

# Medical Policy Vitamin D Screening and Testing in Adults

Policy Number: 058

	Commercial and Qualified Health Plans	MassHealth	Medicare Advantage
Authorization required			
No Prior Authorization	Х	Х	Х

#### Overview

The purpose of this document is to describe the guidelines Mass General Brigham Health Plan utilizes to determine medical appropriateness for Vitamin D screening and testing in adult members.

Mass General Brigham Health Plan considers routine Vitamin D screening and testing in healthy, asymptomatic adult members (noted by the absence of one of the conditions listed below), investigational and therefore not medically necessary.

## **Coverage Guidelines**

Vitamin D levels 25-hydroxyvitamin D [25(OH)D] serum screening and testing may be considered medically necessary in adult members with a clinically documented underlying disease or condition which is specifically associated with Vitamin D deficiency and for conditions associated with deficits in Vitamin D metabolism.

**Note:** Once screening has demonstrated that the adult member is vitamin D deficient, further testing may be medically necessary after three to four months of initiation or adjustment of therapy and only to ensure adequate replacement has been accomplished. Thereafter, annual testing may be appropriate depending upon the indication and other mitigating factors. It is not medically necessary to perform multiple Vitamin D screening tests at the same encounter or on the same date of service.

## **Medicare Variation**

Mass General Brigham Health Plan uses guidance from the Centers for Medicare and Medicaid Services (CMS) for coverage determinations for its Medicare Advantage plan members. National Coverage Determinations (NCDs), Local Coverage Determinations (LCDs), Local Coverage Articles (LCAs) and documentation included in the Medicare manuals are the basis for coverage determinations. When there is no guidance from CMS for the requested service, Mass General Brigham Health Plan's medical policies are used for coverage determinations. At the time of Mass General Brigham Health Plan's most recent policy review, Medicare has the following:

- LCD: Vitamin D Assay Testing (L37535)
- LCD: Vitamin D Assay Testing (L33996)
- LCD: Vitamin D Assay Testing (L34051)
- LCD: Vitamin D Assay Testing (L36692)
- LCD: Vitamin D Assay Testing (L39391)
- LCD: Vitamin D Assay Testing (L34658)
- LCD: Vitamin D; 25 hydroxy, includes fraction(s), if performed (L33771)

## **MassHealth Variation**

Mass General Brigham Health Plan uses guidance from MassHealth for coverage determinations for its MassHealth ACO members. At the time of Mass General Brigham Health Plan's most recent policy review, MassHealth had no medical necessity guidelines for Vitamin D screening or testing.



# Codes

The following codes are included below for informational purposes only. Inclusion of a code does not constitute or imply coverage or reimbursement.

Authorized CPT/HCPCS Codes	Code Description
82306	Vitamin D; 25 hydroxy, includes fraction(s), if performed
82652	Dihydroxyvitamin D, 1, 25 dihydroxy, includes fraction(s), if performed

#### This list of codes applies to commercial and MassHealth plans only.

Authorized ICD-10 Diagnosis Codes	Code Description	
A15.X – A19.X	Tuberculosis	
A58	GRANULOMA INGUINALE	
B20	Human immunodeficiency virus (HIV)	
B38.X	Coccidioidomycosis	
B39.X	Histoplasmosis	
B90.X	Sequelae of tuberculosis	
C22.X	Malignant neoplasm of liver and intrahepatic bile ducts	
C23	Malignant neoplasm of gallbladder	
C24.X	Malignant neoplasm of other and unspecified parts of biliary	
	tract	
C25.X	Malignant neoplasm of pancreas	
C26.X	Malignant neoplasm of other and ill-defined digestive organs	
C81.X	Hodgkin lymphoma	
C82.X	Follicular lymphoma	
C83.X	Non-follicular lymphoma	
C85.X	Other and unspecified types of non-Hodgkin lymphoma	
C88.X	Malignant immunoproliferative disease and certain other B-cell	
	lymphomas	
C91.0X	Acute lymphoblastic leukemia [ALL]	
C91.1X	Chronic lymphocytic leukemia of B-cell type	
C91.3X	Prolymphocytic leukemia of B-cell type	
C91.4X	Hairy cell leukemia	
C91.9X	Lymphoid leukemia, unspecified	
C91.AX	Mature B-cell leukemia Burkitt-type	
C91.ZX	Other lymphoid leukemia	
D63.1	Anemia in chronic kidney disease	
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
D86.X	SARCOIDOSIS
D89.81X	Graft-versus-host disease
E08.22	Diabetes due to underlying condition with diabetic chronic kidney disease
E09.22	Drug or chemical induced diabetes mellitus with diabetic chronic kidney disease
E10.22	Type 1 diabetes mellitus with diabetic chronic kidney disease
E11.22	Type 2 diabetes mellitus with diabetic chronic kidney disease
E13.22	Other diabetes mellitus with diabetic chronic kidney disease
E20.X	HYPOPARATHYROIDISM
E21.X	HYPERPARATHYROIDISM
E24.X	Cushing's syndrome
E41	Nutritional marasmus
E43	Unspecified severe protein-calorie malnutrition
E44.0	Moderate protein-calorie malnutrition
E44.1	Mild protein-calorie malnutrition
E46	Unspecified protein-calorie malnutrition
E55.0	RICKETS ACTIVE
E55.9	VITAMIN D DEFICIENCY UNSPECIFIED
E64.3	SEQUELAE OF RICKETS
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 W/ALVEOLAR HYPOVENTILATION
E66.8X	OTHER OBESITY
E66.9	OBESITY UNSPECIFIED
E67.3	HYPERVITAMINOSIS D
E67.8	Other specified hyperalimentation
E68	Sequelae of hyperalimentation
E72.04	CYSTINOSIS
E72.09	OTHER DISORDERS OF AMINO-ACID TRANSPORT
E83.3X	DISORDER OF PHOSPHORUS METABOLISM
E83.5X	DISORDER OF CALCIUM METABOLISM
E83.81	HUNGRY BONE SYNDROME
E84.X	Cystic fibrosis
E88.A	Wasting disease (syndrome) due to underlying condition
E89.2	Postprocedural hypoparathyroidism



