



BlueCross BlueShield of Oklahoma

If a conflict arises between a Clinical Payment and Coding Policy (“CPCP”) and any plan document under which a member is entitled to Covered Services, the plan document will govern. If a conflict arises between a CPCP and any provider contract pursuant to which a provider participates in and/or provides Covered Services to eligible member(s) and/or plans, the provider contract will govern. “Plan documents” include, but are not limited to, Certificates of Health Care Benefits, benefit booklets, Summary Plan Descriptions, and other coverage documents. BCBSOK may use reasonable discretion interpreting and applying this policy to services being delivered in a particular case. BCBSOK has full and final discretionary authority for their interpretation and application to the extent provided under any applicable plan documents.

Providers are responsible for submission of accurate documentation of services performed. Providers are expected to submit claims for services rendered using valid code combinations from Health Insurance Portability and Accountability Act (“HIPAA”) approved code sets. Claims should be coded appropriately according to industry standard coding guidelines including, but not limited to: Uniform Billing (“UB”) Editor, American Medical Association (“AMA”), Current Procedural Terminology (“CPT®”), CPT® Assistant, Healthcare Common Procedure Coding System (“HCPCS”), ICD-10 CM and PCS, National Drug Codes (“NDC”), Diagnosis Related Group (“DRG”) guidelines, Centers for Medicare and Medicaid Services (“CMS”) National Correct Coding Initiative (“NCCI”) Policy Manual, CCI table edits and other CMS guidelines.

Claims are subject to the code edit protocols for services/procedures billed. Claim submissions are subject to claim review including but not limited to, any terms of benefit coverage, provider contract language, medical policies, clinical payment and coding policies as well as coding software logic. Upon request, the provider is urged to submit any additional documentation.

Folate Testing

Policy Number: CPCPLAB048

Version 1.0

Enterprise Clinical Payment and Coding Policy Committee Approval Date: July 17, 2023

Plan Effective Date: November 1, 2023

Description

BCBSOK has implemented certain lab management reimbursement criteria. Not all requirements apply to each product. Providers are urged to review Plan documents for eligible coverage for services rendered.

Reimbursement Information:

1. For individuals diagnosed with megaloblastic anemia or macrocytic anemia **and** for whom the megaloblastic anemia and/or macrocytosis does not resolve after folic acid treatment, measurement of serum folate concentration **may be reimbursable**.
2. For all indications not described above, measurement of serum folate concentration **is not reimbursable**.
3. For all indications, measurement of red blood cell (RBC) folate **is not reimbursable**.
4. For all situations, folate receptor autoantibody testing **is not reimbursable**.

Procedure Codes

The following is not an all-encompassing code list. The inclusion of a code does not guarantee it is a covered service or eligible for reimbursement.

| Codes |
|---------------------|
| 82746, 82747, 0399U |

References:

AAN. (2009). Management issues for women with epilepsy—focus on pregnancy Vitamin K, folic acid, blood levels, and breastfeeding. <https://pubmed.ncbi.nlm.nih.gov/19507305/>

ASCP. (2017, 10/19/2017). *Do not order red blood cell folate levels at all. In adults, consider folate supplementation instead of serum folate testing in patients with macrocytic anemia*. ABIM. Retrieved 05/24/2018 from <http://www.choosingwisely.org/clinician-lists/ascp-do-not-order-red-blood-cell-folate-levels/>

BCSH. (2021). *Guidelines for the Investigation and Management of Vitamin B12 and Folate Deficiency*. <https://www.hey.nhs.uk/wp/wp-content/uploads/2016/03/vitaminB12FolateDeficiency.pdf>

Bibbins-Domingo, K., Grossman, D. C., Curry, S. J., Davidson, K. W., Epling, J. W., Jr., Garcia, F. A., Kemper, A. R., Krist, A. H., Kurth, A. E., Landefeld, C. S., Mangione, C. M., Phillips, W. R., Phipps, M. G., Pignone, M. P., Silverstein, M., & Tseng, C. W. (2017). Folic Acid Supplementation for the Prevention of Neural Tube Defects: US Preventive Services Task Force Recommendation Statement. *Jama*, 317(2), 183-189. <https://doi.org/10.1001/jama.2016.19438>

CDC. (2022, April 11). *Folic Acid*. <https://www.cdc.gov/ncbddd/folicacid/about.html>

Choban, P., Dickerson, R., Malone, A., Worthington, P., & Compher, C. (2013). A.S.P.E.N. Clinical Guidelines: nutrition support of hospitalized adult patients with obesity. *Journal of Parenteral and Enteral Nutrition*, 37(6), 714-744. <https://doi.org/10.1177/0148607113499374>

Compher, C., Bingham, A. L., McCall, M., Patel, J., Rice, T. W., Braunschweig, C., & McKeever, L. (2022). Guidelines for the provision of nutrition support therapy in the adult critically ill patient: The American

