

Vitamin D Testing

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Developed By: Medical Necessity Criteria Committee

I. Description

Vitamin D (also referred to as calciferol) is a fat-soluble vitamin that is essential to calcium absorption, bone growth and remodeling, reduction of inflammation, and modulation of such processes as cell growth, neuromuscular and immune function, and glucose metabolism.

II. Submission of Documentation

Diagnosis information must be submitted on the claim to determine if the policy criteria are met. Moda's review and decision outcome may be impacted if diagnosis information is not provided.

III. Criteria

- A. 25-hydroxyvitamin D [25(OH)D], calcidiol, serum testing and 1,25-dihydroxyvitamin D [1,25(OH)2D] calcitriol, serum testing may be considered medically necessary in patients with a clinically documented underlying disease or condition which is specifically associated with vitamin D deficiency, decreased bone density, or defects in vitamin D metabolism as listed in Appendix 1
- B. 25(OH)D serum testing and 1,25(OH)2D serum testing are not considered medically necessary unless there is clinical documentation of an underlying disease or condition specifically associated with vitamin D deficiency, decreased bone density, or defects in vitamin D metabolism as listed in Appendix 1

IV. CPT or HCPC codes covered:

Codes	Description
0038U	Vitamin D, 25 hydroxy D2 and D3, by LCMS/MS, serum microsample, quantitative
82306	Vitamin D, 25 hydroxy, includes fraction(s), if performed
82652	Vitamin D, 1,25 dihydroxy, includes fraction(s), if performed

V. CPT or HCPC codes NOT covered:

Codes	Description

V. Annual Review History

Review Date	Revisions	Effective Date
5/22/2024	New Policy created	6/1/2024
8/7/2024	Added diagnosis codes	
1/16/2025	Additional diagnosis codes listed	

VI. Evidence

Some diseases are understood to be caused by or worsened by vitamin D deficiency. These disorders, such as rickets, osteomalacia, and osteoporosis, are generally correlated with bone health. Moreover, vitamin D deficiencies may be caused by sarcoidosis, malabsorption disorders, and chronic kidney disease. There is agreement amongst the medical community that vitamin D testing and treatment are appropriate when these specific conditions (see Appendix) directly cause or result in vitamin deficiency. Vitamin D testing and treatment are thought to be appropriate when a causal relationship is identified between vitamin D deficiency and a specific condition. Although evidence of the correlation between Vitamin D testing and these specific conditions (see Appendix) is limited, assessment of serum levels in patients with these conditions is widely accepted and has become the standard of care.

While there exists research indicating that vitamin D promotes bone growth and maintenance, there is uncertainty regarding the utility of 1) testing asymptomatic populations or 2) testing for conditions not directly associated with bone health or deficiencies in vitamin D metabolism. Clinical studies and trials demonstrate a lack of evidence regarding the effects of vitamin D testing on treatment decisions and health outcomes. Moreover, review in this regard indicates a lack of evidence-based clinical practice guidelines that recommend routine vitamin D testing or screening. For instance, the United States Preventive Services Task Force guidelines do not recommend routine screening as a preventive health measure. As such, vitamin D testing is not considered medically necessary in the absence of conditions associated with vitamin D deficiency, decreased bone density, or defects in vitamin D metabolism.

VI. References

“Better Health for Oregonians: Opportunities to Reduce Low-Value Care”. OHA Transformation Center Webinar, October 2020

“Billing and Coding: Vitamin D Assay Testing.” CMS.Gov Centers for Medicare & Medicaid Services, Centers for Medicare and Medicaid Services, <https://www.cms.gov/medicare-coverage-database/view/article.aspx?articleId=57473>

Don’t perform population-based screening for 25-OH-vitamin D deficiency. Retrieved from <https://www.aafp.org/pubs/afp/collections/choosing-wisely/67.html>

Institute of Medicine, Food and Nutrition Board. Dietary Reference Intakes for Calcium and Vitamin D. Washington, DC: National Academy Press, 2010.

Jones G. Vitamin D. In: Ross AC, Caballero B, Cousins RJ, Tucker KL, Ziegler TR, eds. Modern Nutrition in Health and Disease, 11th ed. Philadelphia: Lippincott Williams & Wilkins, 2014.

Norman AW, Henry HH. Vitamin D. In: Erdman JW, Macdonald IA, Zeisel SH, eds. Present Knowledge in Nutrition, 10th ed. Washington DC: Wiley-Blackwell, 2012.

