

Last 1/10/2023 Approved Effective 3/1/2023 Next Review 1/10/2024 Lines Of Business All Lines of Business Area Medical Policy

#### Vitamin B-12 Testing

# **PURPOSE:**

This policy is designed to discuss medical necessity criteria for Vitamin B-12 testing.

## **DEFINITIONS:**

Vitamin B-12: Vitamin B-12 (cobalamin) plays an essential role in red blood cell formation, cell metabolism, nerve function and the production of DNA, the molecules inside cells that carry genetic information.

#### **PROCEDURE:**

- 1. Vitamin B12 testing is considered not medically necessary, and therefore non-covered, in either of the following:
  - 1. Screening individuals with no risk factors for vitamin B12 deficiency
  - 2. Testing asymptomatic individuals for vitamin B12 deficiency (routine or serial testing)
- 2. Testing may be considered medically necessary for individuals with any of the following indications:
  - 1. Vitamin B12 Testing
    - a. Screening in individuals with one or more risk factors
    - b. If signs or symptoms of vitamin B12 deficiency are present
  - 2. Methylmalonic Acid Testing
    - a. Testing to establish or confirm functional B12 deficiency

- 3. Homocysteine Testing
  - a. Testing of individuals with conditions associated with elevated homocysteine levels
  - b. Assessment of borderline vitamin B12 deficiency or inadequate response to Vitamin B12 treatment in suspected vitamin B12 deficiency.
  - c. Central retinal vein occlusion with a history of previous thrombosis, or family history of thrombosis if under the age of 56 years and does not have strong evidence of arteriosclerotic risk factors.
  - d. Assessment of idiopathic venous thrombo-embolism, recurrent venous thrombo-embolism, thrombosis occurring at a young age (i.e., less than 45 years of age), or thrombosis at an unusual site.
  - e. Assessment of homocystinuria caused by cystathionine beta synthase deficiency.

Risk Factors for vitamin B12 deficiency:

- Decreased ileal absorption
- Pancreatic steatorrhea
- Crohn disease/ inflammatory bowel disease
- Tapeworm infection
- Pernicious anemia
- · Decreased intrinsic factor
- Atrophic gastritis
- Genetic:
  - Transcobalamin II deficiency
- Inadequate intake/nutrition
- Vegans or strict vegetarians (including exclusively breastfed infants of vegetarian/vegan mothers)
- Alcohol abuse
- Patients older than 75 years
- Prolonged medication use of:
  - Histamine H<sub>2</sub> blocker use for more than 12 months
  - Metformin use for more than four months

- Proton pump inhibitor use for more than 12 months
- Inherited metabolic disorders
- · Gastric or small intestine/ Ileal resection
- Postgastrectomy syndrome (includes Roux-en-Y gastric bypass)

Signs and symptoms of Vitamin B12 deficiency:

- Cutaneous
  - Hyperpigmentation
  - Jaundice
  - Vitiligo
- Gastrointestinal
  - Glossitis
- Hematologic
  - Anemia (macrocytic, megaloblastic)
  - Leukopenia
  - Pancytopenia
  - Thrombocytopenia
  - Thrombocytosis
- Neuropsychiatric
  - Areflexia
  - Cognitive impairment (including dementia-like symptoms and acute psychosis)
  - Gait abnormalities
  - Irritability
  - Loss of proprioception and vibratory sense
  - Olfactory impairment
  - Peripheral neuropathy

**Note:** The Health Plan complies with all Medicare National Coverage Determinations (NCDs) and applicable Local Coverage Determinations (LCDs) for all therapies, items, services, and/or procedures that are covered benefits under Medicare. If the coverage criteria in this policy conflicts with any NCDs or relevant LCD, the relevant document controls the application of services regardless of the version of the NCD or LCD listed in the reference section.

# **CODING:**

Procedure Codes:

CPT Code	Description
82607	Cyanocobalamin (Vitamin B-12)
83090	Homocysteine
83921	Organic Acid, single, quantitative (Methylmalonic acid)

Non-covered Diagnosis Codes:

CD-10 Code	Description
Z00.00	Encounter for general adult medical examination without abnormal findings
Z00.129	Encounter for routine child health examination without abnormal findings
Z00.3	Encounter for examination for adolescent development state
Z00.8	Encounter for other general examination

Covered Diagnosis Codes:

ICD-10	Description
Code	
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
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
D70.0	Congenital agranulocytosis
D70.1	Agranulocytosis secondary to cancer chemotherapy