Society for Parenteral and Enteral Nutrition. *JPEN J Parenter Enteral Nutr*, 46(1), 12-41.
<https://doi.org/10.1002/jpen.2267>

Crider, K. S., Bailey, L. B., & Berry, R. J. (2011). Folic acid food fortification-its history, effect, concerns, and future directions. *Nutrients*, 3(3), 370-384. <https://doi.org/10.3390/nu3030370>

Devalia, V., Hamilton, M. S., & Molloy, A. M. (2014). Guidelines for the diagnosis and treatment of cobalamin and folate disorders. *Br J Haematol*, 166(4), 496-513. <https://doi.org/10.1111/bjh.12959>

Dignass, A. U., Gasche, C., Bettenworth, D., Birgegard, G., Danese, S., Gisbert, J. P., Gomollon, F., Iqbal, T., Katsanos, K., Koutroubakis, I., Magro, F., Savoye, G., Stein, J., & Vavricka, S. (2015). European consensus on the diagnosis and management of iron deficiency and anaemia in inflammatory bowel diseases. *J Crohns Colitis*, 9(3), 211-222. <https://doi.org/10.1093/ecco-jcc/jju009>

Epstein-Peterson, Z. D., Li, D. G., Lavery, J. A., Barrow, B., Chokshi, I., & Korenstein, D. (2020). Inpatient folate testing at an academic cancer center: single-year experience. *Support Care Cancer*.
<https://doi.org/10.1007/s00520-019-05267-1>

FFI. (2021, March 2018). *Global Progress o. Food Fortification Initiative*. Retrieved 05/31/2018 from
<https://www.ffinetwork.org/globalprogress>

Finer, S., Saravanan, P., Hitman, G., & Yajnik, C. (2013). The role of the one-carbon cycle in the developmental origins of Type 2 diabetes and obesity. *Diabetic Medicine*, 31(3), 263-272.
<https://doi.org/10.1111/dme.12390>

Fratnow. (2016). *Importance Of FRAT Testing for ASD - FRATNOW*.
<https://www.fratnow.com/information-on-frat.html>

Galloway, M., & Rushworth, L. (2003). Red cell or serum folate? Results from the National Pathology Alliance benchmarking review. *J Clin Pathol*, 56(12), 924-926.
<https://pubmed.ncbi.nlm.nih.gov/14645351/>

Gonzalez-Campoy, J. M., St Jeor, S. T., Castorino, K., Ebrahim, A., Hurley, D., Jovanovic, L., Mechanick, J. I., Petak, S. M., Yu, Y. H., Harris, K. A., Kris-Etherton, P., Kushner, R., Molini-Blandford, M., Nguyen, Q. T., Plodkowski, R., Sarwer, D. B., & Thomas, K. T. (2013). Clinical practice guidelines for healthy eating for the prevention and treatment of metabolic and endocrine diseases in adults: cosponsored by the American Association of Clinical Endocrinologists/the American College of Endocrinology and the Obesity Society. *Endocr Pract*, 19 Suppl 3, 1-82. <https://doi.org/10.4158/ep13155.gl>

Gregory, I. I. J. F., Swendseid, M. E., & Jacob, R. A. (2000). Urinary Excretion of Folate Catabolites Responds to Changes in Folate Intake More Slowly than Plasma Folate and Homocysteine Concentrations and Lymphocyte DNA Methylation in Postmenopausal Women. *The Journal of Nutrition*, 130(12), 2949-2952. <https://doi.org/10.1093/jn/130.12.2949>

Handelsman, Y., Bloomgarden, Z. T., Grunberger, G., Umpierrez, G., Zimmerman, R. S., Bailey, T. S., Blonde, L., Bray, G. A., Cohen, A. J., Dagogo-Jack, S., Davidson, J. A., Einhorn, D., Ganda, O. P., Garber, A. J., Garvey, W. T., Henry, R. R., Hirsch, I. B., Horton, E. S., Hurley, D. L., . . . Zangeneh, F. (2015). American association of clinical endocrinologists and american college of endocrinology - clinical practice

guidelines for developing a diabetes mellitus comprehensive care plan - 2015. *Endocr Pract*, 21 Suppl 1, 1-87. <https://doi.org/10.4158/ep15672.GI>

Imbard, A., Benoist, J.-F., & Blom, H. J. (2013). Neural Tube Defects, Folic Acid and Methylation. *International Journal of Environmental Research and Public Health*, 10(9), 4352-4389. <https://doi.org/10.3390/ijerph10094352>

IOM. (1998). The National Academies Collection: Reports funded by National Institutes of Health. In *Dietary Reference Intakes for Thiamin, Riboflavin, Niacin, Vitamin B6, Folate, Vitamin B12, Pantothenic Acid, Biotin, and Choline*. National Academies Press (US) National Academy of Sciences. <https://doi.org/10.17226/6015>