E89.82X	Postprocedural hematoma or seroma of an endocrine system
	organ or structure following procedure
F50.X	Eating disorders
G40.X	Epilepsy and recurrent seizures
112.0	HYPERTENSIVE CKD W/STAGE 5 CKD OR ESRD
113.2	HTN HEART & CKD W/HF W/STAGE 5 CKD OR ESRD
J63.2	Berylliosis
J65	Pneumoconiosis associated with tuberculosis
K50.X	Crohn's disease
K51.X	Ulcerative colitis
К52.0	Gastroenteritis and colitis due to radiation
К70.2	Alcoholic fibrosis and sclerosis of liver
K70.3X	Alcoholic cirrhosis of liver
K70.4X	Alcoholic hepatic failure
К71.3	TOXIC LIVER DISEASE W/CHRONIC PERSISTENT HEP
К71.4	TOXIC LIVER DISEASE W/CHRONIC LOBULAR HEPATITIS
К71.50	TOXIC LIVER DISEASE W/CHRON ACTV HEP W/O ASCITES
K71.51	TOXIC LIVER DISEASE W/CHRON ACTV HEP W/ASCITES
К71.8	TOXIC LIVER DISEASE WITH OTHER DISORDERS LIVER
К74.Х	HEPATIC FIBROSIS
К75.3	GRANULOMATOUS HEPATITIS NOT ELSEWHERE CLASSIFIED
К76.9	Liver disease, unspecified
К82.0	Obstruction of gallbladder
К82.8	Other specified diseases of gallbladder
К82.9	Disease of gallbladder, unspecified
K83.X	Other diseases of biliary tract
K85.X	Acute pancreatitis
К86.0	Alcohol-induced chronic pancreatitis
K86.1	Other chronic pancreatitis
К86.2	Cyst of pancreas
К86.3	Pseudocyst of pancreas
K86.8X	Other specified diseases of pancreas
К87	Disorders of gallbladder, biliary tract and pancreas in diseases
	classified elsewhere
К90.Х	Intestinal malabsorption
К91.2	POSTSURGICAL MALABSORPTION NEC
K95.X	Complications of bariatric procedures
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
L57.5	ACTINIC GRANULOMA
L90.0	Lichen sclerosus et atrophicus
L92.0	GRANULOMA ANNULARE
L92.3	FB GRANULOMA THE SKIN & SUBCUTANEOUS TISSUE
L92.8	OTH GRANULOMATOUS D/O THE SKIN & SUBQ TISSUE
L92.9	GRANULOMATOUS DISORDER THE SKIN & SUBQ TISS UNS
L94.0	Localized scleroderma [morphea]
L94.1	Linear scleroderma
L94.3	Sclerodactyly
L98.0	PYOGENIC GRANULOMA
M05.X	Rheumatoid Arthritis With Rheumatoid Factor
M06.X	Other Rheumatoid Arthritis
M07.6X	Enteropathic Arthropathies
M08.0X	Unspecified Juvenile Rheumatoid Arthritis
M08.1	Juvenile Ankylosing Spondylitis
M08.2X	Juvenile Rheumatoid Arthritis With Systemic Onset
M08.3	Juvenile Rheumatoid Polyarthritis (Seronegative)
M08.4X	Pauciarticular Juvenile Rheumatoid Arthritis
M08.8X	Other Juvenile Arthritis
M08.9X	Juvenile Arthritis, Unspecified
M27.1	GIANT CELL GRANULOMA CENTRAL
M31.2	LETHAL MIDLINE GRANULOMA
M31.31	WEGENERS GRANULOMATOSIS WITH RENAL INVOLVEMENT
M32.X	Systemic lupus erythematosus (SLE)
M33.X	Dermatopolymyositis
M62.3	Immobility syndrome (paraplegic)
M80.X	Osteoporosis with current pathological fracture
M81.X	OSTEOPOROSIS W/O CURRNT PATH FX
M83.X	Adult OSTEOMALACIA
M85.8X	OTH SPEC D/O BONE DENSITY STRUCTURE
M88.X	Osteitis deformans [Paget's disease of bone]
M89.9	DISORDER OF BONE UNSPECIFIED
N18.X	CHRONIC KIDNEY DISEASE
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 URINARY TRACT IN DISEASES CLASS ELSW	
N25.81	Secondary hyperparathyroidism of renal origin	
N41.4	GRANULOMATOUS PROSTATITIS	
P71.0	COW'S MILK HYPOCALCEMIA IN NEWBORN	
P71.1	OTHER NEONATAL HYPOCALCEMIA	
P71.2	NEONATAL HYPOMAGNESEMIA	
P71.8	OTH TRANSITORY NEONATAL D/O CALCM & MG METAB	
P71.9	TRANSITORY NEONAT DISORDER CALCM & MG METAB UNS	
Q78.0	OSTEOGENESIS IMPERFECTA	
Q78.2	OSTEOPETROSIS	
R63.0	Anorexia	
R63.3X	Feeding difficulties	
T30.X	Burn and corrosion, body region unspecified	
T31.X	Burns classified according to extent of body surface involved	
Z68.3X	BODY MASS INDEX BMI 30.0 OR GREATER ADULT	
Z72.4	Inappropriate diet and eating habits	
Z79.3	Long term (current) use of hormonal contraceptives	
Z79.4	Long term (current) use of insulin	
Z79.5X	Long term (current) use of steroids	
Z79.810	Long term (current) use of selective estrogen receptor modulators (SERMs)	
Z79.811	Long term (current) use of aromatase inhibitors	
279.818	Long term (current) use of other agents affecting estrogen	
273.010	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	
Z85.7X	Personal history of other malignant neoplasms of lymphoid,	
	hematopoietic & related tissues	
Z86.11	Personal history of tuberculosis	
Z86.15	Personal history of latent tuberculosis infection	
287.310	Personal history of (healed) osteoporosis fracture	
Z90.3	Acquired absence of stomach [part of]	
Z92.24X	Personal history of steroid therapy	
Z98.0	INTESTINAL BYPASS AND ANASTOMOSIS STATUS	



