

Policy and Procedure

PHARMACY PRIOR AUTHORIZATION POLICY AND CRITERIA ORPTCNUT003.0425	NUTRITIONAL PRODUCTS TOTAL PARENTERAL NUTRITION (TPN)
Effective Date: 6/1/2025	Review/Revised Date: 04/02, 08/02, 06/03, 06/04, 06/05, 06/07, 10/08, 10/09, 10/10, 04/12, 08/12, 08/13, 10/13, 08/14, 08/15, 07/16, 05/17, 07/17, 07/18, 07/19, 07/20, 03/21, 03/22, 02/23, 03/24, 03/25 (ZJN)
Original Effective Date: 08/02	P&T Committee Meeting Date: 04/02, 08/02, 06/03, 06/04, 06/05, 07/07, 10/08, 10/09, 10/10, 04/12, 08/12, 08/13, 08/1, 08/15, 08/16, 06/17, 08/17, 08/18, 08/19, 08/20, 04/21, 04/22, 04/23, 04/24, 04/25
Approved by: Oregon Region Pharmacy and Therapeutics Committee	

SCOPE:

Providence Health Plan and Providence Health Assurance as applicable (referred to individually as “Company” and collectively as “Companies”).

APPLIES TO:

Commercial
Medicaid

POLICY CRITERIA:

COVERED USES: N/A

REQUIRED MEDICAL INFORMATION:

One of the following criteria must be met:

1. Member has a central or peripheral line and nutrition will be administered via this line.

OR

2. Documentation of a failure to enteral nutrition (either oral or via tube), defined as either a or b:

- a. A documented loss of at least 10% of body weight over a three-month period
- b. Member is unable to reach nutritional needs from combined oral and enteral intake (less than 75 percent of estimated basal caloric requirements)

OR

3. Evidence of structural or functional bowel disease (for example, massive small bowel resection, short bowel syndrome) that makes oral and tube feedings not possible

OR

4. A condition in which it is necessary for the gastrointestinal tract to be totally non-functioning for a period of time (such as bowel rest)

**PHARMACY PRIOR AUTHORIZATION
POLICY AND CRITERIA
ORPTCNUT003**

**NUTRITIONAL PRODUCTS
TOTAL PARENTERAL NUTRITION (TPN)**

Medically necessary **intradialytic parenteral nutrition (IDPN)** may be covered for members on chronic dialysis who meet criteria 2, 3 or 4 AND cannot tolerate daily TPN.

For continued coverage, annual assessment that documents the ongoing medical necessity of PN as per the above criteria will be required.

EXCLUSION CRITERIA:

Coverage for intradialytic parenteral nutrition (IDPN) when offered in addition to regularly scheduled TPN infusions

AGE RESTRICTIONS: N/A

PRESCRIBER RESTRICTIONS: N/A

COVERAGE DURATION:

Initial authorization will be approved for three months, and reauthorization will be approved for up to one year.

Requests for indications that were approved by the FDA within the previous six (6) months may not have been reviewed by the health plan for safety and effectiveness and inclusion on this policy document. These requests will be reviewed using the New Drug and or Indication Awaiting P&T Review; Prior Authorization Request ORPTCOPS047.

Requests for a non-FDA approved (off-label) indication requires the proposed indication be listed in either the American Hospital Formulary System (AHFS), Drugdex, or the National Comprehensive Cancer Network (NCCN) and is considered subject to evaluation of the prescriber's medical rationale, formulary alternatives, the available published evidence-based research and whether the proposed use is determined to be experimental/investigational.

Coverage for Medicaid is limited to a condition that has been designated a covered line item number by the Oregon Health Services Commission listed on the Prioritized List of Health Care Services.

Coverage decisions are made on the basis of individualized determinations of medical necessity and the experimental or investigational character of the treatment in the individual case.

INTRODUCTION:

Parenteral nutrition (PN) is the provision of nutritional requirements through a central or peripheral venous catheter. The purpose of initiating parenteral nutrition therapy is to prevent or correct specific nutrient deficiencies and the adverse effects of malnutrition when the gastrointestinal tract cannot be used safely or effectively. The PN benefit will include all related supplies, equipment, and nutrients. A skilled assessment of nutritional status will be done at a frequency consistent with the member's diagnosis and overall nutritional condition.

