MEDICAL POLICY

POLICY TITLE	PARENTERAL NUTRITION
POLICY NUMBER	MP 3.008

CLINICAL BENEFIT	☐ MINIMIZE SAFETY RISK OR CONCERN. ☐ MINIMIZE HARMFUL OR INEFFECTIVE INTERVENTIONS. ☐ ASSURE APPROPRIATE LEVEL OF CARE. ☐ ASSURE APPROPRIATE DURATION OF SERVICE FOR INTERVENTIONS. ☒ ASSURE THAT RECOMMENDED MEDICAL PREREQUISITES HAVE BEEN MET. ☐ ASSURE APPROPRIATE SITE OF TREATMENT OR SERVICE.
Effective Date:	**12/1/2024**

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POLICY HISTORY

I. POLICY

Parenteral nutrition (PN) should **NOT** be used based solely on medical diagnosis or disease state. PN may be considered **medically necessary** when **all** the following are met:

- A full evaluation has been conducted regarding the feasibility of using Enteral Nutrition (EN)
- PN should be reserved for clinical situations in which adequate EN is not an option. Such conditions include, but are not limited to:
  - Inflammatory bowel syndrome, e.g., Crohn's disease;
  - Short bowel syndrome secondary to massive small bowel resection;
  - Malabsorption due to enterocolic, enterovesical, or enterocutaneous fistulas with PN being used as a temporary treatment until the fistula is repaired;
  - Motility disorder (pseudo-obstruction);
  - Patients with prolonged paralytic ileus
  - Newborn infants with catastrophic gastrointestinal anomalies such as tracheoesophageal fistula, gastroschisis, omphalocele, or massive intestinal atresia;
  - Infants and young children who fail to thrive due to systemic disease or secondary to intestinal insufficiency associated with short bowel syndrome, malabsorption, or chronic idiopathic diarrhea, such as pseudo-obstruction.
  - Pancreatitis
  - Hyperemesis gravidarum

Ongoing evaluation of gastrointestinal function, nutritional status, and for pediatric patients, growth, should occur to determine appropriateness of continuing PN. Prolongation of PN may be considered **medically necessary** to achieve 50% or more of requirements for energy, protein, and micronutrients or when impaired gastrointestinal function precludes 100% absorption of nutrient needs.

In situations at end of life where improvement is not expected, PN administration does not improve nutrition status, reverse cachexia, or improve survival and **may not be considered medically necessary**. Such conditions may include, but are not limited to:

- Obstruction secondary to stricture or neoplasm of the esophagus or stomach when life expectancy is otherwise less than a few weeks;
- Loss of the swallowing mechanism due to a central nervous system disorder, where the risk of aspiration is great;
- Poor oral intake and/or cachexia associated with advanced malignancy or other end-stage disease.

Administration in the home must be safe and medically appropriate. The member is not required to be homebound to receive home infusion services, including Parenteral Nutrition (PN).

Cross-reference:

MP 2.015 Enteral Nutrition

II. PRODUCT VARIATIONS

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This policy is only applicable to certain programs and products administered by Capital Blue Cross and subject to benefit variations as discussed in Section VI. Please see additional information below.

FEP PPO - Refer to FEP Medical Policy Manual. The FEP Medical Policy manual can be found at:
https://www.fepblue.org/benefit-plans/medical-policies-and-utilization-management-guidelines/medical-policies.

III. DESCRIPTION/BACKGROUND

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Home infusion therapy services are services and supplies required for administration of a home infusion therapy regimen. Infusion therapy involves the administration of pharmaceuticals, fluids, and biologicals intravenously. The broad range of home infusion therapy services includes, but is not limited to, parenteral nutrition, antibiotic therapy, intravenous pain management, chemotherapy, replacement therapy, and hydration therapy. The complexity of the treatment may require services such as skilled nursing assessment and education, dispensing, and delivery of medication and supplies. These are generally provided through a multidisciplinary team of health care professionals, which includes, but are not limited to, nursing personnel, registered pharmacists, and patient supply technicians.

