

Vitamin D Testing

Date of Origin: 5/1/2024

Last Review Date: 5/22/2024

Effective Date: 6/1/2024

Dates Reviewed: 5/2024

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. OHSU HS'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. Annual Review History

| Review Date | Revisions | Effective Date |
|-------------|--------------------|----------------|
| 5/22/2024 | New Policy created | 6/1/2024 |
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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.

VII. References

“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>

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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.

“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:

| Codes | Description |
|-----------------|---|
| A15.0 - A19.9 | Tuberculosis |
| A28.1 | Cat scratch disease |
| A30.0 - A30.9 | Leprosy |
| A32.9 | Listeriosis, unspecified [listeria monocytogenes] |
| 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 |
| D71 | Functional disorders of polymorphonuclear neutrophils |
| D86.0 - D86.9 | Sarcoidosis |
| E05.00 - E05.91 | Thyrotoxicosis [hyperthyroidism] |
| E20.0 - E21.5 | Hypoparathyroidism |

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|-------------------|--|
| 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 |

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|-----------------|---|
| 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 |

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): |
|-----------------------|
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| 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 |