FDA APPROVED INDICATIONS: N/A

POSITION STATEMENT:

- Total parenteral nutrition (TPN) therapy is a covered medical benefit when determined to be medically necessary to prevent or treat malnutrition and nutritional needs that cannot be met by oral or enteral feedings.
- For Medicare members, coverage under the Part B benefit applies to individuals with permanent dysfunction (see Medicare Part B Policy).
- TPN is not considered medically necessary for conscious patients whose need for parenteral nutrition is solely due to a lack of appetite or cognitive issues.
- Whenever clinically appropriate, attempts should be made to wean the patient off parenteral nutrition in favor of oral or enteral routes.
- The medical policy and criteria are developed based on Medicaid and ASPEN guidelines.
- Dispensing of nutritional therapy is limited to a one-month supply at a time.

Intradialytic Parenteral Nutrition and Intraperitoneal Nutrition¹⁵⁻¹⁶

- Intradialytic parenteral nutrition (IDPN) and intraperitoneal nutrition (IPN) are both methods of nutritional support for patients with end-stage renal disease (ESRD), but they differ in their administration and clinical indications.
 - Intradialytic parenteral nutrition (IDPN): a type of parenteral nutritional therapy administered to malnourished patients undergoing hemodialysis.
 - Intraperitoneal nutrition (IPN): a type of parenteral nutritional therapy administered to malnourished patients undergoing peritoneal dialysis.
- IDPN involves the infusion of a hyperalimentation formula, composed of amino acids, glucose, and lipids, during dialysis to treat protein-calorie malnutrition. IDPN is indicated for malnourished, non-critically ill hospitalized patients with acute kidney injury or chronic kidney disease (CKD) on hemodialysis, as well as for patients on chronic hemodialysis who require total parenteral nutrition (TPN) due to inadequate oral intake, resulting in malnutrition. The solutions used for IDPN are similar to those used for TPN, with a typical formula containing 10% amino acids, 40% to 50% glucose, 10% to 20% lipids, or a mixture of carbohydrates and lipids, depending on the patient's needs. These solutions deliver approximately provides 500–1000 kcal and 50–100 g of amino acids in less than 1 L of volume per dialysis treatment. IDPN is administered during routine dialysis sessions, typically three times per week, eliminating the need for additional clinic visits, extended dialysis time, or extra lines.
- IPN is a form of parenteral nutrition injected into the peritoneal cavity during peritoneal dialysis. Unlike IDPN, IPN uses amino acids instead of dextrose as the osmotic agent during dialysis, or a combination of amino acids and glucose. Since IPN involves the administration of an amino acid-containing dialysate, it is

also referred to as intraperitoneal amino acid (IPAA) therapy. The amino acids serve a dual purpose: they help cleanse the blood of toxins, aid in fluid removal by acting as an osmotic agent, and provide protein to replace the approximately 5–15 g of amino acids lost per day through the peritoneal membrane.

- Serum albumin concentration is commonly used to assess nutritional status in maintenance dialysis patients, although factors like hydration, inflammation, and liver disease can influence its levels. Low serum albumin is associated with higher mortality risk in dialysis patients. Specifically, in peritoneal dialysis (PD) patients, a baseline serum albumin level below 3.0 g/dL is linked to more than a 3-fold higher risk of all-cause and cardiovascular mortality, and a 3.4-fold higher risk of infection-related mortality compared to levels between 4.0–4.19 g/dL

Clinical guideline recommendations for IDPN:

National Kidney Foundation Kidney Disease Outcomes Quality Initiative (NKF KDOQI)

- The 2020 KDOQI Guidelines recommend that patients may benefit from IDPN therapy if all of the following three criteria are met:
 - Evidence of protein-energy malnutrition and inadequate dietary protein and/or energy intake
 - Inability to administer tolerate adequate oral nutrition, including food supplements or enteral feeding
 - Protein and energy requirements can be met when IDPN is used in conjunction with oral intake or enteral feeding.
- Additionally, the 2020 KDOQI Guidelines recommend the following:
 - IDPN therapy should not be considered a long-term approach to nutritional support. It should be discontinued, and oral nutritional supplementation should be attempted as soon as improvements in nutritional status are observed, and the patient can use the oral or enteral route.
 - If IDPN therapy in conjunction with oral intake does not achieve the nutritional requirements of the patient or the gastrointestinal tract is impaired, TPN given on a daily basis should be considered.

