



## MASSACHUSETTS

Blue Cross Blue Shield of Massachusetts is an independent  
Licensee of the Blue Cross and Blue Shield Association

# Medical Policy Vitamin D Assay Testing

## Table of Contents

- [Policy: Commercial](#)
- [Authorization Information](#)
- [Coding Information](#)
- [Description](#)
- [Policy History](#)
- [References](#)
- [Information Pertaining to All Policies](#)
- [Endnotes](#)

## Policy Number: 746

BCBSA Reference Number: 2.04.135 (For Plan internal use only)

## Related Policies

None

## Policy<sup>1</sup>

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

**Measurement of 25-OH Vitamin D (CPT 82306)** level is considered **MEDICALLY NECESSARY** for individuals 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
- Rheumatoid arthritis

- 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 individuals 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 an individual 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 individual 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 <b>not required</b> .
Commercial PPO and Indemnity	Prior authorization is <b>not required</b> .

### 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
E20.810	Autosomal dominant hypocalcemia
E20.811	Secondary hypoparathyroidism in diseases classified elsewhere
E20.812	Autoimmune hypoparathyroidism
E20.818	Other specified hypoparathyroidism due to impaired parathyroid hormone secretion
E20.819	Hypoparathyroidism due to impaired parathyroid hormone secretion, unspecified
E20.89	Other specified 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
K90.821	Short bowel syndrome with colon in continuity
K90.822	Short bowel syndrome without colon in continuity
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
M05.00	Felty'S Syndrome, Unspecified Site
M05.011	Felty'S Syndrome, Right Shoulder
M05.012	Felty'S Syndrome, Left Shoulder
M05.019	Felty'S Syndrome, Unspecified Shoulder
M05.021	Felty'S Syndrome, Right Elbow
M05.022	Felty'S Syndrome, Left Elbow
M05.029	Felty'S Syndrome, Unspecified Elbow
M05.031	Felty'S Syndrome, Right Wrist
M05.032	Felty'S Syndrome, Left Wrist
M05.039	Felty'S Syndrome, Unspecified Wrist
M05.041	Felty'S Syndrome, Right Hand
M05.042	Felty'S Syndrome, Left Hand
M05.049	Felty'S Syndrome, Unspecified Hand
M05.051	Felty'S Syndrome, Right Hip
M05.052	Felty'S Syndrome, Left Hip
M05.059	Felty'S Syndrome, Unspecified Hip
M05.061	Felty'S Syndrome, Right Knee
M05.062	Felty'S Syndrome, Left Knee
M05.069	Felty'S Syndrome, Unspecified Knee
M05.071	Felty'S Syndrome, Right Ankle And Foot
M05.072	Felty'S Syndrome, Left Ankle And Foot
M05.079	Felty'S Syndrome, Unspecified Ankle And Foot
M05.09	Felty'S Syndrome, Multiple Sites
M05.10	Rheumatoid Lung Disease With Rheumatoid Arthritis Of Unspecified Site
M05.111	Rheumatoid Lung Disease With Rheumatoid Arthritis Of Right Shoulder



M05.112	Rheumatoid Lung Disease With Rheumatoid Arthritis Of Left Shoulder
M05.119	Rheumatoid Lung Disease With Rheumatoid Arthritis Of Unspecified Shoulder
M05.121	Rheumatoid Lung Disease With Rheumatoid Arthritis Of Right Elbow
M05.122	Rheumatoid Lung Disease With Rheumatoid Arthritis Of Left Elbow
M05.129	Rheumatoid Lung Disease With Rheumatoid Arthritis Of Unspecified Elbow
M05.131	Rheumatoid Lung Disease With Rheumatoid Arthritis Of Right Wrist
M05.132	Rheumatoid Lung Disease With Rheumatoid Arthritis Of Left Wrist
M05.139	Rheumatoid Lung Disease With Rheumatoid Arthritis Of Unspecified Wrist
M05.141	Rheumatoid Lung Disease With Rheumatoid Arthritis Of Right Hand
M05.142	Rheumatoid Lung Disease With Rheumatoid Arthritis Of Left Hand
M05.149	Rheumatoid Lung Disease With Rheumatoid Arthritis Of Unspecified Hand
M05.151	Rheumatoid Lung Disease With Rheumatoid Arthritis Of Right Hip
M05.152	Rheumatoid Lung Disease With Rheumatoid Arthritis Of Left Hip
M05.159	Rheumatoid Lung Disease With Rheumatoid Arthritis Of Unspecified Hip
M05.161	Rheumatoid Lung Disease With Rheumatoid Arthritis Of Right Knee
M05.162	Rheumatoid Lung Disease With Rheumatoid Arthritis Of Left Knee
M05.169	Rheumatoid Lung Disease With Rheumatoid Arthritis Of Unspecified Knee
M05.171	Rheumatoid Lung Disease With Rheumatoid Arthritis Of Right Ankle And Foot
M05.172	Rheumatoid Lung Disease With Rheumatoid Arthritis Of Left Ankle And Foot
M05.179	Rheumatoid Lung Disease With Rheumatoid Arthritis Of Unspecified Ankle And Foot
M05.19	Rheumatoid Lung Disease With Rheumatoid Arthritis Of Multiple Sites
M05.20	Rheumatoid Vasculitis With Rheumatoid Arthritis Of Unspecified Site
M05.211	Rheumatoid Vasculitis With Rheumatoid Arthritis Of Right Shoulder
M05.212	Rheumatoid Vasculitis With Rheumatoid Arthritis Of Left Shoulder
M05.219	Rheumatoid Vasculitis With Rheumatoid Arthritis Of Unspecified Shoulder
M05.221	Rheumatoid Vasculitis With Rheumatoid Arthritis Of Right Elbow
M05.222	Rheumatoid Vasculitis With Rheumatoid Arthritis Of Left Elbow
M05.229	Rheumatoid Vasculitis With Rheumatoid Arthritis Of Unspecified Elbow
M05.231	Rheumatoid Vasculitis With Rheumatoid Arthritis Of Right Wrist
M05.232	Rheumatoid Vasculitis With Rheumatoid Arthritis Of Left Wrist
M05.239	Rheumatoid Vasculitis With Rheumatoid Arthritis Of Unspecified Wrist
M05.241	Rheumatoid Vasculitis With Rheumatoid Arthritis Of Right Hand
M05.242	Rheumatoid Vasculitis With Rheumatoid Arthritis Of Left Hand
M05.249	Rheumatoid Vasculitis With Rheumatoid Arthritis Of Unspecified Hand
M05.251	Rheumatoid Vasculitis With Rheumatoid Arthritis Of Right Hip
M05.252	Rheumatoid Vasculitis With Rheumatoid Arthritis Of Left Hip
M05.259	Rheumatoid Vasculitis With Rheumatoid Arthritis Of Unspecified Hip
M05.261	Rheumatoid Vasculitis With Rheumatoid Arthritis Of Right Knee
M05.262	Rheumatoid Vasculitis With Rheumatoid Arthritis Of Left Knee
M05.269	Rheumatoid Vasculitis With Rheumatoid Arthritis Of Unspecified Knee
M05.271	Rheumatoid Vasculitis With Rheumatoid Arthritis Of Right Ankle And Foot
M05.272	Rheumatoid Vasculitis With Rheumatoid Arthritis Of Left Ankle And Foot
M05.279	Rheumatoid Vasculitis With Rheumatoid Arthritis Of Unspecified Ankle And Foot
M05.29	Rheumatoid Vasculitis With Rheumatoid Arthritis Of Multiple Sites
M05.30	Rheumatoid Heart Disease With Rheumatoid Arthritis Of Unspecified Site
M05.311	Rheumatoid Heart Disease With Rheumatoid Arthritis Of Right Shoulder
M05.312	Rheumatoid Heart Disease With Rheumatoid Arthritis Of Left Shoulder
M05.319	Rheumatoid Heart Disease With Rheumatoid Arthritis Of Unspecified Shoulder
M05.321	Rheumatoid Heart Disease With Rheumatoid Arthritis Of Right Elbow
M05.322	Rheumatoid Heart Disease With Rheumatoid Arthritis Of Left Elbow
M05.329	Rheumatoid Heart Disease With Rheumatoid Arthritis Of Unspecified Elbow
M05.331	Rheumatoid Heart Disease With Rheumatoid Arthritis Of Right Wrist
M05.332	Rheumatoid Heart Disease With Rheumatoid Arthritis Of Left Wrist