Oregon health Leadership Council. Vitamin D Testing Clinical Guidelines November 2019. Retrieved from <https://ohlc.org/wp-content/uploads/2021/09/Vitamin-D-Testing-Guideline-Final-with-BPC-update.pdf>

Robert Ferrari MD; Connie Prosser PhD July 2016 research letter: Testing Vitamin D Levels and Choosing Wisely. Retrieved from <https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2522394>

“Summary of recommendations for clinical preventive services.” *American Academy of Family Physicians (AAFP)*, July 2017, https://www.aafp.org/dam/AAFP/documents/patient_care/clinical_recommendations/cps-recommendations.pdf.

“Vitamin D: Fact Sheet for Health Professionals.” *National Institutes of Health*, U.S. Department of Health and Human Services, <https://ods.od.nih.gov/factsheets/VitaminD-HealthProfessional/>

“Vitamin D Deficiency in Adults: Screening.” *United States Preventive Services Taskforce*, 13 Apr. 2021, www.uspreventiveservicestaskforce.org/uspstf/recommendation/vitamin-d-deficiency-screening#:~:text=What%20does%20the%20USPSTF%20recommend,More%20research%20is%20needed

“Vitamin D Screening and Testing: A Health Technology Assessment Prepared for Washington State Health Care Authority. Final Report.” *Hayes Inc.*, 16 Nov. 2012, [https://www.hca.wa.gov/assets/program/vitd_finalrpt_111612\[1\].pd](https://www.hca.wa.gov/assets/program/vitd_finalrpt_111612[1].pd)

Appendix 1 – Applicable Diagnosis Codes:

Diagnosis Codes	Description
A15.0 - A19.9	Tuberculosis
A28.1	Cat scratch disease
A30.0 - A30.9	Leprosy
A32.9	Listeriosis, unspecified [<i>listeria monocytogenes</i>]
B20	Human immunodeficiency virus [HIV] disease
B38.0 - B38.9	Coccidiomycosis
B39.0 - B39.9	Histoplasmosis
B45.0 - B45.9	Cryptococcosis
B59	Pneumocystosis
B65.0 - B65.9	Schistosomiasis
C73	Malignant neoplasm of thyroid gland
D71	Functional disorders of polymorphonuclear neutrophils
D86.0 - D86.9	Sarcoidosis
E04.1	Nontoxic single thyroid nodule
E04.9	Nontoxic goiter, unspecified
E05.00 - E05.91	Thyrotoxicosis [hyperthyroidism]
E20.0 - E21.5	Hypoparathyroidism
E41	Nutritional marasmus
E43	Unspecified severe protein-calorie malnutrition
E55.0 - E55.9	Vitamin D deficiency
E64.3	Sequelae of rickets
E66.01 - E66.9	Overweight and obesity [bariatric surgery]
E67.3	Hypervitaminosis D
E72.0 - E72.09	Disorders of amino-acid transport, unspecified
E74.21	Galactosemia
E83.30 - E83.39	Disorder of phosphorus metabolism
E83.50 - E83.59	Disorder of calcium metabolism
E84.0 - E84.9	Cystic fibrosis
E85.0 - E85.9	Amyloidosis
E89.2	Postprocedural hypoparathyroidism
G40.001 - G40.919	Epilepsy and recurrent seizures

I00 - I01.9	Rheumatic fever without/with heart involvement
J63.2	Berylliosis
K50.00 - K51.919	Crohn's disease and ulcerative colitis
K51.00 - K51.919	Inflammatory bowel disease
K72.00 - K72.91	Hepatic failure
K74.3 - K74.5	Biliary cirrhosis
K74.60 - K74.69	Other and unspecified cirrhosis of liver
K83.1 - K83.9	Other diseases of biliary tract
K86.0 - K86.9	Pancreatitis
K90.0 - K90.9	Intestinal malabsorption
K90.81	Whipple's disease
K91.2	Postsurgical malabsorption, not elsewhere classified
K91.82	Postprocedural hepatic failure
L92.0 - L92.9	Granulomatous disorders of skin and subcutaneous tissue
M05.00 - M06.9	Rheumatoid arthritis
M80.00 - M81.8	Osteoporosis
M83.0 - M83.9	Adult osteomalacia
M85.80 - M85.9	Other specified disorders of bone density and structure
N04.0 - N04.9	Nephrotic syndrome
N18.1 - N18.9	Chronic kidney disease (CKD)
N20.0 - N22	Calculus of kidney and ureter
N25.0	Renal osteodystrophy
N25.81	Secondary hyperparathyroidism of renal origin
P71.0 - P71.9	Transitory neonatal disorders of metabolism
Q78.0	Osteogenesis imperfecta
Q78.2	Osteopetrosis
R17	Unspecified jaundice
Z21	Asymptomatic human immunodeficiency virus [HIV]
Z68.35 - Z68.45	BMI 35.0 or greater, adult [bariatric surgery]
Z79.51 - Z79.52	Long term (current) use of steroids [glucocorticoids]
Z79.899	Other long term (current) drug therapy
Z94.0 - Z94.9	Transplanted organ and tissue status
Z98	Bariatric surgery