One type of home infusion therapy is parenteral nutrition (PN), also known as total parenteral nutrition. This therapy is used for patients with either a temporary or permanent medical or surgical condition in which the ability of the gastrointestinal system to absorb nutrients from food is severely impaired. PN is an intravenous solution that contains glucose (sugar), amino acids (protein), electrolytes, vitamins, and minerals. PN may or may not include fats.

PN is infused through an implanted central venous catheter that delivers the liquid substance into the vena cava. The solution is administered using an infusion pump to assure a controlled flow of the fluid on a continuous or intermittent schedule. PN differs from the peripheral parenteral nutrition in the level of concentration, mode of delivery, and duration of treatment.

Patients and family members should be involved in the decision making process when PN is being considered. Conversations should occur early and often regarding appropriateness of PN. Use of PN in palliative care should be limited to carefully selected patients with an expected survival of 2-3 months when oral intake or EN is not feasible. If PN is deemed medically necessary as part of a palliative plan of care, criteria for discontinuation should be well-defined in preparation for when the burdens and risks of PN outweigh potential benefits. Per The American Society of Parenteral and Enteral Nutrition (ASPEN), "Like any medical intervention, PN should be continued only if it provides a benefit consistent with the goals of palliative care to reduce suffering and improve quality of life. Withdrawing PN is a reasonable course of action when the burdens of care outweigh the benefits, the patient has experienced functional decline, or PN exacerbates symptoms, such as shortness of breath, ascites, or edema."

IV. RATIONALE

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Determining the need for PN is not exclusively diagnosis dependent. As a medical therapy, PN has not been shown to heal or treat any specific disease or medical condition other than malnutrition. In cases where previously healthy patients have experienced an acute gastrointestinal event, PN is used to prevent the malnutrition that would develop without nutrition involvement. The primary intent of PN is to deliver nutrients that support physiologic needs while targeted medical interventions take place in situations where oral intake or EN is not achievable.

Factors other than disease state should guide decisions regarding the initiation of PN, including ability to safely access the gut, severity of disease (catabolic state or critical illness), baseline nutrition status of the patient, timing of starting PN, anticipated length of therapy, medical interventions aimed at promoting EN (including prior attempts to gain enteral access), metabolic stability, and end-of-life considerations.

In 2014, the ASPEN Board of Directors assembled a task force including physicians, nurses, dietitians, and pharmacists, with the goal of exploring clinical questions surrounding PN use. In the initial phase, it was decided to focus on guidance regarding the *appropriate use* of PN therapy in a variety of clinical circumstances rather than *indications* for PN based on medical diagnosis.

Despite extensive clinical experience with PN across the healthcare continuum, relatively few high-level controlled studies address outcomes of PN administration in patients who are not critically ill. The importance of providing adequate nutrition during times of illness and catabolism has been extensively researched. Surgeons in the early 20th century associated poor clinical outcomes in patients with low body weight, as compared with those with normal body weight or adequate baseline nutrition. Despite the general acceptance among illness, nutrition, and outcomes, determining which patients will likely benefit from PN remains a clinical dilemma. The need for PN is often dynamic. PN dependence may fluctuate over time with changes in clinical status or during exacerbations or remissions in the underlying gastrointestinal condition.

Pironi et al. (2020) concluded, "PN is a life-saving therapy to those unable to meet their nutritional requirements by oral/enteral intake. Clearly, no randomized controlled trial (RCT) can be conducted to compare HPN with placebo to confirm the life-saving efficacy of HPN therapy in

this condition… However, the presence of organ failures and metabolic diseases, such as heart failure, renal failure, type 1 diabetes, may be associated with reduced tolerance to PN and may require careful and specific adaptations of the HPN program to meet the patient's specific clinical needs."

Current expert consensus and evidence-based guidelines for PN have evolved over the last decade such that PN is only recommended if EN is impossible or inadequate, or when use of EN exacerbates gastrointestinal tract dysfunction. Additionally, the ASPEN Board of Directors and the Clinical Guidelines Task Force recommends that determination of nutrient requirements should be individualized, based on assessment of body composition and function, and fall within acceptable ranges, while taking physiologic and pathophysiologic conditions into account.