Jellinger, P. S., Handelsman, Y., Rosenblit, P. D., Bloomgarden, Z. T., Fonseca, V. A., Garber, A. J., Grunberger, G., Guerin, C. K., Bell, D. S. H., Mechanick, J. I., Pessah-Pollack, R., Wyne, K., Smith, D., Brinton, E. A., Fazio, S., & Davidson, M. (2017). AMERICAN ASSOCIATION OF CLINICAL ENDOCRINOLOGISTS AND AMERICAN COLLEGE OF ENDOCRINOLOGY GUIDELINES FOR MANAGEMENT OF DYSLIPIDEMIA AND PREVENTION OF CARDIOVASCULAR DISEASE. *Endocr Pract*, 23(Suppl 2), 1-87. <https://doi.org/10.4158/ep171764.appgl>

Joelson, D. W., Fiebig, E. W., & Wu, A. H. (2007). Diminished need for folate measurements among indigent populations in the post folic acid supplementation era. *Arch Pathol Lab Med*, 131(3), 477-480. [https://doi.org/10.1043/1543-2165\(2007\)131\[477:Dnffma\]2.0.Co;2](https://doi.org/10.1043/1543-2165(2007)131[477:Dnffma]2.0.Co;2)

Kaferle, J., & Strzoda, C. E. (2009). Evaluation of macrocytosis. *Am Fam Physician*, 79(3), 203-208. <https://www.aafp.org/pubs/afp/issues/2009/0201/p203.html>

Killick, S. B., Bown, N., Cavenagh, J., Dokal, I., Foukaneli, T., Hill, A., Hillmen, P., Ireland, R., Kulasekararaj, A., Mufti, G., Snowden, J. A., Samarasinghe, S., Wood, A., & Marsh, J. C. (2016). Guidelines for the diagnosis and management of adult aplastic anaemia. *Br J Haematol*, 172(2), 187-207. <https://doi.org/10.1111/bjh.13853>

Knopman, D. S., DeKosky, S. T., Cummings, J. L., Chui, H., Corey-Bloom, J., Relkin, N., Small, G. W., Miller, B., & Stevens, J. C. (2001). Practice parameter: diagnosis of dementia (an evidence-based review). Report of the Quality Standards Subcommittee of the American Academy of Neurology. *Neurology*, 56(9), 1143-1153. <https://pubmed.ncbi.nlm.nih.gov/11342678/>

McClave, S. A., Taylor, B. E., Martindale, R. G., Warren, M. M., Johnson, D. R., Braunschweig, C., McCarthy, M. S., Davanos, E., Rice, T. W., Cresci, G. A., Gervasio, J. M., Sacks, G. S., Roberts, P. R., Compher, C., Society of Critical Care, M., American Society for, P., & Enteral, N. (2016). Guidelines for the Provision and Assessment of Nutrition Support Therapy in the Adult Critically Ill Patient: Society of Critical Care Medicine (SCCM) and American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.). *JPEN J Parenter Enteral Nutr*, 40(2), 159-211. <https://doi.org/10.1177/0148607115621863>

McMurray, J., Parfrey, P., Adamson, J. W., Aljama, P., Berns, J. S., Bohlius, J., Drüeke, T. B., Finkelstein, F. O., Fishbane, S., & Ganz, T. (2012). Kidney disease: Improving global outcomes (KDIGO) anemia work group. KDIGO clinical practice guideline for anemia in chronic kidney disease. *Kidney International Supplements*, 2(4), 279. <https://doi.org/10.1038/kisup.2012.37>

Means Jr, R. T., & Fairfield, K. M. (2023a, December 10). *Causes and pathophysiology of vitamin B12 and folate deficiencies*. UpToDate.com. Retrieved 04/20/2023 from <https://www.uptodate.com/contents/causes-and-pathophysiology-of-vitamin-b12-and-folate-deficiencies>

Means Jr, R. T., & Fairfield, K. M. (2023b, Oct 26, 2022). *Clinical manifestations and diagnosis of vitamin B12 and folate deficiency*. UpToDate.com. Retrieved 04/20/2023 from <https://www.uptodate.com/contents/clinical-manifestations-and-diagnosis-of-vitamin-b12-and-folate-deficiency>

Mechanick, J. I., Apovian, C., Brethauer, S., Garvey, W. T., Joffe, A. M., Kim, J., Kushner, R. F., Lindquist, R., Pessah-Pollack, R., Seger, J., Urman, R. D., Adams, S., Cleek, J. B., Correa, R., Figaro, M. K., Flanders, K., Grams, J., Hurley, D. L., Kothari, S., . . . Still, C. D. (2019). Clinical Practice Guidelines For The Perioperative Nutrition, Metabolic, And Nonsurgical Support Of Patients Undergoing Bariatric Procedures - 2019 Update: Cosponsored By American Association Of Clinical Endocrinologists/American College Of Endocrinology, The Obesity Society, American Society For Metabolic & Bariatric Surgery, Obesity Medicine Association, And American Society Of Anesthesiologists - Executive Summary. *Endocr Pract*, 25(12), 1346-1359. <https://doi.org/10.4158/gl-2019-0406>