M05.339	Rheumatoid Heart Disease With Rheumatoid Arthritis Of Unspecified Wrist
M05.341	Rheumatoid Heart Disease With Rheumatoid Arthritis Of Right Hand
M05.342	Rheumatoid Heart Disease With Rheumatoid Arthritis Of Left Hand
M05.349	Rheumatoid Heart Disease With Rheumatoid Arthritis Of Unspecified Hand
M05.351	Rheumatoid Heart Disease With Rheumatoid Arthritis Of Right Hip
M05.352	Rheumatoid Heart Disease With Rheumatoid Arthritis Of Left Hip
M05.359	Rheumatoid Heart Disease With Rheumatoid Arthritis Of Unspecified Hip
M05.361	Rheumatoid Heart Disease With Rheumatoid Arthritis Of Right Knee
M05.362	Rheumatoid Heart Disease With Rheumatoid Arthritis Of Left Knee
M05.369	Rheumatoid Heart Disease With Rheumatoid Arthritis Of Unspecified Knee
M05.371	Rheumatoid Heart Disease With Rheumatoid Arthritis Of Right Ankle And Foot
M05.372	Rheumatoid Heart Disease With Rheumatoid Arthritis Of Left Ankle And Foot
M05.379	Rheumatoid Heart Disease With Rheumatoid Arthritis Of Unspecified Ankle And Foot
M05.39	Rheumatoid Heart Disease With Rheumatoid Arthritis Of Multiple Sites
M05.40	Rheumatoid Myopathy With Rheumatoid Arthritis Of Unspecified Site
M05.411	Rheumatoid Myopathy With Rheumatoid Arthritis Of Right Shoulder
M05.412	Rheumatoid Myopathy With Rheumatoid Arthritis Of Left Shoulder
M05.419	Rheumatoid Myopathy With Rheumatoid Arthritis Of Unspecified Shoulder
M05.421	Rheumatoid Myopathy With Rheumatoid Arthritis Of Right Elbow
M05.422	Rheumatoid Myopathy With Rheumatoid Arthritis Of Left Elbow
M05.429	Rheumatoid Myopathy With Rheumatoid Arthritis Of Unspecified Elbow
M05.431	Rheumatoid Myopathy With Rheumatoid Arthritis Of Right Wrist
M05.432	Rheumatoid Myopathy With Rheumatoid Arthritis Of Left Wrist
M05.439	Rheumatoid Myopathy With Rheumatoid Arthritis Of Unspecified Wrist
M05.441	Rheumatoid Myopathy With Rheumatoid Arthritis Of Right Hand
M05.442	Rheumatoid Myopathy With Rheumatoid Arthritis Of Left Hand
M05.449	Rheumatoid Myopathy With Rheumatoid Arthritis Of Unspecified Hand
M05.451	Rheumatoid Myopathy With Rheumatoid Arthritis Of Right Hip
M05.452	Rheumatoid Myopathy With Rheumatoid Arthritis Of Left Hip
M05.459	Rheumatoid Myopathy With Rheumatoid Arthritis Of Unspecified Hip
M05.461	Rheumatoid Myopathy With Rheumatoid Arthritis Of Right Knee
M05.462	Rheumatoid Myopathy With Rheumatoid Arthritis Of Left Knee
M05.469	Rheumatoid Myopathy With Rheumatoid Arthritis Of Unspecified Knee
M05.471	Rheumatoid Myopathy With Rheumatoid Arthritis Of Right Ankle And Foot
M05.472	Rheumatoid Myopathy With Rheumatoid Arthritis Of Left Ankle And Foot
M05.479	Rheumatoid Myopathy With Rheumatoid Arthritis Of Unspecified Ankle And Foot
M05.49	Rheumatoid Myopathy With Rheumatoid Arthritis Of Multiple Sites
M05.50	Rheumatoid Polyneuropathy With Rheumatoid Arthritis Of Unspecified Site
M05.511	Rheumatoid Polyneuropathy With Rheumatoid Arthritis Of Right Shoulder
M05.512	Rheumatoid Polyneuropathy With Rheumatoid Arthritis Of Left Shoulder
M05.519	Rheumatoid Polyneuropathy With Rheumatoid Arthritis Of Unspecified Shoulder
M05.521	Rheumatoid Polyneuropathy With Rheumatoid Arthritis Of Right Elbow
M05.522	Rheumatoid Polyneuropathy With Rheumatoid Arthritis Of Left Elbow
M05.529	Rheumatoid Polyneuropathy With Rheumatoid Arthritis Of Unspecified Elbow
M05.531	Rheumatoid Polyneuropathy With Rheumatoid Arthritis Of Right Wrist
M05.532	Rheumatoid Polyneuropathy With Rheumatoid Arthritis Of Left Wrist
M05.539	Rheumatoid Polyneuropathy With Rheumatoid Arthritis Of Unspecified Wrist
M05.541	Rheumatoid Polyneuropathy With Rheumatoid Arthritis Of Right Hand
M05.542	Rheumatoid Polyneuropathy With Rheumatoid Arthritis Of Left Hand
M05.549	Rheumatoid Polyneuropathy With Rheumatoid Arthritis Of Unspecified Hand
M05.551	Rheumatoid Polyneuropathy With Rheumatoid Arthritis Of Right Hip
M05.552	Rheumatoid Polyneuropathy With Rheumatoid Arthritis Of Left Hip
M05.559	Rheumatoid Polyneuropathy With Rheumatoid Arthritis Of Unspecified Hip

M05.561	Rheumatoid Polyneuropathy With Rheumatoid Arthritis Of Right Knee
M05.562	Rheumatoid Polyneuropathy With Rheumatoid Arthritis Of Left Knee
M05.569	Rheumatoid Polyneuropathy With Rheumatoid Arthritis Of Unspecified Knee
M05.571	Rheumatoid Polyneuropathy With Rheumatoid Arthritis Of Right Ankle And Foot
M05.572	Rheumatoid Polyneuropathy With Rheumatoid Arthritis Of Left Ankle And Foot
M05.579	Rheumatoid Polyneuropathy With Rheumatoid Arthritis Of Unspecified Ankle And Foot
M05.59	Rheumatoid Polyneuropathy With Rheumatoid Arthritis Of Multiple Sites
M05.60	Rheumatoid Arthritis Of Unspecified Site With Involvement Of Other Organs And Systems
M05.611	Rheumatoid Arthritis Of Right Shoulder With Involvement Of Other Organs And Systems
M05.612	Rheumatoid Arthritis Of Left Shoulder With Involvement Of Other Organs And Systems
M05.619	Rheumatoid Arthritis Of Unspecified Shoulder With Involvement Of Other Organs And Systems
M05.621	Rheumatoid Arthritis Of Right Elbow With Involvement Of Other Organs And Systems
M05.622	Rheumatoid Arthritis Of Left Elbow With Involvement Of Other Organs And Systems
M05.629	Rheumatoid Arthritis Of Unspecified Elbow With Involvement Of Other Organs And Systems
M05.631	Rheumatoid Arthritis Of Right Wrist With Involvement Of Other Organs And Systems
M05.632	Rheumatoid Arthritis Of Left Wrist With Involvement Of Other Organs And Systems
M05.639	Rheumatoid Arthritis Of Unspecified Wrist With Involvement Of Other Organs And Systems
M05.641	Rheumatoid Arthritis Of Right Hand With Involvement Of Other Organs And Systems
M05.642	Rheumatoid Arthritis Of Left Hand With Involvement Of Other Organs And Systems
M05.649	Rheumatoid Arthritis Of Unspecified Hand With Involvement Of Other Organs And Systems
M05.651	Rheumatoid Arthritis Of Right Hip With Involvement Of Other Organs And Systems
M05.652	Rheumatoid Arthritis Of Left Hip With Involvement Of Other Organs And Systems
M05.659	Rheumatoid Arthritis Of Unspecified Hip With Involvement Of Other Organs And Systems
M05.661	Rheumatoid Arthritis Of Right Knee With Involvement Of Other Organs And Systems
M05.662	Rheumatoid Arthritis Of Left Knee With Involvement Of Other Organs And Systems
M05.669	Rheumatoid Arthritis Of Unspecified Knee With Involvement Of Other Organs And Systems
M05.671	Rheumatoid Arthritis Of Right Ankle And Foot With Involvement Of Other Organs And Systems
M05.672	Rheumatoid Arthritis Of Left Ankle And Foot With Involvement Of Other Organs And Systems
M05.679	Rheumatoid Arthritis Of Unspecified Ankle And Foot With Involvement Of Other Organs And Systems
M05.69	Rheumatoid Arthritis Of Multiple Sites With Involvement Of Other Organs And Systems
M05.70	Rheumatoid Arthritis With Rheumatoid Factor Of Unspecified Site Without Organ Or Systems Involvement
M05.711	Rheumatoid Arthritis With Rheumatoid Factor Of Right Shoulder Without Organ Or Systems Involvement
M05.712	Rheumatoid Arthritis With Rheumatoid Factor Of Left Shoulder Without Organ Or Systems Involvement
M05.719	Rheumatoid Arthritis With Rheumatoid Factor Of Unspecified Shoulder Without Organ Or Systems Involvement
M05.721	Rheumatoid Arthritis With Rheumatoid Factor Of Right Elbow Without Organ Or Systems Involvement
M05.722	Rheumatoid Arthritis With Rheumatoid Factor Of Left Elbow Without Organ Or Systems Involvement
M05.729	Rheumatoid Arthritis With Rheumatoid Factor Of Unspecified Elbow Without Organ Or Systems Involvement

