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

Reference Number: LA.CP.MP.157 Coding Implications

Date of Last ~~Revision~~Review: 10/~~2022~~23 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 Louisiana Healthcare Connections 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.[~~1~~7,10] The international Vitamin D Standardization Program has established measures for standardizing the laboratory value of 25(OH)D to improve clinical and public health practice.[11]

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 of asymptomatic individuals as public health policy.[1,14]

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] Additionally, the Italian Pediatric Society and the Italian Society of Preventative and Social Pediatrics recommend against routine 25(OH) D testing in children and adolescents.[13] 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] The Italian Pediatric Society and the Italian Society of Preventive and Social Pediatrics suggest measuring serum 25(OH) D levels in the presence of multiple risk factors for vitamin D deficiency.[13]

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-10CM10-CM diagnosis code in Table 2.

CPT® Codes	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
Converted corporate to local policy.	08/15/2020	
Annual review. Replaced "member" with "member/~~enrolee~~enrollee" 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.	10/22	1/14/23
Annual review completed. Background updated with no impact to criteria. References reviewed and updated. External and internal specialist review.	10/23	

References

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Important Reminder

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