American Society for Parenteral and Enteral Nutrition (ASPEN)

- The 2010 Clinical Guideline does not recommend IDPN in malnourished CKD stage 5 hemodialysis patients due to lack of supporting data to reduce mortality (Grade C)
- The 2017 ASPEN Task Force Consensus Recommendations support initiation of IDPN when two of the following criteria is met:
 - Serum albumin concentration less than 3.5 g/dL
 - Evidence of protein malnutrition based on a normalized protein catabolic rate (less than 0.8 g/kg/d)

- Energy intake less than 25 kcal/kg/d
- Weight loss equal to or greater than 10% ideal body weight over 3 months
- Dysfunctional gastrointestinal tract
- Inability to administer adequate EN especially if fluid limited
- Inadequate weight gain over 1 month
- The 2017 ASPEN Task Force Consensus Recommendations suggest discontinuing IDPN if any of the following conditions exist:
 - Reasonable sustained improvement in nutritional parameters
 - Able to sustain weight and return to oral nutritional supplementation
 - Adverse effects are improved
 - Lack of improvement after 3 to 6 months of IDPN should also lead to discontinuation and consider TPN instead

Clinical guideline recommendations for IPN/IPAA:

- There is limited to no evidence for IPN, and limited evidence for IPAA.

National Kidney Foundation Kidney Disease Outcomes Quality Initiative (NKF KDOQI)

- IPAA should only be used if spontaneous protein and energy intakes in conjunction with IPAA are able to meet the required protein and energy targets. Otherwise, daily TPN or partial parenteral nutrition (PPN) should be considered.
- In adults with CKD 5D on PD with protein-energy wasting, we suggest not substituting conventional dextrose dialysate with amino acid dialysate as a general strategy to improve nutritional status, although it is reasonable to consider a trial of amino acid dialysate to improve and maintain nutritional status if nutritional requirements cannot be met with existing oral and enteral intake (OPINION).
- The effects of substituting amino acid dialysate for conventional dextrose dialysate on patient survival, hospitalization, other clinical outcomes, and QoL have not been adequately evaluated. The long-term effect of IPAA therapy remains unclear.

Refeeding Syndrome

In malnourished patients, the aggressive delivery of calories, particularly carbohydrates, can induce refeeding syndrome. Refeeding syndrome involves an intracellular shift of magnesium, potassium, and phosphorus, which can lead to low serum levels of these electrolytes. Symptoms may include fatigue, arrhythmia, edema, muscle weakness, and lethargy. Patients at risk of refeeding syndrome should have their TPN or PPN initiated in an inpatient setting to allow for frequent monitoring of electrolytes and minimize the risk of adverse effects.

Patients at High Risk for Refeeding Syndrome

**PHARMACY PRIOR AUTHORIZATION
POLICY AND CRITERIA
ORPTCNUT003**

**NUTRITIONAL PRODUCTS
TOTAL PARENTERAL NUTRITION (TPN)**

Anorexia nervosa
Chronic alcoholism
Morbid obesity with rapid weight loss (ex. Gastric bypass surgery)
Protein Calorie Malnutrition
> 10% weight loss over 2-3 months
Chronic malnutrition or starvation
Unfed for 7-10 days or evidence of underfeeding
Prolonged fasting (ex. Observance of Ramadan, NPO status, Clear liquid diet)
Prolonged IV hydration with NPO status
Wasting diseases (ex. Cancer, AIDS)

BILLING GUIDELINES AND CODING:

CODES◇	
Prior Authorization Required	
CODE	Code Description
B4164	PARENTERAL NUTRITION SOLUTION: CARBOHYDRATES (DEXTROSE), 50% OR LESS (500 ML = 1 UNIT) - HOME MIX
B4168	PARENTERAL NUTRITION SOLUTION; AMINO ACID, 3.5%, (500 ML = 1 UNIT) - HOME MIX
B4172	PARENTERAL NUTRITION SOLUTION; AMINO ACID, 5.5% THROUGH 7%, (500 ML = 1 UNIT) - HOME MIX
B4176	PARENTERAL NUTRITION SOLUTION; AMINO ACID, 7% THROUGH 8.5%, (500 ML = 1 UNIT) - HOME MIX
B4178	PARENTERAL NUTRITION SOLUTION: AMINO ACID, GREATER THAN 8.5% (500 ML = 1 UNIT) - HOME MIX
B4180	PARENTERAL NUTRITION SOLUTION; CARBOHYDRATES (DEXTROSE), GREATER THAN 50% (500 ML = 1 UNIT) - HOME MIX
B4185	PARENTERAL NUTRITION SOLUTION, NOT OTHERWISE SPECIFIED, 10 GRAMS LIPIDS
B4187	OMEGAVEN, 10 GRAMS LIPIDS
B4189	PARENTERAL NUTRITION SOLUTION; COMPOUNDED AMINO ACID AND CARBOHYDRATES WITH ELECTROLYTES, TRACE ELEMENTS, AND VITAMINS, INCLUDING PREPARATION, ANY STRENGTH, 10 TO 51 GRAMS OF PROTEIN - PREMIX
B4193	PARENTERAL NUTRITION SOLUTION; COMPOUNDED AMINO ACID AND CARBOHYDRATES WITH ELECTROLYTES, TRACE ELEMENTS, AND VITAMINS, INCLUDING PREPARATION, ANY STRENGTH, 52 TO 73 GRAMS OF PROTEIN - PREMIX
B4197	PARENTERAL NUTRITION SOLUTION; COMPOUNDED AMINO ACID AND CARBOHYDRATES WITH ELECTROLYTES, TRACE ELEMENTS AND VITAMINS, INCLUDING PREPARATION, ANY STRENGTH, 74 TO 100 GRAMS OF PROTEIN - PREMIX
B4199	PARENTERAL NUTRITION SOLUTION; COMPOUNDED AMINO ACID AND CARBOHYDRATES WITH ELECTROLYTES, TRACE ELEMENTS AND VITAMINS, INCLUDING PREPARATION, ANY STRENGTH, OVER 100 GRAMS

**PHARMACY PRIOR AUTHORIZATION
POLICY AND CRITERIA
ORPTCNUT003**

**NUTRITIONAL PRODUCTS
TOTAL PARENTERAL NUTRITION (TPN)**

	OF PROTEIN - PREMIX
B4216	PARENTERAL NUTRITION; ADDITIVES (VITAMINS, TRACE ELEMENTS, HEPARIN, ELECTROLYTES), HOME MIX, PER DAY
B4220	PARENTERAL NUTRITION SUPPLY KIT; PREMIX, PER DAY
B4222	PARENTERAL NUTRITION SUPPLY KIT; HOME MIX, PER DAY
B4224	PARENTERAL NUTRITION ADMINISTRATION KIT, PER DAY
B5000	PARENTERAL NUTRITION SOLUTION COMPOUNDED AMINO ACID AND CARBOHYDRATES WITH ELECTROLYTES, TRACE ELEMENTS, AND VITAMINS, INCLUDING PREPARATION, ANY STRENGTH, RENAL-AMINOSYN-RF, NEPHRAMINE, RENAMINE-PREMIX
B5100	PARENTERAL NUTRITION SOLUTION COMPOUNDED AMINO ACID AND CARBOHYDRATES WITH ELECTROLYTES, TRACE ELEMENTS, AND VITAMINS, INCLUDING PREPARATION, ANY STRENGTH, HEPATIC, HEPATAMINE-PREMIX
B5200	PARENTERAL NUTRITION SOLUTION COMPOUNDED AMINO ACID AND CARBOHYDRATES WITH ELECTROLYTES, TRACE ELEMENTS, AND VITAMINS, INCLUDING PREPARATION, ANY STRENGTH, STRESS-BRANCH CHAIN AMINO ACIDS-FREAMINE-HBC-PREMIX
No Prior Authorization Required	
B9004	PARENTERAL NUTRITION INFUSION PUMP, PORTABLE
B9006	PARENTERAL NUTRITION INFUSION PUMP, STATIONARY
B9999	NOC FOR PARENTERAL SUPPLIES
E0776	IV POLE

HCPCS MODIFIERS:

BA	Item used in conjunction with parenteral enteral nutrition (PEN) services
EY	No physician or other health care provider order for this item or service
GA	Waiver of liability statement issued as required by payer policy, individual case
GY	Item or service statutorily excluded or doesn't meet the definition of any Medicare benefit category
GZ	Item or service expected to be denied as not reasonable and necessary
KX	Requirements specified in the medical policy have been met

◇ Coding/Administration Notes:

- The above code list is provided as a courtesy and may not be all-inclusive. Inclusion or omission of a code from this policy neither implies nor guarantees reimbursement or coverage. Some codes may not require routine review for medical necessity, but they are subject to provider contracts, as well as member benefits, eligibility and potential utilization audit.
- HCPCS/CPT code(s) may be subject to National Correct Coding Initiative (NCCI) procedure-to-procedure (PTP) bundling edits and daily maximum edits known as "medically unlikely edits" (MUEs) published by the Centers for Medicare and Medicaid Services (CMS). This policy does not take precedence over NCCI edits or MUEs. Please refer to the CMS website for coding guidelines and applicable code combinations.