Z98.84 BARIATRIC SURGERY STATUS	
---------------------------------	--

## Effective

May 2025: Ad hoc update. Removed two tables that listed conditions appropriate for Vitamin D testing. ICD-10 Diagnosis code table updated. Clarified that conducting multiple Vitamin D screening tests in one day is not medically necessary. References updated.

December 2024: Annual update. Added MassHealth Variation. Added LCDs to Medicare Variation. Added ICD-10 Diagnosis code table to clarify coverage.

December 2023: Annual update. Medicare Advantage added to table on page 1. Medicare variation language added. References updated.

April 2022: Annual update.

December 2020: Annual update. References updated.

December 2019: Annual update. References updated.

December 2018: Annual update.

September 6, 2017: Effective date.

## References

ACOG Committee on Clinical Practice Guidelines–Gynecology. Management of Postmenopausal Osteoporosis: ACOG Clinical Practice Guideline No. 2. Obstet Gynecol. 2022 Apr 1;139(4):698-717. doi: 10.1097/AOG.000000000004730. Erratum in: Obstet Gynecol. 2022 Jul 01;140(1):138. doi: 10.1097/AOG.000000000004855. PMID: 35594133.

ACOG Committee on Obstetric Practice. ACOG Committee Opinion No. 495: Vitamin D: screening and supplementation during pregnancy. Obstet Gynecol. 2011;118(1):197–198.Reaffirmed 2017. Accessed 2019

Crouser ED, Maier LA, Wilson KC, et al. Diagnosis and Detection of Sarcoidosis. An Official American Thoracic Society Clinical Practice Guideline. Am J Respir Crit Care Med. 2020 Apr 15;201(8):e26-e51. doi: 10.1164/rccm.202002-0251ST. PMID: 32293205; PMCID: PMC7159433.

Demay MB, Pittas AG, Bikle DD, et al. Vitamin D for the Prevention of Disease: An Endocrine Society Clinical Practice Guideline. J Clin Endocrinol Metab. 2024 Jul 12;109(8):1907-1947. doi: 10.1210/clinem/dgae290. Erratum in: J Clin Endocrinol Metab. 2024 Dec 16:dgae854. doi: 10.1210/clinem/dgae854. PMID: 38828931.

