Description of Procedure or Service

Total parenteral nutrition (TPN), also known as parenteral hyperalimentation, involves the delivery of micronutrients and macronutrients via infusion to an individual with complex nutritional needs. TPN consists of the optimal levels of glucose, amino acids, electrolytes, vitamins, minerals, and fats; the concentration of each component is calculated for the individual's specific metabolic need. TPN bolsters and/or maintains the nutritional status of moderately to severely malnourished individuals who have medical or surgical conditions such as gastrointestinal (GI) anomalies or impaired intestinal absorption or motility.

For individuals who have moderate GI abnormalities (e.g., malabsorption disorders), TPN is typically instituted when enteral nutrition via a nasogastric, gastrostomy, or jejunostomy tube has failed. TPN may be part of the treatment plan for individuals who have severe pathology of the digestive system that does not allow for the absorption of sufficient nutrients to maintain weight and strength. Highly concentrated parenteral products are available for individuals who have fluid restrictions.

TPN is administered through a central intravenous line access or a peripherally inserted central catheter (PICC). An infusion pump regulates the flow of the solution on either a continuous (24-hour) or intermittent schedule.

The indications for intradialytic parenteral nutrition (IDPN) and intraperitoneal parenteral nutrition (IPN) are similar to those for TPN. IDPN refers to the delivery of micronutrients and macronutrients to individuals who have complex nutritional needs during hemodialysis. It is the infusion of supplemental nutrition (composed of dextrose, amino acids, and sometimes, lipids) during dialysis in individuals with protein calorie malnutrition. This process typically begins 30 minutes after dialysis is initiated, and is continued for remainder of the dialysis session. In peritoneal dialysis, also referred to as intraperitoneal parenteral nutrition (IPPN) or intraperitoneal nutrition (IPN), the infusion of nutrition is done through the peritoneal cavity.

Background

Parenteral nutrition involves the delivery of micronutrients and macronutrients through catheters in central or peripheral veins. In most instances, the central venous route is utilized, and for long-term total parenteral nutrition a central catheter (e.g., Hickman, Broviac, PICC) is burrowed through a subcutaneous tunnel on the anterior chest.
In order to initiate parenteral nutrition, appropriate access must be obtained and the prescription (i.e., composition and infusion rate) must be determined. Guidelines suggest that when tolerance to enteral nutrition is evident, parenteral nutrition should be weaned and discontinued when >60 percent of the patients’ needs are met enterally. Short-term TPN is commonly used in the inpatient setting for acutely ill patients for a period of up to 30 days. Long-term parenteral nutrition requires a tunneled central venous catheter (e.g., Hickman catheter, Groshong catheter, or implanted infusion port) or a peripherally inserted central catheter (PICC). A tunneled catheter is preferable, since infections are more common among patients receiving parenteral nutrition at home through a PICC. Single lumen central venous catheters should be dedicated solely for the infusion of parenteral nutrition, while multiple lumen central venous catheters should have one port dedicated solely for the infusion of parenteral nutrition. In addition, catheter manipulations should be minimized. These interventions may decrease the infectious complications associated with parenteral nutrition. For patients who have an existing line, a new line is not typically required unless there has been septicemia during the life of the existing line.

A position statement published by the American Gastroenterological Association (AGA) in 1995 states enteral nutrition should be considered for individuals who cannot or will not eat, and who have a functional gastrointestinal tract and a safe method of access. Furthermore, if there are no contraindications, and access can be obtained safely (and oral intake is not possible), preference should be given to enteral feeding over parenteral therapy. An additional statement published in 2001 on parenteral nutrition states, in general, that parenteral nutrition is indicated to avoid malnutrition in individuals who cannot obtain adequate nutrients by oral or enteral routes.

