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| Title: Folic Acid Testing | Division: Medical Management Department: Utilization Management |
| Approval Date: 6/8/2020 | LOB: Medicaid, HIV SNP, HARP, Medicare, CHP, Essential 3 & 4 |
| Effective Date: 6/8/2020 | Policy Number: UM-MP251 |
| Review Date: 2/28/22 | Cross Reference Number: |
| Retired Date: | Page 1 of 9 |

1. POLICY DESCRIPTION:

Folate is a water-soluble B vitamin essential for the synthesis of DNA and for converting homocysteine to methionine. Folate deficiency is causally linked with both neural tube defects and megaloblastic anemia. Low levels of folate are associated with cardiovascular disease, colon cancer, neuropathy, depression, hypercoagulability, and cognitive decline, though there is a paucity of evidence showing causation or risk reduction with folate supplementation. In patients with inadequate folate intake, the earliest sign is a decline in serum folate levels, followed by a fall in RBC folate levels. Only weeks later do macrocytosis, megaloblastic bone marrow, and finally anemia occur. Given that humans are unable to synthesize folate and are therefore dependent on dietary sources, those with inadequate intake or absorption are at risk of folate deficiency.

In hospitalized patients, the most common indication for folate testing is anemia, either with or without macrocytosis. Given that at least 10% to 15% of hospitalized patients are anemic, it is unsurprising that folate testing is frequently performed. Despite the link between folate deficiency and megaloblastic anemia, >85% of patients evaluated for folate deficiency have normocytic or microcytic anemia. In addition, a study found that 30% of all folate testing was performed not as part of an anemia workup but in the evaluation of other comorbidities (eg, dementia and altered mental status) that are not causally linked to folate deficiency.

2. RESPONSIBLE PARTIES:

Medical Management Administration, Utilization Management, Integrated Care Management, Pharmacy, Claim Department, Providers Contracting.

3. DEFINITIONS:

Folate, or vitamin B9 - a generic term for a water-soluble vitamin obtained from the diet that is involved in the transfer of methyl groups (i.e. single carbon-containing groups) in multiple biochemical metabolic pathways, including nucleic acid biosynthesis and methionine/homocysteine metabolism. Folate is naturally found in foods as folate. Folic acid is the manmade version sold as supplements and added to fortified foods. Folate and folic acid have the same effects

Folate deficiency - nutritional deficits can occur due to diet, alcoholism, depression, and even overcooked foods. Many malabsorptive disorders, such as celiac disease and ulcerative colitis, can also result in a decrease in folate uptake.

4. POLICY:

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| Review Date: 2/28/22 | Cross Reference Number: |
| Retired Date: | Page 2 of 9 |

Under this policy, the use of red blood cell folate test to measure folate levels is not medically necessary for any indications. A folic acid test measures the amount of folic acid in the blood. Folic acid is vitamin B-9, which is essential for the production of healthy red blood cells. These cells deliver oxygen to the entire body, so they're vital for maintaining overall health. Folic acid is also important for the normal development of a fetus. It helps with cell and tissue growth as well as the creation of DNA, which carries genetic information. This is why folic acid is particularly critical for women who are pregnant or who are planning to become pregnant. According to the Centers for Disease Control and Prevention (CDC), women should take 400 micrograms of folic acid every day, starting at least one month before getting pregnant. Taking extra folic acid during pregnancy can help prevent brain and spinal cord birth defects, such as spina bifida and a cleft lip or cleft palate.

Since 1998, when the U.S. and Canada mandated that foods with processed grains be fortified with folic acid, there has been a significant decline in the incidence of folate deficiency. For the rare patient suspected of having a folate deficiency, simply treating with folic acid, vitamin B9, is a more cost-effective approach than blood testing. While red blood cell folate levels have been used in the past as a surrogate for tissue folate levels or a marker for folate status over the lifetime of red blood cells, the result of this testing does not, in general, add to the clinical diagnosis or therapeutic plan.

Documentation Requirements:

This documentation includes, but is not limited to, relevant medical history, physical examination, and results of pertinent diagnostic tests or procedures.

5. LIMITATIONS/ EXCLUSIONS:

In adults, consider folate supplementation instead of serum folate testing in patients with macrocytic anemia. With the mandatory fortification of foods (with processed grains), folic acid incidence of folate deficiency has decline dramatically. In rare cases of folate deficiency, simply treating with folic acid is a more cost-effective approach than blood testing.

The use of red blood cell folate test to measure folate levels is not medically necessary for any indications. The correct use of an ICD-10-CM code listed below does not assure coverage of a service. The service must be reasonable and necessary in the specific case and must meet the criteria specified in this determination.

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| Review Date: 2/28/22 | Cross Reference Number: |
| Retired Date: | Page 3 of 9 |

CPT code 82747 is non covered for any diagnosis.