M05.731	Rheumatoid Arthritis With Rheumatoid Factor Of Right Wrist Without Organ Or Systems Involvement
M05.732	Rheumatoid Arthritis With Rheumatoid Factor Of Left Wrist Without Organ Or Systems Involvement
M05.739	Rheumatoid Arthritis With Rheumatoid Factor Of Unspecified Wrist Without Organ Or Systems Involvement
M05.741	Rheumatoid Arthritis With Rheumatoid Factor Of Right Hand Without Organ Or Systems Involvement
M05.742	Rheumatoid Arthritis With Rheumatoid Factor Of Left Hand Without Organ Or Systems Involvement
M05.749	Rheumatoid Arthritis With Rheumatoid Factor Of Unspecified Hand Without Organ Or Systems Involvement
M05.751	Rheumatoid Arthritis With Rheumatoid Factor Of Right Hip Without Organ Or Systems Involvement
M05.752	Rheumatoid Arthritis With Rheumatoid Factor Of Left Hip Without Organ Or Systems Involvement
M05.759	Rheumatoid Arthritis With Rheumatoid Factor Of Unspecified Hip Without Organ Or Systems Involvement
M05.761	Rheumatoid Arthritis With Rheumatoid Factor Of Right Knee Without Organ Or Systems Involvement
M05.762	Rheumatoid Arthritis With Rheumatoid Factor Of Left Knee Without Organ Or Systems Involvement
M05.769	Rheumatoid Arthritis With Rheumatoid Factor Of Unspecified Knee Without Organ Or Systems Involvement
M05.771	Rheumatoid Arthritis With Rheumatoid Factor Of Right Ankle And Foot Without Organ Or Systems Involvement
M05.772	Rheumatoid Arthritis With Rheumatoid Factor Of Left Ankle And Foot Without Organ Or Systems Involvement
M05.779	Rheumatoid Arthritis With Rheumatoid Factor Of Unspecified Ankle And Foot Without Organ Or Systems Involvement
M05.79	Rheumatoid Arthritis With Rheumatoid Factor Of Multiple Sites Without Organ Or Systems Involvement
M05.7A	Rheumatoid Arthritis With Rheumatoid Factor Of Other Specified Site Without Organ Or Systems Involvement
M05.80	Other Rheumatoid Arthritis With Rheumatoid Factor Of Unspecified Site
M05.811	Other Rheumatoid Arthritis With Rheumatoid Factor Of Right Shoulder
M05.812	Other Rheumatoid Arthritis With Rheumatoid Factor Of Left Shoulder
M05.819	Other Rheumatoid Arthritis With Rheumatoid Factor Of Unspecified Shoulder
M05.821	Other Rheumatoid Arthritis With Rheumatoid Factor Of Right Elbow
M05.822	Other Rheumatoid Arthritis With Rheumatoid Factor Of Left Elbow
M05.829	Other Rheumatoid Arthritis With Rheumatoid Factor Of Unspecified Elbow
M05.831	Other Rheumatoid Arthritis With Rheumatoid Factor Of Right Wrist
M05.832	Other Rheumatoid Arthritis With Rheumatoid Factor Of Left Wrist
M05.839	Other Rheumatoid Arthritis With Rheumatoid Factor Of Unspecified Wrist
M05.841	Other Rheumatoid Arthritis With Rheumatoid Factor Of Right Hand
M05.842	Other Rheumatoid Arthritis With Rheumatoid Factor Of Left Hand
M05.849	Other Rheumatoid Arthritis With Rheumatoid Factor Of Unspecified Hand
M05.851	Other Rheumatoid Arthritis With Rheumatoid Factor Of Right Hip
M05.852	Other Rheumatoid Arthritis With Rheumatoid Factor Of Left Hip
M05.859	Other Rheumatoid Arthritis With Rheumatoid Factor Of Unspecified Hip
M05.861	Other Rheumatoid Arthritis With Rheumatoid Factor Of Right Knee
M05.862	Other Rheumatoid Arthritis With Rheumatoid Factor Of Left Knee
M05.869	Other Rheumatoid Arthritis With Rheumatoid Factor Of Unspecified Knee
M05.871	Other Rheumatoid Arthritis With Rheumatoid Factor Of Right Ankle And Foot

M05.872	Other Rheumatoid Arthritis With Rheumatoid Factor Of Left Ankle And Foot
M05.879	Other Rheumatoid Arthritis With Rheumatoid Factor Of Unspecified Ankle And Foot
M05.89	Other Rheumatoid Arthritis With Rheumatoid Factor Of Multiple Sites
M05.8A	Other Rheumatoid Arthritis With Rheumatoid Factor Of Other Specified Site
M05.9	Rheumatoid Arthritis With Rheumatoid Factor, Unspecified
M06.00	Rheumatoid Arthritis Without Rheumatoid Factor, Unspecified Site
M06.011	Rheumatoid Arthritis Without Rheumatoid Factor, Right Shoulder
M06.012	Rheumatoid Arthritis Without Rheumatoid Factor, Left Shoulder
M06.019	Rheumatoid Arthritis Without Rheumatoid Factor, Unspecified Shoulder
M06.021	Rheumatoid Arthritis Without Rheumatoid Factor, Right Elbow
M06.022	Rheumatoid Arthritis Without Rheumatoid Factor, Left Elbow
M06.029	Rheumatoid Arthritis Without Rheumatoid Factor, Unspecified Elbow
M06.031	Rheumatoid Arthritis Without Rheumatoid Factor, Right Wrist
M06.032	Rheumatoid Arthritis Without Rheumatoid Factor, Left Wrist
M06.039	Rheumatoid Arthritis Without Rheumatoid Factor, Unspecified Wrist
M06.041	Rheumatoid Arthritis Without Rheumatoid Factor, Right Hand
M06.042	Rheumatoid Arthritis Without Rheumatoid Factor, Left Hand
M06.049	Rheumatoid Arthritis Without Rheumatoid Factor, Unspecified Hand
M06.051	Rheumatoid Arthritis Without Rheumatoid Factor, Right Hip
M06.052	Rheumatoid Arthritis Without Rheumatoid Factor, Left Hip
M06.059	Rheumatoid Arthritis Without Rheumatoid Factor, Unspecified Hip
M06.061	Rheumatoid Arthritis Without Rheumatoid Factor, Right Knee
M06.062	Rheumatoid Arthritis Without Rheumatoid Factor, Left Knee
M06.069	Rheumatoid Arthritis Without Rheumatoid Factor, Unspecified Knee
M06.071	Rheumatoid Arthritis Without Rheumatoid Factor, Right Ankle And Foot
M06.072	Rheumatoid Arthritis Without Rheumatoid Factor, Left Ankle And Foot
M06.079	Rheumatoid Arthritis Without Rheumatoid Factor, Unspecified Ankle And Foot
M06.08	Rheumatoid Arthritis Without Rheumatoid Factor, Vertebrae
M06.09	Rheumatoid Arthritis Without Rheumatoid Factor, Multiple Sites
M06.0A	Rheumatoid Arthritis Without Rheumatoid Factor, Other Specified Site
M06.1	Adult-Onset Still'S Disease
M06.20	Rheumatoid Bursitis, Unspecified Site
M06.211	Rheumatoid Bursitis, Right Shoulder
M06.212	Rheumatoid Bursitis, Left Shoulder
M06.219	Rheumatoid Bursitis, Unspecified Shoulder
M06.221	Rheumatoid Bursitis, Right Elbow
M06.222	Rheumatoid Bursitis, Left Elbow
M06.229	Rheumatoid Bursitis, Unspecified Elbow
M06.231	Rheumatoid Bursitis, Right Wrist
M06.232	Rheumatoid Bursitis, Left Wrist
M06.239	Rheumatoid Bursitis, Unspecified Wrist
M06.241	Rheumatoid Bursitis, Right Hand
M06.242	Rheumatoid Bursitis, Left Hand
M06.249	Rheumatoid Bursitis, Unspecified Hand
M06.251	Rheumatoid Bursitis, Right Hip
M06.252	Rheumatoid Bursitis, Left Hip
M06.259	Rheumatoid Bursitis, Unspecified Hip
M06.261	Rheumatoid Bursitis, Right Knee
M06.262	Rheumatoid Bursitis, Left Knee
M06.269	Rheumatoid Bursitis, Unspecified Knee
M06.271	Rheumatoid Bursitis, Right Ankle And Foot
M06.272	Rheumatoid Bursitis, Left Ankle And Foot
M06.279	Rheumatoid Bursitis, Unspecified Ankle And Foot