V. DEFINITIONS

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PARENTERAL refers to administration of medication or fluid other than through the digestive tract (e.g. intravenous or intramuscular).

VENA CAVA refers to one of two large veins returning blood from the peripheral circulation to the right atrium of the heart.

VI. BENEFIT VARIATIONS

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The existence of this medical policy does not mean that this service is a covered benefit under the member's health benefit plan. Benefit determinations should be based in all cases on the applicable health benefit plan language. Medical policies do not constitute a description of benefits. A member's health benefit plan governs which services are covered, which are excluded, which are subject to benefit limits, and which require preauthorization. There are different benefit plan designs in each product administered by Capital Blue Cross. Members and providers should consult the member's health benefit plan for information or contact Capital Blue Cross for benefit information.

VII. DISCLAIMER

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Capital Blue Cross' medical policies are developed to assist in administering a member's benefits, do not constitute medical advice and are subject to change. Treating providers are solely responsible for medical advice and treatment of members. Members should discuss any medical policy related to their coverage or condition with their provider and consult their benefit information to determine if the service is covered. If there is a discrepancy between this medical policy and a member's benefit information, the benefit information will govern. If a provider or a member has a question concerning the application of this medical policy to a specific member's plan of benefits, please contact Capital Blue Cross' Provider Services or Member Services. Capital Blue Cross considers the information contained in this medical policy to be proprietary and it may only be disseminated as permitted by law.

VIII. CODING INFORMATION

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Note: This list of codes may not be all-inclusive, and codes are subject to change at any time. The identification of a code in this section does not denote coverage as coverage is determined by the terms of member benefit information. In addition, not all covered services are eligible for separate reimbursement.

Parenteral Nutrition (PN) may be considered medically necessary when criteria are met:

Procedure Codes								
99601	99602	B4164	B4168	B4172	B4176	B4178	B4180	B4185
B4187	B4189	B4193	B4197	B4199	B4216	B4220	B4222	B4224
B5000	B5100	B5200	B9004	B9006	E0791	J7799	S5035	S5036
S5497	S5498	S5501	S5502	S5517	S5518	S5520	S5521	S5522
S5523	S9364	S9365	S9366	S9367	S9368	S9810	S9364	

ICD-10-CM Diagnosis Code	Description
C15.3	Malignant neoplasm of upper third of esophagus
C15.4	Malignant neoplasm of middle third of esophagus
C15.5	Malignant neoplasm of lower third of esophagus
C15.8	Malignant neoplasm of overlapping sites of esophagus
C16.0	Malignant neoplasm of cardia
C16.1	Malignant neoplasm of fundus of stomach
C16.2	Malignant neoplasm of body of stomach
C16.3	Malignant neoplasm of pyloric antrum
C16.4	Malignant neoplasm of pylorus
C16.8	Malignant neoplasm of overlapping sites of stomach
C18.2	Malignant neoplasm of ascending colon
C18.3	Malignant neoplasm of hepatic flexure
C18.4	Malignant neoplasm of transverse colon
C18.5	Malignant neoplasm of splenic flexure
C18.6	Malignant neoplasm of descending colon
C18.7	Malignant neoplasm of sigmoid colon
C18.8	Malignant neoplasm of overlapping sites of colon
C19	Malignant neoplasm of rectosigmoid junction
C20	Malignant neoplasm of rectum
C7A.092	Malignant carcinoid tumor of the stomach
D00.1	Carcinoma in situ of esophagus
D00.2	Carcinoma in situ of stomach
D13.0	Benign neoplasm of esophagus