REFERENCE/RESOURCES:

1. Stephen A. McClave, Robert G. et al. 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* 2016 40:159-21.
2. Compher C, Bingham AL. et al. 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* 2022 46:12-41.
 3. Health Systems Division: Medical Assistance Programs – Chapter 410. Division 148 Home Enteral/Parenteral Nutrition and IV Services. Salem, OR: Oregon Health Authority.
https://secure.sos.state.or.us/oard/displayDivisionRules.action;JSESSIONID_OARD=adNbagzSXpi7jhwQyVWI9kloagq2uYWIzHAyr_9_GCF7cr4Ne3oO!2090594408?selectedDivision=1734 (Accessed March 7, 2022).
 4. ASPEN Board of Directors. Guidelines for the use of parenteral and enteral nutrition in adults and pediatric patients. *J Parenter Enteral Nutr*. 2005; 26(1 suppl): 54SA-55SA
 5. Brooks MJ, Melnik G. The Refeeding Syndrome: An approach to Understanding Its Complications and Preventing Its Occurrence. 1995; 15(6): 713-26
 6. Brophy DF, Gehr TWB. Disorders of potassium and magnesium homeostasis. In: DiPiro JT, Talbert RL, Yee GC, Matzle GR, Wells BG, Posey LM (eds). *Pharmacotherapy A pathophysiologic approach*. McGraw-Hill Companies Inc; 2002:981-993
 7. Btaiche IF, Khalidi N. Metabolic Complications of parenteral nutrition in adults, part 1. *Am J Health-Syst Pharm*. 2004; 61: 1938-49
 8. Btaiche IF, Khalidi N. Metabolic complications of parenteral nutrition in adults, part 2. *Am J Health-Syst Pharm*. 2004; 61: 2050-2057
 9. Chessman KH, Teasley-Strausburg KM. Assessment of nutrition status and nutrition requirements. In: DiPiro JT, Talbert RL, Yee GC, Matzle GR, Wells BG, Posey LM (eds). *Pharmacotherapy A pathophysiologic approach*. McGraw-Hill Companies Inc; 2002: 2445-2463
 10. Gervasio JM. Fluids, electrolytes, and nutrition. A. Dickerson RN. *New Practices in Nutrition Support* In: ACCP Updates in therapeutics: updates in nutrition support. American College of Clinical Pharmacy; 2002: 136-154
 11. Holcombe BJ, Seider DL. (eds) *The science and practice of nutrition support*. Dubuque, Iowa: ASPEN; 2001:663-673
 12. Mattox TW. Parenteral nutrition. In: DiPiro JT, Talbert RL, Yee GC, Matzle GR, Wells BG, Posey LM (eds). *Pharmacotherapy A pathophysiologic approach*. McGraw-Hill Companies Inc; 2002:2475-2494
 13. Shopbell JM, Hopkins B, Shronts EP. Nutrition Screening and Assessment. In: Gottschlich MM, Fuhrman MP, Hammond KA, Holcombe BJ, Seider DL. (eds) *The science and practice of nutrition support*. Dubuque, Iowa: ASPEN; 2001:107-140

14. Whitmire SF. Fluid and Electrolytes. In: Gottschlich MM, Fuhrman MP, Hammond KA, Holcombe BJ, Seider DL. (eds) The science and practice of nutrition support. Dubuque, Iowa: ASPEN; 2001:53-81
15. Ikizler TA, Burrowes JD, Byham-Gray LD, et al. KDOQI Clinical Practice Guideline for Nutrition in CKD: 2020 Update [published correction appears in *Am J Kidney Dis.* 2021 Feb;77(2):308. doi: 10.1053/j.ajkd.2020.11.004.]. *Am J Kidney Dis.* 2020;76(3 Suppl 1):S1-S107. doi:10.1053/j.ajkd.2020.05.006
16. Worthington P, Balint J, Bechtold M, et al. When Is Parenteral Nutrition Appropriate?. *JPEN J Parenter Enteral Nutr.* 2017;41(3):324-377. doi:10.1177/0148607117695251
17. Burrowes, J. D., Kovesdy, C. P., & Byham-Gray, L. D. (Eds.). (2020). Nutrition in Kidney Disease . SpringerLink. <http://sodenn.com/wp-content/uploads/2020/08/NUTRITION-IN-KIDNEY-DISEASE.-HUMANA-2020.pdf>