M06.28	Rheumatoid Bursitis, Vertebrae
M06.29	Rheumatoid Bursitis, Multiple Sites
M06.30	Rheumatoid Nodule, Unspecified Site
M06.311	Rheumatoid Nodule, Right Shoulder
M06.312	Rheumatoid Nodule, Left Shoulder
M06.319	Rheumatoid Nodule, Unspecified Shoulder
M06.321	Rheumatoid Nodule, Right Elbow
M06.322	Rheumatoid Nodule, Left Elbow
M06.329	Rheumatoid Nodule, Unspecified Elbow
M06.331	Rheumatoid Nodule, Right Wrist
M06.332	Rheumatoid Nodule, Left Wrist
M06.339	Rheumatoid Nodule, Unspecified Wrist
M06.341	Rheumatoid Nodule, Right Hand
M06.342	Rheumatoid Nodule, Left Hand
M06.349	Rheumatoid Nodule, Unspecified Hand
M06.351	Rheumatoid Nodule, Right Hip
M06.352	Rheumatoid Nodule, Left Hip
M06.359	Rheumatoid Nodule, Unspecified Hip
M06.361	Rheumatoid Nodule, Right Knee
M06.362	Rheumatoid Nodule, Left Knee
M06.369	Rheumatoid Nodule, Unspecified Knee
M06.371	Rheumatoid Nodule, Right Ankle And Foot
M06.372	Rheumatoid Nodule, Left Ankle And Foot
M06.379	Rheumatoid Nodule, Unspecified Ankle And Foot
M06.38	Rheumatoid Nodule, Vertebrae
M06.39	Rheumatoid Nodule, Multiple Sites
M06.4	Inflammatory Polyarthropathy
M06.80	Other Specified Rheumatoid Arthritis, Unspecified Site
M06.811	Other Specified Rheumatoid Arthritis, Right Shoulder
M06.812	Other Specified Rheumatoid Arthritis, Left Shoulder
M06.819	Other Specified Rheumatoid Arthritis, Unspecified Shoulder
M06.821	Other Specified Rheumatoid Arthritis, Right Elbow
M06.822	Other Specified Rheumatoid Arthritis, Left Elbow
M06.829	Other Specified Rheumatoid Arthritis, Unspecified Elbow
M06.831	Other Specified Rheumatoid Arthritis, Right Wrist
M06.832	Other Specified Rheumatoid Arthritis, Left Wrist
M06.839	Other Specified Rheumatoid Arthritis, Unspecified Wrist
M06.841	Other Specified Rheumatoid Arthritis, Right Hand
M06.842	Other Specified Rheumatoid Arthritis, Left Hand
M06.849	Other Specified Rheumatoid Arthritis, Unspecified Hand
M06.851	Other Specified Rheumatoid Arthritis, Right Hip
M06.852	Other Specified Rheumatoid Arthritis, Left Hip
M06.859	Other Specified Rheumatoid Arthritis, Unspecified Hip
M06.861	Other Specified Rheumatoid Arthritis, Right Knee
M06.862	Other Specified Rheumatoid Arthritis, Left Knee
M06.869	Other Specified Rheumatoid Arthritis, Unspecified Knee
M06.871	Other Specified Rheumatoid Arthritis, Right Ankle And Foot
M06.872	Other Specified Rheumatoid Arthritis, Left Ankle And Foot
M06.879	Other Specified Rheumatoid Arthritis, Unspecified Ankle And Foot
M06.88	Other Specified Rheumatoid Arthritis, Vertebrae
M06.89	Other Specified Rheumatoid Arthritis, Multiple Sites
M06.8A	Other Specified Rheumatoid Arthritis, Other Specified Site
M06.9	Rheumatoid Arthritis, Unspecified

M07.60	Enteropathic Arthropathies, Unspecified Site
M07.611	Enteropathic Arthropathies, Right Shoulder
M07.612	Enteropathic Arthropathies, Left Shoulder
M07.619	Enteropathic Arthropathies, Unspecified Shoulder
M07.621	Enteropathic Arthropathies, Right Elbow
M07.622	Enteropathic Arthropathies, Left Elbow
M07.629	Enteropathic Arthropathies, Unspecified Elbow
M07.631	Enteropathic Arthropathies, Right Wrist
M07.632	Enteropathic Arthropathies, Left Wrist
M07.639	Enteropathic Arthropathies, Unspecified Wrist
M07.641	Enteropathic Arthropathies, Right Hand
M07.642	Enteropathic Arthropathies, Left Hand
M07.649	Enteropathic Arthropathies, Unspecified Hand
M07.651	Enteropathic Arthropathies, Right Hip
M07.652	Enteropathic Arthropathies, Left Hip
M07.659	Enteropathic Arthropathies, Unspecified Hip
M07.661	Enteropathic Arthropathies, Right Knee
M07.662	Enteropathic Arthropathies, Left Knee
M07.669	Enteropathic Arthropathies, Unspecified Knee
M07.671	Enteropathic Arthropathies, Right Ankle And Foot
M07.672	Enteropathic Arthropathies, Left Ankle And Foot
M07.679	Enteropathic Arthropathies, Unspecified Ankle And Foot
M07.68	Enteropathic Arthropathies, Vertebrae
M07.69	Enteropathic Arthropathies, Multiple Sites
M08.00	Unspecified Juvenile Rheumatoid Arthritis Of Unspecified Site
M08.011	Unspecified Juvenile Rheumatoid Arthritis, Right Shoulder
M08.012	Unspecified Juvenile Rheumatoid Arthritis, Left Shoulder
M08.019	Unspecified Juvenile Rheumatoid Arthritis, Unspecified Shoulder
M08.021	Unspecified Juvenile Rheumatoid Arthritis, Right Elbow
M08.022	Unspecified Juvenile Rheumatoid Arthritis, Left Elbow
M08.029	Unspecified Juvenile Rheumatoid Arthritis, Unspecified Elbow
M08.031	Unspecified Juvenile Rheumatoid Arthritis, Right Wrist
M08.032	Unspecified Juvenile Rheumatoid Arthritis, Left Wrist
M08.039	Unspecified Juvenile Rheumatoid Arthritis, Unspecified Wrist
M08.041	Unspecified Juvenile Rheumatoid Arthritis, Right Hand
M08.042	Unspecified Juvenile Rheumatoid Arthritis, Left Hand
M08.049	Unspecified Juvenile Rheumatoid Arthritis, Unspecified Hand
M08.051	Unspecified Juvenile Rheumatoid Arthritis, Right Hip
M08.052	Unspecified Juvenile Rheumatoid Arthritis, Left Hip
M08.059	Unspecified Juvenile Rheumatoid Arthritis, Unspecified Hip
M08.061	Unspecified Juvenile Rheumatoid Arthritis, Right Knee
M08.062	Unspecified Juvenile Rheumatoid Arthritis, Left Knee
M08.069	Unspecified Juvenile Rheumatoid Arthritis, Unspecified Knee
M08.071	Unspecified Juvenile Rheumatoid Arthritis, Right Ankle And Foot
M08.072	Unspecified Juvenile Rheumatoid Arthritis, Left Ankle And Foot
M08.079	Unspecified Juvenile Rheumatoid Arthritis, Unspecified Ankle And Foot
M08.08	Unspecified Juvenile Rheumatoid Arthritis, Vertebrae
M08.09	Unspecified Juvenile Rheumatoid Arthritis, Multiple Sites
M08.0A	Unspecified Juvenile Rheumatoid Arthritis, Other Specified Site
M08.1	Juvenile Ankylosing Spondylitis
M08.20	Juvenile Rheumatoid Arthritis With Systemic Onset, Unspecified Site
M08.211	Juvenile Rheumatoid Arthritis With Systemic Onset, Right Shoulder
M08.212	Juvenile Rheumatoid Arthritis With Systemic Onset, Left Shoulder

