Clinical Policy: 25-hydroxyvitamin D Testing in Children and Adolescents

Reference Number: CP.MP.157 Coding Implications
Date of Last Review: 09/22 Revision Log

See Important Reminder at the end of this policy for important regulatory and legal information.

Description

A global consensus statement recommends against universal screening for vitamin D deficiency in healthy children as there is insufficient evidence that the potential benefits of testing outweigh the potential harms.[2]

Policy/Criteria

I. It is the policy of health plans affiliated with Centene Corporation® that 25-hydroxyvitamin D testing in healthy, including obese but otherwise healthy, children (age ≥ 1 and ≤ 18) is **not medically necessary** because these tests have not been demonstrated to have a clear clinical benefit.

Background

Measurement of 25-OH-D (25-hydroxyvitamin D) concentration is the appropriate screening test for vitamin D deficiency. The 1,25-OH_2-D test has little to no predictive value related to bone health.[6] However, there is lack of agreement concerning the best type of assay to conduct when measuring 25-hydroxyvitamin D.[4] Furthermore, there is substantial controversy concerning cutoff levels to define vitamin D deficiency, as the evidence is inconsistent regarding optimal levels of vitamin D.[7]

Prevalence of vitamin D deficiency in children (defined in the study as levels < 20 ng/mL) is approximately 15%, with estimates ranging from 14% to 37%.[3,6] Rates of deficiency vary among certain populations, with increased risk among black and Hispanic teenagers, as well as overweight and obese children and adolescents.[6] Reduced serum vitamin D in overweight and obese children and adolescents reflects sequestration in adipose tissue, but little is known about the significance of low serum vitamin D in this population.[4]

A global consensus of 33 experts, convened at the request of the European Society for Pediatric Endocrinology, reviewed the available literature on prevention and management of nutritional rickets and determined that routine vitamin D screening is not recommended for healthy children.[1,2] They note the frequent coexistence of dietary calcium and vitamin D deficiency, which alters the threshold for development of rickets, and makes a single screening value impractical.[2] The global consensus panel advocates for identification and screening of groups at high risk for vitamin D deficiency based on clinical factors, as opposed to universal screening as public health policy.

The American Academy of Pediatrics (AAP) – Section on Endocrinology advises against ordering vitamin D concentrations routinely in otherwise healthy children, including children who are overweight or obese.[5] The AAP's report on optimizing bone health recommends screening for vitamin D deficiency only in children and adolescents with conditions associated with reduced bone mass and/or recurrent low-impact fractures.[6]

For healthy children and adolescents who are not ingesting enough foods with vitamin D, the Endocrine Society's clinical practice guidelines for the prevention of vitamin D deficiency and the AAP recommend supplementation with vitamin D, as does the global consensus panel convened by the European Society for Pediatric Endocrinology.[2,6-7]

Coding Implications

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Table 1: CPT codes not medically necessary when billed with a corresponding ICD-10CM in Table 2.

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

Table 2: ICD-10-CM diagnosis codes not medically necessary when billed with a corresponding CPT code in Table 1.

ICD 10 CM Code	Description
E66.01	Morbid (severe) obesity due to excess calories
E66.09	Other obesity due to excess calories
E66.1	Drug-induced obesity
E66.3	Overweight
E66.8	Other obesity
E66.9	Obesity, unspecified
Z00.00	Encounter for general adult medical examination without abnormal findings
Z00.129	Encounter for routine child health examination without abnormal findings
Z00.8	Encounter for other general examination
Z68.52	Body mass index (BMI) pediatric, 5th percentile to less than 85th percentile for age
Z68.53	BMI pediatric, 85th percentile to less than 95th percentile for age
Z68.54	BMI pediatric, greater than or equal to 95th percentile for age

Reviews, Revisions, and Approvals	Revision Date	Approval Date
Policy created	12/17	12/17
References reviewed and updated	12/18	12/18

Reviews, Revisions, and Approvals	Revision Date	Approval Date
References reviewed and updated	02/20	02/20
References reviewed and updated. Replaced "member" with "member/enrollee" in all instances.	12/20	01/21
Annual review. References reviewed and updated. Reviewed by specialist. Changed "Last Review Date" in the header to "Date of Last Review" and "Date" in revision log to "Revision Date". Updated background with no impact to criteria.	11/21	11/21
Annual review. Background updated with no impact on criteria. References reviewed and updated.	09/22	09/22

References

1. Munns CF, Shaw N, Kiely M, et al. Global Consensus Recommendations on Prevention and Management of Nutritional Rickets. *J Clin Endocrinol Metab*. 2016;101(2):394 to 415. doi:10.1210/jc.2015-2175
2. Saintonge S, Bang H, Gerber LM. Implications of a new definition of vitamin D deficiency in a multiracial us adolescent population: the National Health and Nutrition Examination Survey III. *Pediatrics*. 2009;123(3):797 to 803. doi:10.1542/peds.2008-1195
3. Misra M. Vitamin D insufficiency and deficiency in children and adolescents. UpToDate. www.uptodate.com. Published April 12, 2022. Accessed August 22, 2022.
4. Golden NH, Abrams SA; Committee on Nutrition. Optimizing bone health in children and adolescents. *Pediatrics*. 2014;134(4):e1229 to e1243. doi:10.1542/peds.2014-2173
5. Turer CB, Lin H, Flores G. Prevalence of vitamin D deficiency among overweight and obese US children. *Pediatrics*. 2013;131(1):e152 to e161. doi:10.1542/peds.2012-1711
6. Jin J. Screening for Vitamin D Deficiency in Adults. *JAMA*. 2021;325(14):1480. doi:10.1001/jama.2021.4606
7. Holick MF, Binkley NC, Bischoff-Ferrari HA, et al. Evaluation, treatment, and prevention of vitamin D deficiency: an Endocrine Society clinical practice guideline [published correction appears in J Clin Endocrinol Metab. 2011 Dec;96(12):3908]. *J Clin Endocrinol Metab*. 2011;96(7):1911 to 1930. doi:10.1210/jc.2011-0385

Important Reminder

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. "Health Plan" means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan's affiliates, as applicable.

The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements and applicable Health Plan-level administrative policies and procedures.

This clinical policy is effective as of the date determined by the Health Plan. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. The Health Plan retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

This clinical policy does not constitute medical advice, medical treatment or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of member/enrollees. This clinical policy is not intended to recommend treatment for member/enrollees. Member/enrollees should consult with their treating physician in connection with diagnosis and treatment decisions.

Providers referred to in this clinical policy are independent contractors who exercise independent judgment and over whom the Health Plan has no control or right of control. Providers are not agents or employees of the Health Plan.

 Providers, member/enrollees and their representatives are bound to the terms and conditions expressed herein through the terms of their contracts. Where no such contract exists, providers, member/enrollees and their representatives agree to be bound by such terms and conditions by providing services to member/enrollees and/or submitting claims for payment for such services.

Note: For Medicaid member/enrollees, when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.

Note: For Medicare member/enrollees, to ensure consistency with the Medicare National Coverage Determinations (NCD) and Local Coverage Determinations (LCD), all applicable NCDs, LCDs, and Medicare Coverage Articles should be reviewed prior to applying the criteria set forth in this clinical policy. Refer to the CMS website at http://www.cms.gov for additional information.