D70.2	Other drug-induced agranulocytosis
D70.3	Neutropenia due to infection
D70.4	Cyclic neutropenia
D70.8	Other neutropenia
D70.9	Neutropenia, unspecified
D71	Functional disorders of polymorphonuclear neutrophils
D72.0	Genetic anomalies of leukocytes
D72.10	Eosinophilia, unspecified
D72.110	Idiopathic hypereosinophilic syndrome [IHES]
D72.118	Other hypereosinophilic syndrome
D72.119	Hypereosinophilic syndrome [HES], unspecified
D72.12	Drug rash with eosinophilia and systemic symptoms syndrome
D72.18	Eosinophilia in diseases classified elsewhere
D72.19	Other eosinophilia
D72.810	Lymphocytopenia
D72.818	Other decreased white blood cell count
D72.819	Decreased white blood cell count, unspecified
D76.1	Hemophagocytic lymphohistiocytosis
D76.2	Hemophagocytic syndrome, infection-associated
D76.3	Other histiocytosis syndromes
D81.818	Other biotin-dependent carboxylase deficiency
D81.819	Biotin-dependent carboxylase deficiency, unspecified
E41	Nutritional marasmus
E43	Unspecified severe protein-calorie malnutrition
E44.0	Moderate 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

E72.19	Other disorders of sulfur-bearing amino-acid metabolism
F03.90	Unspecified dementia without behavioral disturbance
F10.11	Alcohol abuse, in remission
F10.130	Alcohol abuse with withdrawal, uncomplicated
F10.131	Alcohol abuse with withdrawal delirium
F10.132	Alcohol abuse with withdrawal with perceptual disturbance
F10.139	Alcohol abuse with withdrawal, unspecified
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
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
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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
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
K52.21	Food protein-induced enterocolitis syndrome
K52.22	Food protein-induced enteropathy
K52.29	Other allergic and dietetic gastroenteritis and colitis
K52.3	Indeterminate colitis
K52.831	Collagenous colitis
K52.832	Lymphocytic colitis
K58.1	Irritable bowel syndrome with constipation
K58.2	Mixed irritable bowel syndrome
K90.0	Celiac disease
K90.1	Tropical sprue
K90.2	Blind loop syndrome, not elsewhere classified
K90.3	Pancreatic steatorrhea
K90.81	Whipple's disease

K90.89	Other intestinal malabsorption
K90.9	Intestinal malabsorption, unspecified
K91.1	Postgastric surgery syndromes
K91.2	Postsurgical malabsorption, not elsewhere classified
K91.30	Post-procedural intestinal obstruction, unspecified as to partial versus complete
K91.31	Post-procedural partial intestinal obstruction
K91.32	Post-procedural complete intestinal obstruction
K91.81	Other intraoperative complications of digestive system
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
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
R41.9	Unspecified symptoms and signs involving cognitive functions and awareness
R45.84	Anhedonia
R68.89	Other general symptoms and signs
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

Z86.2	Personal history of diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism
Z86.31	Personal history of diabetic foot ulcer
Z86.32	Personal history of gestational diabetes
Z86.39	Personal history of other endocrine, nutritional and metabolic disease
Z98.0	Intestinal bypass and anastomosis status
Z99.2	Dependence on renal dialysis

#### **REFERENCES:**

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## **POST-PAYMENT AUDIT STATEMENT:**

The medical record must include documentation that reflects the medical necessity criteria and is subject to audit by THP at any time pursuant to the terms of your provider agreement.

# **DISCLAIMER:**

This policy is intended to serve as a guideline only and does not constitute medical advice, any guarantee of payment, plan pre-authorization, an explanation of benefits, or a contract. This policy is intended to address medical necessity guidelines that are suitable for most individuals. Each individual's unique clinical situation may warrant individual consideration based on medical records. Individual claims may be affected by other factors, including but not necessarily limited to state and federal laws and regulations, legislative mandates, provider contract terms, and THP's professional judgment. Reimbursement for any services shall be subject to member benefits and eligibility on the date of service, medical necessity, adherence to plan policies and procedures, claims editing logic, provider contractual agreement, and applicable referral, authorization, notification, and utilization management guidelines. Unless otherwise noted within the policy, THP's policies apply to both participating and non-participating providers and facilities. THP reserves the right to review and revise these policies periodically as it deems necessary in its discretion, and it is subject to change or termination at any time by THP. THP has full and final discretionary authority for its interpretation and application. Accordingly, THP may use reasonable discretion in interpreting and applying this policy to health care services provided in any particular case.

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All Revision Dates