M08.219	Juvenile Rheumatoid Arthritis With Systemic Onset, Unspecified Shoulder
M08.221	Juvenile Rheumatoid Arthritis With Systemic Onset, Right Elbow
M08.222	Juvenile Rheumatoid Arthritis With Systemic Onset, Left Elbow
M08.229	Juvenile Rheumatoid Arthritis With Systemic Onset, Unspecified Elbow
M08.231	Juvenile Rheumatoid Arthritis With Systemic Onset, Right Wrist
M08.232	Juvenile Rheumatoid Arthritis With Systemic Onset, Left Wrist
M08.239	Juvenile Rheumatoid Arthritis With Systemic Onset, Unspecified Wrist
M08.241	Juvenile Rheumatoid Arthritis With Systemic Onset, Right Hand
M08.242	Juvenile Rheumatoid Arthritis With Systemic Onset, Left Hand
M08.249	Juvenile Rheumatoid Arthritis With Systemic Onset, Unspecified Hand
M08.251	Juvenile Rheumatoid Arthritis With Systemic Onset, Right Hip
M08.252	Juvenile Rheumatoid Arthritis With Systemic Onset, Left Hip
M08.259	Juvenile Rheumatoid Arthritis With Systemic Onset, Unspecified Hip
M08.261	Juvenile Rheumatoid Arthritis With Systemic Onset, Right Knee
M08.262	Juvenile Rheumatoid Arthritis With Systemic Onset, Left Knee
M08.269	Juvenile Rheumatoid Arthritis With Systemic Onset, Unspecified Knee
M08.271	Juvenile Rheumatoid Arthritis With Systemic Onset, Right Ankle And Foot
M08.272	Juvenile Rheumatoid Arthritis With Systemic Onset, Left Ankle And Foot
M08.279	Juvenile Rheumatoid Arthritis With Systemic Onset, Unspecified Ankle And Foot
M08.28	Juvenile Rheumatoid Arthritis With Systemic Onset, Vertebrae
M08.29	Juvenile Rheumatoid Arthritis With Systemic Onset, Multiple Sites
M08.2A	Juvenile Rheumatoid Arthritis With Systemic Onset, Other Specified Site
M08.3	Juvenile Rheumatoid Polyarthritis (Seronegative)
M08.40	Pauciarticular Juvenile Rheumatoid Arthritis, Unspecified Site
M08.411	Pauciarticular Juvenile Rheumatoid Arthritis, Right Shoulder
M08.412	Pauciarticular Juvenile Rheumatoid Arthritis, Left Shoulder
M08.419	Pauciarticular Juvenile Rheumatoid Arthritis, Unspecified Shoulder
M08.421	Pauciarticular Juvenile Rheumatoid Arthritis, Right Elbow
M08.422	Pauciarticular Juvenile Rheumatoid Arthritis, Left Elbow
M08.429	Pauciarticular Juvenile Rheumatoid Arthritis, Unspecified Elbow
M08.431	Pauciarticular Juvenile Rheumatoid Arthritis, Right Wrist
M08.432	Pauciarticular Juvenile Rheumatoid Arthritis, Left Wrist
M08.439	Pauciarticular Juvenile Rheumatoid Arthritis, Unspecified Wrist
M08.441	Pauciarticular Juvenile Rheumatoid Arthritis, Right Hand
M08.442	Pauciarticular Juvenile Rheumatoid Arthritis, Left Hand
M08.449	Pauciarticular Juvenile Rheumatoid Arthritis, Unspecified Hand
M08.451	Pauciarticular Juvenile Rheumatoid Arthritis, Right Hip
M08.452	Pauciarticular Juvenile Rheumatoid Arthritis, Left Hip
M08.459	Pauciarticular Juvenile Rheumatoid Arthritis, Unspecified Hip
M08.461	Pauciarticular Juvenile Rheumatoid Arthritis, Right Knee
M08.462	Pauciarticular Juvenile Rheumatoid Arthritis, Left Knee
M08.469	Pauciarticular Juvenile Rheumatoid Arthritis, Unspecified Knee
M08.471	Pauciarticular Juvenile Rheumatoid Arthritis, Right Ankle And Foot
M08.472	Pauciarticular Juvenile Rheumatoid Arthritis, Left Ankle And Foot
M08.479	Pauciarticular Juvenile Rheumatoid Arthritis, Unspecified Ankle And Foot
M08.48	Pauciarticular Juvenile Rheumatoid Arthritis, Vertebrae
M08.4A	Pauciarticular Juvenile Rheumatoid Arthritis, Other Specified Site
M08.80	Other Juvenile Arthritis, Unspecified Site
M08.811	Other Juvenile Arthritis, Right Shoulder
M08.812	Other Juvenile Arthritis, Left Shoulder
M08.819	Other Juvenile Arthritis, Unspecified Shoulder
M08.821	Other Juvenile Arthritis, Right Elbow
M08.822	Other Juvenile Arthritis, Left Elbow