Dawson-Hughes B. Vitamin D deficiency in adults: Definition, clinical manifestations, and treatment. In: UpToDate, Drezner MC, Rosen CJ (Eds), UpToDate, Waltham, MA. Literature review current through Feb 2019. Topic last updated Feb 08, 2019. Accessed November 2019.

Granado-Lorencio, F, Blanco-Navarro, I, and Perez-Sacristan, B. Criteria of adequacy for vitamin D testing and prevalence of deficiency in clinical practice. *Clin Chem Lab Med* 2016;54(5)

Giustina A, Adler RA, Binkley N, et al. Controversies in Vitamin D: Summary Statement From an International Conference. J Clin Endocrinol Metab 2019;104:234

Hashash JG, Elkins J, Lewis JD, et al. AGA Clinical Practice Update on Diet and Nutritional Therapies in Patients With Inflammatory Bowel Disease: Expert Review. Gastroenterology. 2024 Mar;166(3):521-532. doi: 10.1053/j.gastro.2023.11.303. Epub 2024 Jan 23. PMID: 38276922.

Hayes, Inc. Vitamin D Screening and Testing. A Health Technology Assessment Prepared for Washington State Health Care Authority. Final Report - November 16, 2012.

Institute of Medicine (US) Committee to Review Dietary Reference Intakes for Vitamin D and Calcium; Ross AC, Taylor CL, Yaktine AL, et al., editors. Washington (DC): National Academies Press (US); 2011



Kahwati LC, LeBlanc E, Weber RP, et. al. Screening for Vitamin D Deficiency in Adults: Updated Evidence Report and Systematic Review for the US Preventive Services Task Force. JAMA. 2021 Apr 13;325(14):1443-1463.

LeBlanc E, Chou R, Zakher B, et al. Screening for Vitamin D Deficiency: Systematic Review for the U.S. Preventive Services Task Force Recommendation. Evidence Synthesis No. 119. AHRQ Publication No. 13-05183-EF-1. Rockville, MD: Agency for Healthcare Research and Quality; 2014.

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*. [Epub ahead of print 25 Nov 2014]

Lee, J, So, T, Thackray, J. A Review on Vitamin D Deficiency Treatment in Pediatric Patients. *J Pediatr Pharmacol Ther*. 2013 Oct-Dec; 18(4): 277–291.

Manson JE, Cook NR, Lee IM, Christen W, Bassuk SS, VITAL Research Group, et al. Vitamin D Supplements and Prevention of Cancer and Cardiovascular Disease. *N Engl J Med.* 2019 Jan 3;380(1):33-44. Epub 2018 Nov 10.

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

National Government Services. Local Coverage Determination (LCD): Vitamin D Assay Testing (L37535). Revision Effective Date: 10/01/21. Available: Medical Policies - NGSMEDICARE

National Institute of Health. Office of Dietary Supplements. Health Information. Fact Sheet for Health Professionals. Vitamin D. August 7, 2019.

National Institutes of Health, Office of Dietary Supplements. Vitamin D Standardization Program. Bethesda, MD: National Institutes of Health; 2014. Accessed at <a href="http://ods.od.nih.gov/Research/vdsp.aspx">http://ods.od.nih.gov/Research/vdsp.aspx</a>

National Institutes of Health. Vitamin D: Fact Sheet for Health Professionals. Bethesda, MD: National Institutes of Health; 2011. Accessed at <u>http://ods.od.nih.gov/factsheets/VitaminD-HealthProfessional</u>

National Osteoporosis Foundation. Clinician's Guide to Prevention and Treatment of Osteoporosis. Washington, DC: National Osteoporosis Foundation; 2014.

Newberry SJ, Chung M, Shekelle PG, Booth MS, Liu JL, Maher AR, et al. Vitamin D and Calcium: A Systematic Review of Health Outcomes (Update). Evidence Report/Technology Assessment No. 217. AHRQ Publication No. 14-E004-EF. Rockville, MD: Agency for Healthcare Research and Quality; 2014.

Taylor CL, Carriquiry AL, Bailey RL, Sempos CT, Yetley EA. Appropriateness of the probability approach with a nutrient status biomarker to assess population inadequacy: a study using vitamin D. *Am J Clin Nutr*. 2013;97:72-8.

US Preventive Services Task Force; Krist AH., Davidson KW., Mangione CM., et. al. Screening for Vitamin D Deficiency in Adults: US Preventive Services Task Force Recommendation Statement. *JAMA*. 2021 Apr 13;325(14):1436-1442. doi: 10.1001/jama.2021.3069. PMID: 33847711.

