MEDICAL COVERAGE POLICY
SERVICE: Vitamin Assays

Policy Number:	**242**
Effective Date:	**08/01/2024**
Last Review:	**07/24/2024**
Next Review:	**07/24/2025**

Important note: *Unless otherwise indicated, medical policies will apply to all lines of business. Medical necessity as defined by this policy does not ensure the benefit is covered. This medical policy does not replace existing federal or state rules and regulations for the applicable service or supply. In the absence of a controlling federal or state coverage mandate, benefits are ultimately determined by the terms of the applicable benefit plan documents. See the member plan specific benefit plan document for a complete description of plan benefits, exclusions, limitations, and conditions of coverage. In the event of a discrepancy, the plan document always supersedes the information in this policy.*

SERVICE: Vitamin Assays

PRIOR AUTHORIZATION: Not required.

POLICY: Please review the plan's EOC (Evidence of Coverage) or Summary Plan Description (SPD) for details.

Note: Unless otherwise indicated (see below), this policy will apply to all lines of business.

For Medicare plans, please refer to appropriate Medicare NCD (National Coverage Determination) or LCD (Local Coverage Determination). L34914 Assays for Vitamins and Metabolic Function, NGS L37535 Vitamin D Assay Testing, WPSIC L34658 Vitamin D Assay Testing. NCD or LCD specific InterQual criteria may be used when available. If there are no applicable NCD or LCD criteria, use the criteria set forth below.

Testing for Vitamin D deficiency is not medically necessary for general screening and requires a qualifying diagnosis as listed in the LCD.

For Medicaid plans, please confirm coverage as outlined in the Texas Medicaid Provider Procedures Manual | TMHP (TMPPM). If there are no applicable criteria to guide medical necessity decision making in the TMPPM, use the criteria set forth below.

BSWHP considers vitamin assay panels (more than one vitamin assay) a screening procedure and not medically necessary.

Similarly, assays for micronutrient testing for nutritional deficiencies that include multiple tests for vitamins, minerals, antioxidants and various metabolic functions are never necessary.

Regarding Vitamin D testing (CPT code 82306 and 82652): Testing for Vitamin D deficiency is not medically necessary for general screening and requires a qualifying diagnosis as listed in the non-Texas LCDs L37535 and L34658. Once a member has been found to be vitamin D deficient, further testing is medically necessary only to ensure adequate replacement has been accomplished. Testing more often than annually is not considered medically necessary unless member has a vitamin D deficiency.

The following tests have diagnosis and/or frequency limitations. These limitations may be supported

using automated claim edits:
1. Diagnosis to procedure limitations only (86352)
2. Frequency limitations only (82180, 84252, 84425, 84446, 84590, 84597)
3. Diagnosis to procedure and frequency limitations (82306, 82652, 82379, 82607, 82746, 83090, 84207, 85385, 83698)

This policy follows the medically indicated coverage limitations described in detail in non-Texas LCDs LCD L34914/LCA A56416 and LCD L34658.

MANDATES: None

CODES:
Important note: *Due to the wide range of applicable diagnosis codes and potential changes to codes, an inclusive list may not be presented, but the following codes may apply. Inclusion of a code in this section does not guarantee that it will be reimbursed, and patient must meet the criteria set forth in the policy language.*

CPT Codes	82180 – Ascorbic acid (Vitamin C), blood 82306 – Vitamin D; 25 hydroxy, includes fraction(s), if performed 82379 – Carnitine (total and free), quantitative, each specimen 82607 – Cyanocobalamin (Vitamin B-12) 82652 – Vitamin D; 1,25 dihydroxy, includes fraction(s), if performed 82746 – Folic acid; serum 83090 - Homocysteine 84207 – Pyridoxal phosphate (Vitamin B-6) 84252 – Riboflavin (Vitamin B-2) 84425 – Thiamine (Vitamin B-1) 84446 – Tocopherol alpha (Vitamin E) 84590 – Vitamin A 84597 – Vitamin K
CPT Not Covered	
ICD10 codes	
ICD10 Not covered	

POLICY HISTORY:

Status	Date	Action
New	01/16/2018	New policy
Reviewed	01/08/2019	No changes.
Updated	09/26/2019	Clarified Vitamin D testing limitations
Updated	10/24/2020	Aligned with LCD
Reviewed	11/24/2021	No changes
Reviewed	12/01/2022	No changes

Reviewed	12/13/2023	Formatting changes, added hyperlinks to LCD and TMPPM, added descriptions for codes in codes section, beginning and ending note sections updated to align with CMS requirements and business entity changes.
Reviewed	07/24/2024	No changes

REFERENCES:

The following scientific references were utilized in the formulation of this medical policy. BSWHP will continue to review clinical evidence related to this policy and may modify it at a later date based upon the evolution of the published clinical evidence. Should additional scientific studies become available, and they are not included in the list, please forward the reference(s) to BSWHP so the information can be reviewed by the Medical Coverage Policy Committee (MCPC) and the Quality Improvement Committee (QIC) to determine if a modification of the policy is in order.