Diagnosis Codes	Description
E08.21	Diabetes due to underlying condition w diabetic nephropathy
E08.22	Diabetes due to undrl cond w diabetic chronic kidney disease
E08.29	Diabetes due to undrl condition w oth diabetic kidney comp
E09.21	Drug/chem diabetes mellitus w diabetic nephropathy
E09.22	Drug/chem diabetes w diabetic chronic kidney disease
E09.29	Drug/chem diabetes w oth diabetic kidney complication
E10.21	Type 1 diabetes mellitus with diabetic nephropathy
E10.22	Type 1 diabetes mellitus w diabetic chronic kidney disease

E10.29	Type 1 diabetes mellitus w oth diabetic kidney complication
E11.21	Type 2 diabetes mellitus with diabetic nephropathy
E11.22	Type 2 diabetes mellitus w diabetic chronic kidney disease
E11.29	Type 2 diabetes mellitus w oth diabetic kidney complication
E13.21	Other specified diabetes mellitus with diabetic nephropathy
E13.22	Oth diabetes mellitus with diabetic chronic kidney disease
E13.29	Oth diabetes mellitus with oth diabetic kidney complication
M32.14	Glomerular disease in systemic lupus erythematosus
M32.15	Tubulo-interstitial neuropath in sys lupus erythematosus
M35.04	Sicca syndrome with tubulo-interstitial nephropathy
M35.0A	SJOGREN SYNDROME WITH GLOMERULAR DISEASE
N05.0	Unsp nephritic syndrome with minor glomerular abnormality
N05.1	Unsp neph syndrome w focal and segmental glomerular lesions
N18.5	Chronic kidney disease, stage 5
N18.6	End stage renal disease

Diagnosis Codes	Description
E83.00	Disorder of copper metabolism, unspecified
E83.01	Wilson's disease
E83.09	Other disorders of copper metabolism
E83.1	Disorders of iron metabolism
E83.10	Disorder of iron metabolism, unspecified
E83.110	Hereditary hemochromatosis
E83.111	Hemochromatosis due to repeated red blood cell transfusions
E83.118	Other hemochromatosis
E83.119	Hemochromatosis, unspecified
E83.19	Other disorders of iron metabolism
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
E83.4	Disorders of magnesium metabolism
E83.40	Disorders of magnesium metabolism, unspecified
E83.41	Hypermagnesemia
E83.42	Hypomagnesemia
E83.49	Other disorders of magnesium metabolism
E83.89	Other disorders of mineral metabolism

Diagnosis codes	Description
D35.1	Benign neoplasm of parathyroid gland
D44.2	Neoplasm of uncertain behavior of parathyroid gland
E20.0	Idiopathic hypoparathyroidism

E20.1	Pseudohypoparathyroidism
E20.9	Hypoparathyroidism, unspecified
E21.0	Primary hyperparathyroidism
E21.1	Secondary hyperparathyroidism, not elsewhere classified
E21.2	Other hyperparathyroidism
E21.3	Hyperparathyroidism, unspecified
E21.4	Other specified disorders of parathyroid gland
E21.5	Disorder of parathyroid gland, unspecified
E83.50	Unspecified disorder of calcium metabolism
E83.51	Hypocalcemia
E83.52	Hypercalcemia
E83.59	Other disorders of calcium metabolism
E83.8	Other disorders of mineral metabolism
E83.81	Hungry bone syndrome
E89.2	Postprocedural hypoparathyroidism
N25.81	Secondary hyperparathyroidism of renal origin
R82.994	HYPERCALCIURIA

Diagnosis Codes	Description
M81.0	Age-related osteoporosis w/o 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
M88.0	Osteitis deformans of skull
M88.1	Osteitis deformans of vertebrae
M88.811	Osteitis deformans of right shoulder
M88.812	Osteitis deformans of left shoulder
M88.819	Osteitis deformans of unspecified shoulder
M88.82	Osteitis deformans of upper arm
M88.821	Osteitis deformans of right upper arm
M88.822	Osteitis deformans of left upper arm
M88.829	Osteitis deformans of unspecified upper arm
M88.83	Osteitis deformans of forearm
M88.831	Osteitis deformans of right forearm
M88.832	Osteitis deformans of left forearm
M88.839	Osteitis deformans of unspecified forearm
M88.84	Osteitis deformans of hand
M88.841	Osteitis deformans of right hand