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ICD-10-CM Diagnosis Code	Description
D13.99	Benign neoplasm of ill-defined sites within the digestive system
D3A.092	Benign carcinoid tumor of the stomach
K22.2	Esophageal obstruction
K22.81	Esophageal polyp
K22.82	Esophagogastric junction polyp
K22.89	Other specified disease of esophagus
K31.A0	Gastric intestinal metaplasia, unspecified
K31.A11	Gastric intestinal metaplasia without dysplasia, involving the antrum
K31.A12	Gastric intestinal metaplasia without dysplasia, involving the body (corpus)
K31.A13	Gastric intestinal metaplasia without dysplasia, involving the fundus
K31.A14	Gastric intestinal metaplasia without dysplasia, involving the cardia
K31.A15	Gastric intestinal metaplasia without dysplasia, involving multiple sites
K31.A19	Gastric intestinal metaplasia without dysplasia, unspecified site
K31.A21	Gastric intestinal metaplasia with low grade dysplasia
K31.A22	Gastric intestinal metaplasia with high grade dysplasia
K31.A29	Gastric intestinal metaplasia with dysplasia, unspecified
K31.1	Adult hypertrophic pyloric stenosis
K31.2	Hourglass stricture and stenosis of stomach
K31.6	Fistula of stomach and duodenum
K31.7	Polyp of stomach and duodenum
K31.89	Other diseases of stomach and duodenum
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
K50.10	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
K50.80	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

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ICD-10-CM Diagnosis Code	Description
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
K51.00	Ulcerative (chronic) pancolitis without complications
K51.011	Ulcerative (chronic) pancolitis with rectal bleeding
K51.012	Ulcerative (chronic) pancolitis with intestinal obstruction
K51.013	Ulcerative (chronic) pancolitis with fistula
K51.018	Ulcerative (chronic) pancolitis with other complication
K51.20	Ulcerative (chronic) proctitis without complications
K51.211	Ulcerative (chronic) proctitis with rectal bleeding
K51.212	Ulcerative (chronic) proctitis with intestinal obstruction
K51.213	Ulcerative (chronic) proctitis with fistula
K51.214	Ulcerative (chronic) proctitis with abscess
K51.218	Ulcerative (chronic) proctitis with other complication
K51.30	Ulcerative (chronic) rectosigmoiditis without complications
K51.311	Ulcerative (chronic) rectosigmoiditis with rectal bleeding
K51.312	Ulcerative (chronic) rectosigmoiditis with intestinal obstruction
K51.313	Ulcerative (chronic) rectosigmoiditis with fistula
K51.314	Ulcerative (chronic) rectosigmoiditis with abscess
K51.318	Ulcerative (chronic) rectosigmoiditis with other complication
K51.411	Inflammatory polyps of colon with rectal bleeding
K51.412	Inflammatory polyps of colon with intestinal obstruction
K51.413	Inflammatory polyps of colon with fistula
K51.414	Inflammatory polyps of colon with abscess
K51.418	Inflammatory polyps of colon with other complication
K51.50	Left sided colitis without complications
K51.511	Left sided colitis with rectal bleeding
K51.512	Left sided colitis with intestinal obstruction
K51.513	Left sided colitis with fistula
K51.514	Left sided colitis with abscess
K51.518	Left sided colitis with other complication
K51.80	Other ulcerative colitis without complications
K51.811	Other ulcerative colitis with rectal bleeding
K51.812	Other ulcerative colitis with intestinal obstruction
K51.813	Other ulcerative colitis with fistula
K51.814	Other ulcerative colitis with abscess