6. APPLICABLE PROCEDURE CODES:

CPT code 82747 is non covered for any diagnosis.

| CPT | Description |
|-------|-----------------|
| 82747 | Folic acid; RBC |
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Folic acid; serum (82746) is covered for up to 3-times per calendar year.
CPT code 82746 covered only with the applicable diagnosis codes in Section 7 and the following place of service (POS): 11, 12, 20, 22, 81.

| CPT | Description |
|-------|-------------------|
| 82746 | Folic acid; serum |
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7. APPLICABLE DIAGNOSIS CODES:

| CODE | Description |
|-------|-------------------------------------------------------------------------------------------|
| D51.0 | Vitamin B12 deficiency anemia due to intrinsic factor deficiency |
| D51.1 | Vitamin B12 deficiency anemia due to selective vitamin B12 malabsorption with proteinuria |
| D51.2 | Transcobalamin II deficiency |
| D51.3 | Other dietary vitamin B12 deficiency anemia |
| D51.8 | Other vitamin B12 deficiency anemias |
| D51.9 | Vitamin B12 deficiency anemia, unspecified |

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| Review Date: 2/28/22 | Cross Reference Number: |
| Retired Date: | Page 4 of 9 |

| | |
|----------------|------------------------------------------------------------------------|
| D52.0 | Dietary folate deficiency anemia |
| D52.1 | Drug-induced folate deficiency anemia |
| D52.8 | Other folate deficiency anemias |
| D52.9 | Folate deficiency anemia, unspecified |
| D53.1 | Other megaloblastic anemias, not elsewhere classified |
| D53.9 | Nutritional anemia, unspecified |
| D69.6 | Thrombocytopenia, unspecified |
| D81.818 | Other biotin-dependent carboxylase deficiency |
| D81.819 | Biotin-dependent carboxylase deficiency, unspecified |
| E41 | Nutritional marasmus |
| E43 | Unspecified severe protein-calorie malnutrition |
| E45 | Retarded development following protein-calorie malnutrition |
| E46 | Unspecified protein-calorie malnutrition |
| E53.8 | Deficiency of other specified B group vitamins |
| E64.0 | Sequelae of protein-calorie malnutrition |
| E72.10 | Disorders of sulfur-bearing amino-acid metabolism, unspecified |
| E72.11 | Homocystinuria |
| E72.12 | Methylenetetrahydrofolate reductase deficiency |
| E72.19 | Other disorders of sulfur-bearing amino-acid metabolism |
| F03.90 | Unspecified dementia without behavioral disturbance |
| F03.91 | Unspecified dementia with behavioral disturbance |
| F10.20 | Alcohol dependence, uncomplicated |
| G25.70 | Drug induced movement disorder, unspecified |
| G25.71 | Drug induced akathisia |
| G25.79 | Other drug induced movement disorders |
| G25.89 | Other specified extrapyramidal and movement disorders |
| G25.9 | Extrapyramidal and movement disorder, unspecified |
| G26 | Extrapyramidal and movement disorders in diseases classified elsewhere |

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| Retired Date: | Page 5 of 9 |

| | |
|----------------|-------------------------------------------------------------------------|
| G30.0 | Alzheimer's disease with early onset |
| G30.1 | Alzheimer's disease with late onset |
| G30.8 | Other Alzheimer's disease |
| G30.9 | Alzheimer's disease, unspecified |
| G60.3 | Idiopathic progressive neuropathy |
| G60.9 | Hereditary and idiopathic neuropathy, unspecified |
| K14.0 | Glossitis |
| K14.6 | Glossodynia |
| K31.83 | Achlorhydria |
| K50.00 | Crohn's disease of small intestine without complications |
| K50.011 | Crohn's disease of small intestine with rectal bleeding |
| K50.012 | Crohn's disease of small intestine with intestinal obstruction |
| K50.013 | Crohn's disease of small intestine with fistula |
| K50.014 | Crohn's disease of small intestine with abscess |
| K50.018 | Crohn's disease of small intestine with other complication |
| K50.019 | Crohn's disease of small intestine with unspecified complications |
| K50.10 | Crohn's disease of large intestine without complications |
| K50.111 | Crohn's disease of large intestine with rectal bleeding |
| K50.112 | Crohn's disease of large intestine with intestinal obstruction |
| K50.113 | Crohn's disease of large intestine with fistula |
| K50.114 | Crohn's disease of large intestine with abscess |
| K50.118 | Crohn's disease of large intestine with other complication |
| K50.119 | Crohn's disease of large intestine with unspecified complications |
| K50.80 | Crohn's disease of both small and large intestine without complications |
| K50.811 | Crohn's disease of both small and large intestine with rectal bleeding |