M88.842	Osteitis deformans of left hand
M88.849	Osteitis deformans of unspecified hand
M88.85	Osteitis deformans of thigh
M88.851	Osteitis deformans of right thigh
M88.852	Osteitis deformans of left thigh
M88.859	Osteitis deformans of unspecified thigh
M88.86	Osteitis deformans of lower leg
M88.861	Osteitis deformans of right lower leg
M88.862	Osteitis deformans of left lower leg
M88.869	Osteitis deformans of unspecified lower leg
M88.87	Osteitis deformans of ankle and foot
M88.871	Osteitis deformans of right ankle and foot
M88.872	Osteitis deformans of left ankle and foot
M88.879	Osteitis deformans of unspecified ankle and foot
M88.88	Osteitis deformans of other bones
M88.89	Osteitis deformans of multiple sites
M88.9	Osteitis deformans of unspecified bone
M90.611	Osteitis deformans in neoplastic diseases, right shoulder
M90.612	Osteitis deformans in neoplastic diseases, left shoulder
M90.619	Osteitis deformans in neoplastic diseases, unsp shoulder
M90.62	Osteitis deformans in neoplastic diseases, upper arm
M90.621	Osteitis deformans in neoplastic diseases, right upper arm
M90.622	Osteitis deformans in neoplastic diseases, left upper arm
M90.629	Osteitis deformans in neoplastic diseases, unsp upper arm
M90.63	Osteitis deformans in neoplastic diseases, forearm
M90.631	Osteitis deformans in neoplastic diseases, right forearm
M90.632	Osteitis deformans in neoplastic diseases, left forearm
M90.639	Osteitis deformans in neoplastic diseases, unsp forearm
M90.64	Osteitis deformans in neoplastic diseases, hand
M90.641	Osteitis deformans in neoplastic diseases, right hand
M90.642	Osteitis deformans in neoplastic diseases, left hand
M90.649	Osteitis deformans in neoplastic diseases, unspecified hand
M90.65	Osteitis deformans in neoplastic diseases, thigh
M90.651	Osteitis deformans in neoplastic diseases, right thigh
M90.652	Osteitis deformans in neoplastic diseases, left thigh
M90.659	Osteitis deformans in neoplastic diseases, unspecified thigh
M90.66	Osteitis deformans in neoplastic diseases, lower leg
M90.661	Osteitis deformans in neoplastic diseases, right lower leg
M90.662	Osteitis deformans in neoplastic diseases, left lower leg
M90.669	Osteitis deformans in neoplastic diseases, unsp lower leg
M90.67	Osteitis deformans in neoplastic diseases, ankle and foot
M90.671	Osteitis deformans in neoplastic diseases, right ank/ft
M90.672	Osteitis deformans in neoplastic diseases, left ank/ft
M90.679	Osteitis deformans in neoplastic diseases, unsp ank/ft
M90.68	Osteitis deformans in neoplastic diseases, other site
M90.69	Osteitis deformans in neoplastic diseases, multiple sites

Diagnosis Codes	Description
N20.0	Calculus of kidney
N20.1	Calculus of ureter
N20.2	Calculus of kidney with calculus of ureter
N20.9	Urinary calculus, unspecified
N21.0	Calculus in bladder
N21.1	Calculus in urethra
N21.8	Other lower urinary tract calculus
N21.9	Calculus of lower urinary tract, unspecified
N22	Calculus of urinary tract in diseases classified elsewhere
R82.994	HYPERCALCIURIA

Appendix 2 – Centers for Medicare and Medicaid Services (CMS)

Medicare coverage for outpatient (Part B) drugs is outlined in the Medicare Benefit Policy Manual (Pub. 100-2), Chapter 15, §50 Drugs and Biologicals. In addition, National Coverage Determination (NCD) and Local Coverage Determinations (LCDs) may exist and compliance with these policies is required where applicable. They can be found at: <http://www.cms.gov/medicare-coverage-database/search/advanced-search.aspx>. Additional indications may be covered at the discretion of the health plan.

Medicare Part B Covered Diagnosis Codes (applicable to existing NCD/LCD):

Jurisdiction(s): 5, 8	NCD/LCD Document (s):

NCD/LCD Document (s):

Medicare Part B Administrative Contractor (MAC) Jurisdictions		
Jurisdiction	Applicable State/US Territory	Contractor
F (2 & 3)	AK, WA, OR, ID, ND, SD, MT, WY, UT, AZ	Noridian Healthcare Solutions, LLC