d
1-3 years old	400	600	2500
4-8 years old	400	600	3000
9-70 years old	400	600	4000
>70 years old	400	800	4000

Adapted from Institute of Medicine (2011).

Summary

Routine use of laboratory assays to document Vitamin D deficiency remains controversial. The current United States Preventive Health Service Task Force recommendations consider current medical evidence insufficient to assess the balance of benefits and harms of screening for Vitamin D deficiency in asymptomatic adults. However, one major meta-analysis (one with five pooled randomized controlled trials including 1237 patients) concluded that Vitamin D supplementation reduced the risk of falls among ambulatory and institutionalized older individuals with stable health by more than 20%.

A second meta-analysis pooled 12 randomized controlled trials, all using cholecalciferol supplementation therapy between 700-800 IU/d. The results demonstrated a reduction in fractures of the hip of 26%, and non-vertebral fractures of 23%, in both ambulatory and institutionalized elderly persons.

There is also controversy as to the definition of vitamin D sufficiency, although many authors accept a level of 25(OH)D of at least 30 ng/ml. Accepting this metric, 25-50% of nursing home or homebound patients, greater than 50% of hospitalized patients and 30% of women with osteoporosis may still have Vitamin D deficiency despite a growing societal awareness of that deficiency as a contributing factor.

In 2009, the Agency for Healthcare Research and Quality, through the Tufts Evidenced Based Practice Center, conducted a systematic review of the scientific literature on Vitamin D and calcium intake as related to status indicators and health outcomes. This original report summarized 165 articles and 11 systematic reviews that incorporated 200 additional primary articles. In 2013, in preparation for a project in conjunction with the NIH Office of Dietary Supplements, the report was updated to include 154 new articles. Despite this effort, disagreement exists regarding Vitamin D optimum dosing, target 25(OH) vitamin D levels and the reported associations with health outcomes. Associations with cardiovascular disease, major cancers breast, prostate, colorectal and pancreatic were mixed and inconclusive. One RCT found a small effect on fall risk among older adults. As described in the original report, both the Tufts EPC and the Ottawa EPC data found good evidence that combined Vitamin D3 (200-800 IU/d) plus calcium 500mg/d supplementation resulted in a small increase in Bone Mineral Density of the spine, the total body, femoral neck and total hip.

Another AHRQ funded study, LeBlanc et al Screening for Vitamin D deficiency: A Systematic Review for the US Preventive Services Task Force (Jan. 2015) concluded that screening for Vitamin D levels in asymptomatic persons might reduce mortality risk in institutionalized elderly persons and risk for falls, but not fractures. The authors noted the inconsistency of laboratory methodology and reporting, and a lack of consensus regarding optimal 25(OH) D levels.

In its 2011 report, the Institute of Medicine shared the concerns that a “reassessment of laboratory ranges for 25-hydroxyvitamin D” was needed to decrease risks of over and under treatment of Vitamin D deficiency.

A pragmatic approach for patients and their physicians was developed by the ABIM Foundation in its Choosing Wisely initiative. The patient friendly literature reassures individuals that healthy diet and exercise maintain most persons in an adequate range of Vitamin D level. It raises the possible justification of empiric vitamin D supplementation without testing for those patients without risk factors but may be thought to have inadequate sun exposure or dietary intake, while outlining those clinical risk factors that warrant baseline diagnostic assays.

**Analysis of Evidence
(Rationale for Determination)**

It is established that 25-hydroxyvitamin D is more reflective of total body stores of vitamin D than the shorter lived, active metabolite, 1,25 dihydroxyvitamin D. Although lack of laboratory standardization is commonly noted in most papers, it is the preferred initial assay in the evaluation of most patients with hypovitaminosis D. The 25-hydroxyvitamin D undergoes additional hydroxylation in the kidney by 1-alpha-hydroxylase under the influence of parathyroid hormone to produce the active metabolite. The 1,25 dihydroxyvitamin D assay is reserved for those patients where a contributory medical illness generally related to kidney disease, but also possibly related to liver, parathyroid or genetic diseases that may influence this normal metabolism.

The benefits of treatment of Vitamin D supplementation may be modest, and those benefits made difficult to quantify by general health, habits such as exercise and smoking, and other contributory factors such as ethnicity and medication treatment regimens.

However, the prevalence of osteoporosis, fall risk and skeletal fractures, and the general tolerance of the current recommended daily requirements mitigate for early supplementation in any individual uncertain regarding adequate dietary intake and sunlight exposure.

Once a beneficiary has been shown to be Vitamin D deficient, by assay or clinical findings, the correctly chosen assay (25 hydroxyvitamin D, or 1,25 di-hydroxyvitamin D) may be used to assure correct supplementation to attain the serum levels outlined in Limitations. Continued findings outside those parameters (again outlined in the Limitations section) may warrant additional testing.

Policy History

Date	Action
10/2020	Coding information clarified
12/2019	Policy revised to align with Medicare Local Coverage Determination: Vitamin D Assay Testing (L37535) criteria. Clarified coding information. Effective 12/1/2019.
2/2019	BCBSA National medical policy review. Description, summary and references updated. Policy statements unchanged.
3/2018	New references added from BCBSA National medical policy.
1/2017	New references added from BCBSA National medical policy.
2/2016	New medical policy describing medically necessary and not medically necessary indications. Effective 2/1/2016.

Information Pertaining to All Blue Cross Blue Shield Medical Policies

Click on any of the following terms to access the relevant information:

- [Medical Policy Terms of Use](#)
- [Managed Care Guidelines](#)
- [Indemnity/PPO Guidelines](#)
- [Clinical Exception Process](#)
- [Medical Technology Assessment Guidelines](#)

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Endnotes

¹ Based on Local Coverage Determination (LCD): Vitamin D Assay Testing (L37535)