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| Retired Date: | Page 6 of 9 |

| | |
|----------------|----------------------------------------------------------------------------------|
| K50.812 | Crohn's disease of both small and large intestine with intestinal obstruction |
| K50.813 | Crohn's disease of both small and large intestine with fistula |
| K50.814 | Crohn's disease of both small and large intestine with abscess |
| K50.818 | Crohn's disease of both small and large intestine with other complication |
| K50.819 | Crohn's disease of both small and large intestine with unspecified complications |
| K50.90 | Crohn's disease, unspecified, without complications |
| K50.911 | Crohn's disease, unspecified, with rectal bleeding |
| K50.912 | Crohn's disease, unspecified, with intestinal obstruction |
| K50.913 | Crohn's disease, unspecified, with fistula |
| K50.914 | Crohn's disease, unspecified, with abscess |
| K50.918 | Crohn's disease, unspecified, with other complication |
| K50.919 | Crohn's disease, unspecified, with unspecified complications |
| K90.0 | Celiac disease |
| K90.1 | Tropical sprue |
| K90.2 | Blind loop syndrome, not elsewhere classified |
| K90.3 | Pancreatic steatorrhea |
| K90.49 | Malabsorption due to intolerance, not elsewhere classified |
| K90.81 | Whipple's disease |
| K90.89 | Other intestinal malabsorption |
| K90.9 | Intestinal malabsorption, unspecified |
| K91.2 | Postsurgical malabsorption, not elsewhere classified |
| R20.0 | Anesthesia of skin |
| R20.1 | Hypoesthesia of skin |
| R20.2 | Paresthesia of skin |
| R20.3 | Hyperesthesia |
| R20.8 | Other disturbances of skin sensation |
| R20.9 | Unspecified disturbances of skin sensation |

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| Retired Date: | Page 7 of 9 |

| | |
|----------------|----------------------------------------------------------------------------|
| R26.0 | Ataxic gait |
| R26.1 | Paralytic gait |
| R26.81 | Unsteadiness on feet |
| R26.89 | Other abnormalities of gait and mobility |
| R26.9 | Unspecified abnormalities of gait and mobility |
| R27.0 | Ataxia, unspecified |
| R27.8 | Other lack of coordination |
| R27.9 | Unspecified lack of coordination |
| R41.1 | Anterograde amnesia |
| R41.2 | Retrograde amnesia |
| R41.3 | Other amnesia |
| R41.82 | Altered mental status, unspecified |
| R41.9 | Unspecified symptoms and signs involving cognitive functions and awareness |
| R45.84 | Anhedonia |
| Z51.11 | Encounter for antineoplastic chemotherapy |
| Z79.3 | Long term (current) use of hormonal contraceptives |
| Z79.891 | Long term (current) use of opiate analgesic |
| Z79.899 | Other long term (current) drug therapy |
| Z86.39 | Personal history of other endocrine, nutritional and metabolic disease |
| Z98.0 | Intestinal bypass and anastomosis status |
| Z99.2 | Dependence on renal dialysis |

8. REFERENCES:

CMS Local Coverage Article: Billing and Coding: Assays for Vitamins and Metabolic Function (A56416)

CMS Local Coverage Determination (LCD): Assays for Vitamins and Metabolic Function (L34914)

Joelson DW, Fiebig EW, Wu AH. Diminished need for folate measurements among indigent populations in the post folic acid supplementation era. Arch Path Lab Med. 2007; 131(3):477-480.

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| Retired Date: | Page 8 of 9 |

Ray, JG, Vermeulen MJ, Boss SC, Cole DE. Declining rate of folate insufficiency among adults following increased folic acid food fortification in Canada. Can J Public Health. 2002;3(4):249-253.

Latif T, His ED, Rybicki LA, Adelstein DJ. Is there a role for folate determinations in current clinical practice in the USA? Clin Lab Haematol. 2004;26(6):379-383.

Shojania AM, VonKuster K. Folate assays are no longer useful diagnostic tools in medical practice. Blood. 2005;106(11 pt1):12b.

Shojania AM. Folate assays are no longer useful as screening tests for malabsorption syndrome. Now, iron and B12 deficiency are more common than folate deficiency in adults with untreated celiac disease. Blood. 2005;106(11 pt1): 12b.

<https://www.healthline.com/health/folic-acid-test>

REVISION LOG:

| REVISIONS | DATE |
|-------------------------|-------------|
| Creation date | 4/28/20 |
| Revised applicable LOBs | 1/21/21 |
| Update coding | 3/5/21 |
| Annual Review | 2/28/22 |

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|------------------------------------------------------------|--------------|--------------------------------------------------------|--------------|
| Approved: | Date: | Approved: | Date: |
| Glendon Henry, MD Senior Medical Director | | Sanjiv Shah, MD Chief Medical Officer | |



Policy and Procedure

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| Review Date: 2/28/22 | Cross Reference Number: |
| Retired Date: | Page 9 of 9 |

Medical Guideline Disclaimer:

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All coding and website links are accurate at time of publication.

MetroPlus Health Plan has adopted the herein policy in providing management, administrative and other services to our members, related to health benefit plans offered by our organization.