M08.829	Other Juvenile Arthritis, Unspecified Elbow
M08.831	Other Juvenile Arthritis, Right Wrist
M08.832	Other Juvenile Arthritis, Left Wrist
M08.839	Other Juvenile Arthritis, Unspecified Wrist
M08.841	Other Juvenile Arthritis, Right Hand
M08.842	Other Juvenile Arthritis, Left Hand
M08.849	Other Juvenile Arthritis, Unspecified Hand
M08.851	Other Juvenile Arthritis, Right Hip
M08.852	Other Juvenile Arthritis, Left Hip
M08.859	Other Juvenile Arthritis, Unspecified Hip
M08.861	Other Juvenile Arthritis, Right Knee
M08.862	Other Juvenile Arthritis, Left Knee
M08.869	Other Juvenile Arthritis, Unspecified Knee
M08.871	Other Juvenile Arthritis, Right Ankle And Foot
M08.872	Other Juvenile Arthritis, Left Ankle And Foot
M08.879	Other Juvenile Arthritis, Unspecified Ankle And Foot
M08.88	Other Juvenile Arthritis, Other Specified Site
M08.89	Other Juvenile Arthritis, Multiple Sites
M08.90	Juvenile Arthritis, Unspecified, Unspecified Site
M08.911	Juvenile Arthritis, Unspecified, Right Shoulder
M08.912	Juvenile Arthritis, Unspecified, Left Shoulder
M08.919	Juvenile Arthritis, Unspecified, Unspecified Shoulder
M08.921	Juvenile Arthritis, Unspecified, Right Elbow
M08.922	Juvenile Arthritis, Unspecified, Left Elbow
M08.929	Juvenile Arthritis, Unspecified, Unspecified Elbow
M08.931	Juvenile Arthritis, Unspecified, Right Wrist
M08.932	Juvenile Arthritis, Unspecified, Left Wrist
M08.939	Juvenile Arthritis, Unspecified, Unspecified Wrist
M08.941	Juvenile Arthritis, Unspecified, Right Hand
M08.942	Juvenile Arthritis, Unspecified, Left Hand
M08.949	Juvenile Arthritis, Unspecified, Unspecified Hand
M08.951	Juvenile Arthritis, Unspecified, Right Hip
M08.952	Juvenile Arthritis, Unspecified, Left Hip
M08.959	Juvenile Arthritis, Unspecified, Unspecified Hip
M08.961	Juvenile Arthritis, Unspecified, Right Knee
M08.962	Juvenile Arthritis, Unspecified, Left Knee
M08.969	Juvenile Arthritis, Unspecified, Unspecified Knee
M08.971	Juvenile Arthritis, Unspecified, Right Ankle And Foot
M08.972	Juvenile Arthritis, Unspecified, Left Ankle And Foot
M08.979	Juvenile Arthritis, Unspecified, Unspecified Ankle And Foot
M08.98	Juvenile Arthritis, Unspecified, Vertebrae
M08.99	Juvenile Arthritis, Unspecified, Multiple Sites
M08.9A	Juvenile Arthritis, Unspecified, Other Specified Site
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
M80.021A	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"> <li>• Both assays of vitamin D need not be performed for each of the above conditions.</li> <li>• 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.</li> <li>• 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.</li> <li>• If level &lt;20 ng/dl or &gt; 60 ng/dl are noted, a subsequent level(s) may be reimbursed until the level is within the normal range.</li> <li>• Testing may not be used for routine or other screening. Current Pathological Fracture, Left Humerus, Subsequent Encounter for Fracture with Nonunion</li> </ul>
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
M80.031A	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
M80.041A	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
M80.051A	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
M80.061A	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
M80.071A	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
M80.08XA	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

M80.08XP	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
M80.0B1A	Age-related osteoporosis with current pathological fracture, right pelvis, initial encounter for fracture
M80.0B1D	Age-related osteoporosis with current pathological fracture, right pelvis, subsequent encounter for fracture with routine healing
M80.0B1G	Age-related osteoporosis with current pathological fracture, right pelvis, subsequent encounter for fracture with delayed healing
M80.0B1K	Age-related osteoporosis with current pathological fracture, right pelvis, subsequent encounter for fracture with nonunion
M80.0B1P	Age-related osteoporosis with current pathological fracture, right pelvis, subsequent encounter for fracture with malunion
M80.0B1S	Age-related osteoporosis with current pathological fracture, right pelvis, sequela
M80.0B2A	Age-related osteoporosis with current pathological fracture, left pelvis, initial encounter for fracture
M80.0B2D	Age-related osteoporosis with current pathological fracture, left pelvis, subsequent encounter for fracture with routine healing
M80.0B2G	Age-related osteoporosis with current pathological fracture, left pelvis, subsequent encounter for fracture with delayed healing
M80.0B2K	Age-related osteoporosis with current pathological fracture, left pelvis, subsequent encounter for fracture with nonunion
M80.0B2P	Age-related osteoporosis with current pathological fracture, left pelvis, subsequent encounter for fracture with malunion
M80.0B2S	Age-related osteoporosis with current pathological fracture, left pelvis, 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
M80.821A	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
M80.831A	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
M80.841A	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
M80.851A	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
M80.861A	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
M80.871A	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
M80.88XA	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
M80.8B1A	Other osteoporosis with current pathological fracture, right pelvis, initial encounter for fracture
M80.8B1D	Other osteoporosis with current pathological fracture, right pelvis, subsequent encounter for fracture with routine healing
M80.8B1G	Other osteoporosis with current pathological fracture, right pelvis, subsequent encounter for fracture with delayed healing
M80.8B1K	Other osteoporosis with current pathological fracture, right pelvis, subsequent encounter for fracture with nonunion
M80.8B1P	Other osteoporosis with current pathological fracture, right pelvis, subsequent encounter for fracture with malunion
M80.8B1S	Other osteoporosis with current pathological fracture, right pelvis, sequela
M80.8B2A	Other osteoporosis with current pathological fracture, left pelvis, initial encounter for fracture
M80.8B2D	Other osteoporosis with current pathological fracture, left pelvis, subsequent encounter for fracture with routine healing
M80.8B2G	Other osteoporosis with current pathological fracture, left pelvis, subsequent encounter for fracture with delayed healing
M80.8B2K	Other osteoporosis with current pathological fracture, left pelvis, subsequent encounter for fracture with nonunion
M80.8B2P	Other osteoporosis with current pathological fracture, left pelvis, subsequent encounter for fracture with malunion
M80.8B2S	Other osteoporosis with current pathological fracture, left pelvis, sequela
M80.8B9A	Other osteoporosis with current pathological fracture, unspecified pelvis, initial encounter for fracture
M80.8B9D	Other osteoporosis with current pathological fracture, unspecified pelvis, subsequent encounter for fracture with routine healing
M80.8B9G	Other osteoporosis with current pathological fracture, unspecified pelvis, subsequent encounter for fracture with delayed healing
M80.8B9K	Other osteoporosis with current pathological fracture, unspecified pelvis, subsequent encounter for fracture with nonunion



M80.8B9P	Other osteoporosis with current pathological fracture, unspecified pelvis, subsequent encounter for fracture with malunion
M80.8B9S	Other osteoporosis with current pathological fracture, unspecified pelvis, 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**

<b>Date</b>	<b>Action</b>
1/2024	Annual policy review. Policy statements unchanged.
11/2023	Clarified coding information.
10/2023	Clarified coding information.
2/2023	Annual policy review. Minor editorial refinements to policy statements; intent unchanged.
3/2021	Policy clarified to include coverage for rheumatoid arthritis. Clarified coding information. References added.
1/2021	Medicare information removed. See MP #132 Medicare Advantage Management for local coverage determination and national coverage determination reference. Clarified coding information.
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	Annual policy review. Description, summary, and references updated. Policy statements unchanged.
3/2018	Annual policy review. New references added.
1/2017	Annual policy review. New references added.
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](#)