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ICD-10-CM Diagnosis Code	Description
K51.818	Other ulcerative colitis with other complication
K56.0	Paralytic ileus
K56.50	Intestinal adhesions [bands], unspecified as to partial versus complete obstruction
K56.51	Intestinal adhesions [bands], with partial obstruction
K56.52	Intestinal adhesions [bands] with complete obstruction
K56.600	Partial intestinal obstruction, unspecified as to cause
K56.601	Complete intestinal obstruction, unspecified as to cause
K59.8	Other specified functional intestinal disorders
K59.89	Other specified functional intestinal disorders
K63.2	Fistula of intestine
K91.2	Postsurgical malabsorption, not elsewhere classified
K94.23	Gastrostomy malfunction
N32.1	Vesicointestinal fistula
P76.1	Transitory ileus of newborn
P76.8	Other specified intestinal obstruction of newborn
P77.1	Stage 1 necrotizing enterocolitis in newborn
P77.2	Stage 2 necrotizing enterocolitis in newborn
P77.3	Stage 3 necrotizing enterocolitis in newborn
P78.0	Perinatal intestinal perforation
P78.1	Other neonatal peritonitis
P78.3	Noninfective neonatal diarrhea
P78.81	Congenital cirrhosis (of liver)
P78.82	Peptic ulcer of newborn
P78.83	Newborn esophageal reflux
P78.89	Other specified perinatal digestive system disorders
P92.01	Bilious vomiting of newborn
Q39.0	Atresia of esophagus without fistula
Q39.1	Atresia of esophagus with tracheo-esophageal fistula
Q39.2	Congenital tracheo-esophageal fistula without atresia
Q39.3	Congenital stenosis and stricture of esophagus
Q39.4	Esophageal web
Q39.8	Other congenital malformations of esophagus
Q40.2	Other specified congenital malformations of stomach
Q41.0	Congenital absence, atresia, and stenosis of duodenum
Q41.1	Congenital absence, atresia, and stenosis of jejunum

ICD-10-CM Diagnosis Code	Description
Q41.2	Congenital absence, atresia, and stenosis of ileum
Q41.8	Congenital absence, atresia, and stenosis of other specified parts of small intestine
Q42.0	Congenital absence, atresia and stenosis of rectum with fistula
Q42.1	Congenital absence, atresia and stenosis of rectum without fistula
Q42.2	Congenital absence, atresia and stenosis of anus with fistula
Q42.3	Congenital absence, atresia and stenosis of anus without fistula
Q42.8	Congenital absence, atresia and stenosis of other parts of large intestine
Q79.2	Exomphalos
Q79.3	Gastroschisis
R13.19	Other dysphagia

IX. REFERENCES

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X. POLICY HISTORY

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MP 3.008	**01/01/2020 Administrative Update.** Updated code description for B4185 and added new code B4187**.**
	05/11/2020 Consensus Review. References and FEP language added. No change to policy statement.
	09/01/2020 Administrative Update. Added ICD 10 K59.89
	09/07/2021 Administrative Update. Added new ICD-10 codes K22.81, K22.82, K22.89, K31.A0, K31.A11, K31.A12, K31.A13, K31.A14, K31.A15, K31.A19, K31.A21, K31.A22, K31.A29. Effective 10/1/2021
	01/20/2022 Minor Review. Changed title to Parenteral Nutrition. Changed Total Parenteral Nutrition to Parenteral Nutrition throughout policy. Added criteria that PN is not to be used based solely on medical diagnosis and enteral nutrition should be considered first. Removed mention of surgery, burns, and multiple injuries from prolonged paralytic ileus criteria. Added pancreatitis and hyperemesis gravidarum to list of clinical situations where enteral nutrition may not be an option. Added information regarding ongoing evaluation of GI function, nutritional status, and growth for pediatric patients to determine continuation of PN. Changed criteria requiring < 30% po intake to 50% or more of requirements for energy, protein, and micronutrients or when impaired gastrointestinal function precludes 100% absorption of nutrient needs. Added end of life criteria. Removed home infusion services section. Product Variation and FEP language updated. Revised Background and Rationale sections. Coding updated. References added.
	08/21/2023 Consensus Review. No change to policy statement. Definitions updated. Added code B4222. Removed codes S9325, S9326, S9327, S9328, S9329, S9330, S9331, S9336, S9338, S9345, S9346, S9347, S9348, S9349, S9351, S9353, S9355, S9357, S9359, S9361, S9363, S9373, S9374, S9375, S9376, S9377, S9379, S9490, S9494, S9497, S9500, S9501, S9502, S9503, S9504, S9542, S9558, S9559, S9560, S9562, S9590.
	09/15/2023 Administrative Update. New ICD10 code D13.99 added. Effective 10/1/2023
	01/19/2024 Administrative Update. Clinical benefit added.
	08/06/2024 Consensus Review. No change to policy statement. References added.

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