1. Albert MA, et al. The Effect of Statin Therapy on Lipoprotein Associated Phospholipase A2 Levels. *Atherosclerosis* 2005; 182: pp. 193–198.
2. Anderson, JL. Lipoprotein-Associated Phospholipid A2: An Independent Predictor of Coronary Artery Disease Events in Primary and Secondary Prevention. *Am J Cardiol* 2008 Jun 16; 101(12A): 23F-33F.
3. American College of Cardiology and American Heart Association, ACC/AHA 2002 Guideline Update for Management of Patients with Chronic Stable Angina, Circulation, 2003, 107: pp. 1–10.
4. Centers for Medicare & Medicaid Services, Levocarnitine for Use in the Treatment of Carnitine Deficiency in ESRD Patients, Program Memorandum Transmittal AB-02-165, November 8, 2002.
5. Colley KJ, Wolfert RL, Cobble ME. Lipoprotein associated phospholipase A2: role in atherosclerosis and utility as a biomarker for cardiovascular risk. *EPMA J*. 2011 Mar;2(1):27-38.
6. Lp-PLA(2) Studies Collaboration, Thompson A, Gao P, et al. Lipoprotein-associated phospholipase A2 and risk of coronary disease, stroke, and mortality: collaborative analysis of 32 prospective studies. *Lancet*. 2010 May 1;375(9725):1536-44.
7. Davidson MH, Corson MA, Alberts MJ, et al. Consensus Panel Recommendation For Incorporating Lipoprotein-Associated Phospholipase A2 Testing into Cardiovascular Disease Risk Assessment Guidelines. *Am J Cardiol*. 2008 Jun 16;101(12A):51F-57F.
8. Epps KC, Wilensky RL. Lp-PLA2- a novel risk factor for high-risk coronary and carotid artery disease. *J Intern Med*. 2011 Jan;269(1):94-106.
9. Federal Register, Vol. 66, No. 226, November 23, 2001, pp. 58788–58890.
10. Hackam, DG, Anand SS. Emerging Risk Factors for Atherosclerotic Vascular Disease. *JAMA*, 2003, 290: pp. 932–940.
11. Holick, MF et al. Evaluation, Treatment, and Prevention of Vitamin D Deficiency: An Endocrine Society Clinical Practice Guidelines. *Journal of Clinical Endocrinology and Metabolism* 2011 Jan; 96(7):1911-1930.
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13. Hypophosphatasia. Review. https://ghr.nlm.nih.gov/condition/hypophosphatasia
14. Jacobs DS, DeMott WR, Oxley DK. Jacobs and DeMott. *Laboratory Test Handbook with Key Word Index*, 5th Edition.
15. Kelly JL et al. Vitamin D and Non-Hodgkin Lymphoma Risk in Adults: A Review. *Clinical Invest*. 2009 November; 27(9): 942-951.
16. Kowalshi RJ, et al. Assessing Relative Risks of Infection and Rejection: A Meta-Analysis Using an Immune Function Assay (manuscript accepted for publication in *Transplantation*, April 25, 2006).
17. Pasternak RC, Abrams J, Greenland P, et al. 34th Bethesda Conference: Task Force #1— Identification of Coronary Heart Disease Risk: Is There a Detection Gap? *J Am Coll Cardiol*. 2003 Jun 4;41(11):1863-74.
18. Pitt B, Waters D, Brown WV, et al. Aggressive lipid-lowering therapy compared with angioplasty in stable coronary artery

disease. Atorvastatin versus Revascularization Treatment Investigators. *N Engl J Med*. 1999 Jul 8;341(2):70-6.
19. Tikkanen MJ, Szarek M, Fayyad R, et al. Total Cardiovascular Disease Burden: Comparing Intensive With Moderate Statin Therapy Insights From the IDEAL (Incremental Decrease in End Points Through Aggressive Lipid Lowering) Trial. *J Am Coll Cardiol*. 2009 Dec 15;54(25):2353-7.
20. Timbie JW, Hayward RA, Vijan S. Variation in the Net Benefit Of Aggressive Cardiovascular Risk Factor Control

***Note**:*
Health Maintenance Organization (HMO) products are offered through Scott and White Health Plan dba Baylor Scott & White Health Plan, and Scott & White Care Plans dba Baylor Scott & White Care Plan. Insured PPO and EPO products are offered through Baylor Scott & White Insurance Company. Scott and White Health Plan dba Baylor Scott & White Health Plan serves as a third-party administrator for self-funded employer-sponsored plans. Baylor Scott & White Care Plan and Baylor Scott & White Insurance Company are wholly owned subsidiaries of Scott and White Health Plan. These companies are referred to collectively in this document as Baylor Scott & White Health Plan.

RightCare STAR Medicaid plans are offered through Scott and White Health Plan in the Central Managed Care Service Area (MRSA) and STAR and CHIP plans are offered through SHA LLC dba FirstCare Health Plans (FirstCare) in the Lubbock and West MRSAs.