## References

1. American Gastroenterological Association medical position statement: guidelines on osteoporosis in gastrointestinal diseases. *Gastroenterology*. 2003;124(3):791-4.
2. In: Ross AC, Taylor CL, Yaktine AL, Del Valle HB, editors. Dietary Reference Intakes for Calcium and Vitamin D. The National Academies Collection: Reports funded by National Institutes of Health. Washington (DC): Institute of Medicine; 2011.
3. Vitamin D Testing in the General Population: A Review of the Clinical and Cost-Effectiveness and Guidelines. CADTH Rapid Response Reports. Ottawa (ON) 2015.
4. Autier P, Gandini S. Vitamin D Supplementation and Total Mortality. A Meta-analysis of Randomized Controlled Trials. *Arch Intern Med*. 2007;167(16):1730-1737.
5. Bernstein CN, Leslie WD, Leboff MS. AGA technical review on osteoporosis in gastrointestinal diseases. *Gastroenterology*. 2003;124(3):795-841.
6. Bikle DD. Vitamin D and bone. *Curr Osteoporos Rep*. 2012;10(2):151-9.
7. Bikle DD. Vitamin D metabolism, mechanism of action, and clinical applications. *Chem Biol*. 2014;21(3):319-29.
8. Binkley N, Krueger D, Gemar D, Drezner MK. Correlation among 25-hydroxy-vitamin D assays. *J Clin Endocrinol Metab*. 2008;93(5):1804-8.
9. Bischoff-Ferrari HA, Dawson-Hughes B, Willett W, et al. Effect of vitamin D on falls a meta-analysis. *JAMA*. April 2004;291:16:1999-2006.
10. Bischoff-Ferrari HA, Giovannucci E, Willett WC, Dietrich T, Dawson-Hughes B. Estimation of optimal serum concentrations of 25-hydroxyvitamin D for multiple health outcomes. *Am J Clin Nutr*. 2006;84(1):18-28.
11. Bischoff-Ferrari HA, Willett W, Wong J, Giovannucci E, Dietrich T, Dawson-Hughes B. Fracture prevention with vitamin D supplementation, a meta-analysis of randomized controlled trials. *JAMA*. May 2005;293:18:2257-2264.
12. Bjelakovic G, Glud C. Vitamin and mineral supplement use in relation to all-cause mortality in the Iowa Women's Health Study. *Arch Intern Med*. 2011;171(18):1633-1634.
13. Bjelakovic G, Glud LL, Nikolova D, Whitfield K, Krstic G, Wetterslev J, et al. Vitamin D supplementation for prevention of cancer in adults. *Cochrane Database Syst Rev*. 2014(6):CD007469.
14. Bjelakovic G, Glud LL, Nikolova D, Whitfield K, Wetterslev J, Simonetti RG, et al. Vitamin D supplementation for prevention of mortality in adults. *Cochrane Database Syst Rev*. 2011(7):CD007470.
15. Bjelakovic G, Glud LL, Nikolova D, Whitfield K, Wetterslev J, Simonetti RG, et al. Vitamin D supplementation for prevention of mortality in adults. *Cochrane Database Syst Rev*. 2014(1):CD007470.
16. Bjelakovic G, Nikolova D, Glud LL, Simonetti RG, Glud C. Antioxidant supplements for prevention of mortality in healthy participants and patients with various diseases. *Cochrane Database Syst Rev*. 2008(2):CD007176.
17. Bodnar LM, Simhan HN, Powers RW, Frank MP, Cooperstein E, Roberts JM. High prevalence of vitamin D insufficiency in black and white pregnant women residing in the northern United States and their neonates. *J Nutr*. 2007;137:447-452.
18. Bolland MJ, Bacon CJ, Horne AM, et al. Vitamin D insufficiency and health outcomes over 5 y in older women. *Am J Clin Nutr*. 2010;91(1):82-9.
19. Camacho PM, Petak SM, Binkley N, et al. American Association of Clinical Endocrinologists and American College of Endocrinology Clinical Practice Guidelines for the Diagnosis and Treatment of Postmenopausal Osteoporosis - 2016. *Endocr Pract*. 2016;22(Suppl 4):1-42.
20. Chapuy M, Arlot M, Duboeuf F, et al. Vitamin D3 and calcium to prevent hip fractures in elderly women. *N Engl J Med*. 1992;327:23:1637-1642.
21. Chung M, Balk EM, Brendel M, et al. Vitamin D and calcium: a systematic review of health outcomes. *Evid Rep Technol Assess (Full Rep)*. 2009(183):1-420.
22. Compston JE. Hepatic osteodystrophy: vitamin D metabolism in patients with liver disease. *Gut*. 1986;27(9):1073-1090.

23. Giovannucci E. Vitamin D and cancer incidence in the Harvard cohorts. *Ann Epidemiol.* 2009;19(2):84-88.
24. Giovannucci E, Liu Y, Hollis BW, Rimm EB. 25-Hydroxyvitamin D and Risk of Myocardial Infarction in Men; A Prospective Study. *Arch Intern Med.* 2008;168(11):1174-1180.
25. Gordon PL, Sakkas GK, Doyle JW, Shubert T, Johansen KL. Relationship between vitamin D and muscle size and strength in patients on hemodialysis. *J Ren Nutr.* 2007;17(6):397-407.
26. Hanley DA, Cranney A, Jones G, et al. Vitamin D in adult health and disease: a review and guideline statement from Osteoporosis Canada. *CMAJ.* 2010;182(12):E610-8.
27. Hanley DA, Cranney A, Jones G, Whiting SJ, Leslie WD, Guidelines Committee of the Scientific Advisory Council of Osteoporosis C. Vitamin D in adult health and disease: a review and guideline statement from Osteoporosis Canada (summary). *CMAJ.* 2010;182(12):1315-9.
28. Holick MF. High Prevalence of Vitamin D Inadequacy and Implications for Health. *Mayo Clin Proc.* 2006;81(3):353-373.
29. Holick MF. Vitamin D deficiency. *N Engl J Med.* 2007; 357:266.
30. Holick MF. Vitamin D status: measurement, interpretation, and clinical application. *Ann Epidemiol.* 2009;19(2):73-8.
31. Holick MF, Binkley NC, Bischoff-Ferrari HA, Gordon CM, Hanley DA, Heaney RP, et al. Evaluation, treatment, and prevention of vitamin D deficiency: an Endocrine Society clinical practice guideline. *J Clin Endocrinol Metab.* 2011;96(7):1911-30.
32. Holick MF, Gordon CM. The Hormone Foundation's: Patient guide to vitamin D deficiency. *J Clin Endocrinol Metab.* 2011;96(7):1-2.
33. Inker LA, Astor BC, Fox CH, et al. KDOQI US commentary on the 2012 KDIGO clinical practice guideline for the evaluation and management of CKD. *Am J Kidney Dis.* 2014;63(5):713-35.
34. Jacobus, CH, Holick, MF, Shao, Q, et al. Hypervitaminosis D associated with drinking milk. *N Engl J Med.* 1992;326:1173.
35. Johnson JM, Maher JW, DeMaria EJ, Downs RW, Wolfe LG, Kellum JM. The long-term effects of gastric bypass on vitamin D metabolism. *Ann Surg.* 2006 243(5):701-704;discussion 4-5.
36. Kennel K, Drake M, Hurley D. Vitamin D deficiency in adults: when to test and how to treat. *Mayo Clin Proc.* 2010;85(8):752-757;quiz 7-8.
37. Kidney Disease: Improving Global Outcomes CKD-MBDWG. KDIGO clinical practice guideline for the diagnosis, evaluation, prevention, and treatment of Chronic Kidney Disease-Mineral and Bone Disorder (CKD-MBD). *Kidney Int Suppl.* 2009;76(113):S1-130.
38. Lafferty, FW. Differential diagnosis of hypercalcemia. *J Bone Miner Res.* 1991;6 Suppl 2:S51-59;discussion S61.
39. LeBlanc E, Chou R, Zakher B, Daeges M, Pappas M. Screening for Vitamin D Deficiency: Systematic Review for the US Preventive Services Task Force Recommendation. U.S. Preventive Services Task Force Evidence Syntheses, formerly Systematic Evidence Reviews. Rockville (MD)2014.
40. LeBlanc E, Zakher B, Daeges M, Pappas M, Chou R. Screening for vitamin D deficiency: a systematic review for the U.S. Preventive Services Task Force. *Ann Intern Med.* 2015;162(2):109-122.
41. Lee JH, O'Keefe JH, Bell D, Hensrud DD, Holick MF. Vitamin D deficiency an important, common, and easily treatable cardiovascular risk factor? *J Am Coll Cardiol.* 2008;52(24):1949-1956.
42. LeFevre ML, Force USPST. Screening for vitamin D deficiency in adults: U.S. Preventive Services Task Force recommendation statement. *Ann Intern Med.* 2015;162(2):133-140.
43. MacLean C, Alexander A, Carter J, et al. Comparative Effectiveness of Treatments To Prevent Fractures in Men and Women With Low Bone Density or Osteoporosis. AHRQ Comparative Effectiveness Reviews. Rockville (MD)2007.
44. MacLean C, Newberry S, Maglione M, McMahon M, Ranganath V, Suttrop M, et al. Systematic review: comparative effectiveness of treatments to prevent fractures in men and women with low bone density or osteoporosis. *Ann Intern Med.* 2008;148(3):197-213.
45. Moyer VA, Force USPST. Vitamin, mineral, and multivitamin supplements for the primary prevention of cardiovascular disease and cancer: U.S. Preventive services Task Force recommendation statement. *Ann Intern Med.* 2014;160(8):558-64.
46. Newberry. Vitamin D and Calcium: A Systematic Review of Health Outcomes (Update) 2014.