Mehta, N. M., Skillman, H. E., Irving, S. Y., Coss-Bu, J. A., Vermilyea, S., Farrington, E. A., McKeever, L., Hall, A. M., Goday, P. S., & Braunschweig, C. (2017). Guidelines for the Provision and Assessment of Nutrition Support Therapy in the Pediatric Critically Ill Patient: Society of Critical Care Medicine and American Society for Parenteral and Enteral Nutrition. *Pediatr Crit Care Med*, 18(7), 675-715. <https://doi.org/10.1097/pcc.0000000000001134>

Mikhail, A., Brown, C., Williams, J. A., Mathrani, V., Shrivastava, R., Evans, J., Isaac, H., & Bhandari, S. (2017). Renal association clinical practice guideline on Anaemia of Chronic Kidney Disease. *BMC Nephrol*, 18(1), 345. <https://doi.org/10.1186/s12882-017-0688-1>

NCCN. (2023, January 15). *NCCN Guidelines Version 1.2023 Myelodysplastic Syndromes*. https://www.nccn.org/professionals/physician_gls/pdf/mds.pdf

NICE. (2015). *Bladder cancer: diagnosis and management*. (NG2). United Kingdom: National Institute for Health and Care Excellence Retrieved from <https://www.nice.org.uk/guidance/ng2>

NIH. (2018, 10/04/2018). *Folate Dietary Supplement Fact Sheet*. National Institutes of Health. Retrieved 05/25/2018 from <https://ods.od.nih.gov/factsheets/Folate-HealthProfessional/>

Rothenberg, S. P., da Costa, M. P., Sequeira, J. M., Cracco, J., Roberts, J. L., Weedon, J., & Quadros, E. V. (2004). Autoantibodies against Folate Receptors in Women with a Pregnancy Complicated by a Neural-Tube Defect. *New England Journal of Medicine*, 350(2), 134-142. <https://doi.org/10.1056/NEJMoa031145>

Rubio-Tapia, A., Hill, I. D., Kelly, C. P., Calderwood, A. H., & Murray, J. A. (2013). ACG clinical guidelines: diagnosis and management of celiac disease. *Am J Gastroenterol*, 108(5), 656-676; quiz 677. <https://doi.org/10.1038/ajg.2013.79>

Sequeira, J. R., Vincent Quadros, Edward. (2012). The diagnostic utility of folate receptor autoantibodies in blood <https://doi.org/10.1515/cclm-2012-0577>

Shojania, A. M., & von Kuster, K. (2010). Ordering folate assays is no longer justified for investigation of anemias, in folic acid fortified countries. *BMC Research Notes*, 3, 22-22. <https://doi.org/10.1186/1756-0500-3-22>

Thompson, K. L., Elliott, L., Fuchs-Tarlovsky, V., Levin, R. M., Voss, A. C., & Piemonte, T. (2017). Oncology Evidence-Based Nutrition Practice Guideline for Adults. *J Acad Nutr Diet*, 117(2), 297-310.e247. <https://doi.org/10.1016/j.jand.2016.05.010>

Tran, K., Mierzwinski-Urban, M., & Mahood, Q. (2022). Folate Testing in People With Suspected Folate Deficiency. *Canadian Journal of Health Technologies*, 2(3). <https://doi.org/10.51731/cjht.2022.295>

Trompeter, S., Massey, E., Robinson, S., & Committee, t. T. T. F. o. t. B. S. o. H. G. (2020). Position paper on International Collaboration for Transfusion Medicine (ICTM) Guideline 'Red blood cell specifications for patients with hemoglobinopathies: a systematic review and guideline'. *British Journal of Haematology*, 189(3), 424-427. <https://doi.org/https://doi.org/10.1111/bjh.16405>

Wu, A., Chanarin, I., Slavin, G., & Levi, A. J. (1975). Folate Deficiency in the Alcoholic—its Relationship to Clinical and Haematological Abnormalities, Liver Disease and Folate Stores. *British Journal of Haematology*, 29(3), 469-478. <https://doi.org/10.1111/j.1365-2141.1975.tb01844.x>

Policy Update History:

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| 7/17/2023 | Document updated with literature review. The following changes were made to Reimbursement Information: added #4: For all situations, folate receptor autoantibody testing is not reimbursable. Other revisions made for clarity. References revised. |
| 11/1/2022 | New policy |