47. Orwoll ES. Clinical Practice Guidelines for Osteoporosis: Translating Data to Patients? *Ann Intern Med.* 2017;166(11):852-853.
48. Rosen CJ, Abrams SA, Aloia JF, et al. IOM committee members respond to Endocrine Society vitamin D guideline. *J Clin Endocrinol Metab.* 2012;97(4):1146-1152.
49. Silverberg SJ. Vitamin D deficiency and primary hyperparathyroidism. *J Bone Miner Res.* 2007;22 Suppl 2:V100-4.
50. Silverberg SJ, Clarke BL, Peacock M, et al. Current issues in the presentation of asymptomatic primary hyperparathyroidism: proceedings of the Fourth International Workshop. *J Clin Endocrinol Metab.* 2014;99(10):3580-3594.
51. Sotaniemi, EA, Hakkarainen, HK, Puranen, JA, Lahti, RO. Radiologic bone changes and hypocalcemia with anticonvulsant therapy in epilepsy. *Ann Intern Med.* 1972;77(3):389-394.
52. Wagner CL, Greer FR, and the Section on Breastfeeding and Committee on Nutrition. Prevention of Rickets and Vitamin D Deficiency in Infants, Children, and Adolescents. *Pediatrics.* 2008;122;1142-1152.
53. Ward KA, Das G, Berry JL, Roberts SA, Rawer R, Adams JE, Mughal Z. Vitamin D status and muscle function in post-menarchal adolescent girls. *J Clin Endocrinol Metab.* 2009 Feb;94(2):559-563.
54. Woolcott CG, Wilkens LR, Nomura AM et al. Plasma 25-hydroxyvitamin D levels and the risk of colorectal cancer: the multiethnic cohort study. *Cancer Epidemiol Biomarkers Prev.* 2010;19(1):130-134.
55. ABIM Foundation. Choosing Wisely (developed with the American Society of Clinical Pathology) Vitamin D tests- when you need them- and when you don't. Feb 2014, ChoosingWisely.org.
56. Other Contractor(s)' Policies.
57. Bazzano AN, Littrell L, Lambert S, Roi C. Factors associated with vitamin D status of low-income, hospitalized psychiatric patients: results of a retrospective study. *Neuropsychiatr Dis Treat.* 2016;12:2973-2980.
58. Dall'Ara F, Cutolo M, Andreoli L, Tincani A, Paolino S. Vitamin D and systemic lupus erythematosus: a review of immunological and clinical aspects. *Clin Exp Rheumatol.* 2017.
59. Falkiewicz K, Boratynska M, Speichert-Bidzinska B, et al. 1,25-dihydroxyvitamin D deficiency predicts poorer outcome after renal transplantation. *Transplant Proc.* 2009;41(8):3002-3005.
60. Karimzadeh H, Shirzadi M, Karimifar M. The effect of Vitamin D supplementation in disease activity of systemic lupus erythematosus patients with Vitamin D deficiency: A randomized clinical trial. *J Res Med Sci.* 2017;22:4.
61. Lima GL, Paupitz JA, Aikawa NE, Alvarenga JC, Pereira RMR. A randomized double-blind placebo-controlled trial of vitamin D supplementation in juvenile-onset systemic lupus erythematosus: positive effect on trabecular microarchitecture using HR-pQCT. *Osteoporos Int.* 2017.
62. Pereira-Santos M, Costa PR, Assis AM, Santos CA, Santos DB. Obesity and vitamin D deficiency: a systematic review and meta-analysis. *Obes Rev.* 2015;16(4):341-349.
63. Rossini M, Gatti D, Viapiana O, et al. Vitamin D and rheumatic diseases. *Reumatismo.* 2014;66(2):153-170.
64. Sahebari M, Nabavi N, Salehi M. Correlation between serum 25(OH)D values and lupus disease activity: an original article and a systematic review with meta-analysis focusing on serum VitD confounders. *Lupus.* 2014;23(11):1164-1177.
65. Sakthiswary R, Raymond AA. The clinical significance of vitamin D in systemic lupus erythematosus: a systematic review. *PLoS One.* 2013;8(1):e55275.
66. Salman-Monte TC, Torrente-Segarra V, Vega-Vidal AL, et al. Bone mineral density and vitamin D status in systemic lupus erythematosus (SLE): A systematic review. *Autoimmun Rev.* 2017;16(11):1155-1159.
67. Sousa JR, Rosa EPC, Nunes I, Carvalho C. Effect of vitamin D supplementation on patients with systemic lupus erythematosus: a systematic review. *Rev Bras Reumatol Engl Ed.* 2017;57(5):466-471.
68. Wilkins CH, Sheline YI, Roe CM, Birge SJ, Morris JC. Vitamin D deficiency is associated with low mood and worse cognitive performance in older adults. *Am J Geriatr Psychiatry.* 2006;14(12):1032-1040.
69. Herly M, Stengaard-Pedersen K, Vestergaard P et al. The D-vitamin metabolite 1,25(OH)(2) D in serum is associated with disease activity and Anti-Citrullinated Protein Antibodies in active and treatment naive, early Rheumatoid Arthritis Patients. *Scand J Immunol.* 2018 Sep;88(3):e12704.



70. Baker JF, Baker DG, Toedter G et al. Associations between vitamin D, disease activity, and clinical response to therapy in rheumatoid arthritis. *Clin Exp Rheumatol*. 2012 Sep-Oct;30(5):658-64.
71. Carrasco R, Lovell DJ, Giannini EH et al. Biochemical markers of bone turnover associated with calcium supplementation in children with juvenile rheumatoid arthritis: results of a double-blind, placebo-controlled intervention trial. *Arthritis Rheum*. 2008 Dec;58(12):3932-40.
72. Forsblad d'Elia H, Christgau S, Mattsson LA et al. Hormone replacement therapy, calcium and vitamin D3 versus calcium and vitamin D3 alone decreases markers of cartilage and bone metabolism in rheumatoid arthritis: a randomized controlled trial [ISRCTN46523456]. *Arthritis Res Ther*. 2004;6(5):R457-68.
73. ABIM 2017 "Choosing Wisely: Vitamin D tests: When you need them and when you don't." <https://www.choosingwisely.org/patient-resources/vitamin-d-tests>.
74. Nikiphorou E, Uksila J, Sokka T. A cross-sectional study of vitamin D levels in a large cohort of patients with rheumatic diseases. *Clin Rheumatol*. 2018 Mar;37(3):803-810.
75. Meena N, et al. Assessment of Vitamin D in Rheumatoid Arthritis and Its Correlation with Disease Activity. *J Nat Sci Biol Med*. 2018, Jan-Jun; 9 (1): 54-58.
76. Haque UJ, Bartlett SJ. Relationships among vitamin D, disease activity, pain and disability in rheumatoid arthritis. *Clin Exp Rheumatol*. 2010 Sep-Oct;28(5):745-7.
77. Guan Y, Hao Y, Guan Y, Bu H, Wang H. The Effect of Vitamin D Supplementation on Rheumatoid Arthritis Patients: A Systematic Review and Meta-Analysis. *Front Med (Lausanne)*. 2020 Oct 30; 7:596007.
78. Miler M, Nikolac Gabaj N, Grazio S, Vahtaric A, Vrtaric A, Grubišić F, Skala Kavanagh H, Doko Vajdic I, Vrkic N. Lower concentration of vitamin D is associated with lower DAS28 and VAS-pain scores in patients with inflammatory rheumatic diseases treated with infliximab: a pilot study. *Rheumatol Int*. 2020 Sep;40(9):1455-1461.
79. Mouterde G, Gamon E, Rincheval N, Lukas C, Seror R, Berenbaum F, Dupuy AM, Daien C, Daurès JP, Combe B. Association Between Vitamin D Deficiency and Disease Activity, Disability, and Radiographic Progression in Early Rheumatoid Arthritis: The ESPOIR Cohort. *J Rheumatol*. 2020 Nov 1;47(11):1624-1628. doi: 10.3899/jrheum.190795.

## Endnotes

---

<sup>1</sup> Based on Local Coverage Determination (LCD): Vitamin D Assay Testing (L37535)