The AGA established guidelines for care for nutritionally at risk individuals (2001):

Nutritionally-At-Risk Adult

• Involuntary weight loss of 10% of usual body weight within 6 months or 5% within 1 month
• Involuntary loss of 10 lb within 6 months
• Body mass index (BMI) less than 18.5 kg/m2
• Increased metabolic requirements
• Altered diets or diet schedules
• Inadequate nutrition intake, including not receiving food or nutrition products for more than 7 days

Nutritionally-At-Risk Child

• Weight for length, weight for height, or sex less than 10th percentile (−1.28 z score)
• BMI for age or sex less than 5th percentile (−1.64 z score)
• Increased metabolic requirements
• Impaired ability to ingest or tolerate oral feeding
• Documented inadequate provision of or tolerance to nutrients
• Inadequate weight gain or a significant decrease in usual growth percentile
Nutritionally-At-Risk Neonate

High Risk

• Preterm less than 28 weeks at birth
• Extremely low birth weight less than 1000 g
• Infant establishing feeds after episode of necrotizing enterocolitis or gastrointestinal perforation
• Infants with severe congenital gastrointestinal malformations (eg, gastroschisis)

Moderate Risk

• Preterm 28th–31st weeks, otherwise well
• Intrauterine growth restriction (weight less than 9th percentile)
• Very low birth weight 1000–1500 g
• Illness or congenital anomaly that may compromise feeding

1: Parenteral Nutrition Use Based on Medical Diagnosis or Disease State

Adult

• 1A: Do not use parenteral nutrition (PN) based solely on medical diagnosis or disease state.
• 1B: Prior to initiating PN, conduct a full evaluation of the feasibility of using enteral nutrition (EN); reserve PN for clinical situations in which adequate EN is not an option.

Neonatal

• 1C: Consider PN for neonates in the critical care setting, regardless of diagnosis, when EN is unable to meet energy requirements for energy expenditure and growth.

Pediatric

• 1D: Use PN for children when the intestinal tract is not functional or cannot be accessed or when nutrient needs to provide for growth are greater than that which can be provided through oral intake or EN support alone.

2: Circumstances Where PN Is the Preferred Method of Nutrition Support

Adult

• 2A: Use PN in patients who are malnourished or at risk for malnutrition when a contraindication to EN exists or the patient does not tolerate adequate EN or lacks sufficient bowel function to maintain or restore nutrition status

Neonatal and Pediatric

• 2B: Initiate PN for total or supplemental nutrient provision if EN is not feasible or not sufficient to meet total nutrient needs.
3: Determining When EN Is Not Feasible

Adult

• 3A: Evaluate clinical factors derived from history, physical examination, and diagnostic evaluations in determining if EN is contraindicated:

  All types of enteral access
  • Mechanical obstruction of the gastrointestinal tract
  • Uncontrolled peritonitis
  • Uncorrected coagulopathy or thrombocytopenia
  • Bowel ischemia
  • Recent gastrointestinal bleeding with high risk of recurrent bleeding (peptic ulcer disease or esophageal varices)

  Nasal placement
  • Basilar skull fracture: temporal, occipital, sphenoid, or ethmoid fracture
  • Recent transsphenoidal surgery
  • Facial, nasal, or sinus trauma
  • Significant esophageal pathology: stricture, tumor, severe esophagitis
  • Esophageal varices with recent banding (delay placement 72 h)

  Percutaneous and surgical abdominal placement
  • Massive ascites
  • Hemodynamic instability
  • Morbid obesity with large panniculus
  • Gastric outlet or duodenal obstruction (percutaneous endoscopic or surgical gastrostomy)
  • Anticipated duration less than 4 weeks

Neonatal and Pediatric

• 3B: Initiate PN and withhold EN in neonatal and pediatric patients when a clear contraindication to EN exists, such as intestinal injury and perforation.

• 3C: Assess intestinal function and perfusion, as well as overall hemodynamic stability, when evaluating readiness for EN, rather than relying on strict adherence to a list of contraindications to EN, such as the presence of umbilical catheters or use of vasoactive medications.

4: Time Frame for Initiating PN
Adult

• 4A: Initiate PN after 7 days for well-nourished, stable adult patients who have been unable to receive significant (50% or more of estimated requirements) oral or enteral nutrients.

• 4B: Initiate PN within 3 to 5 days in those who are nutritionally-at-risk and unlikely to achieve desired oral intake or EN.

• 4C: Initiate PN as soon as is feasible for patients with baseline moderate or severe malnutrition in whom oral intake or EN is not possible or sufficient.

• 4D: Delay the initiation of PN in a patient with severe metabolic instability until the patient’s condition has improved.

Neonatal

• 4E: Begin PN promptly after birth in the very low birth weight infant (birth weight less than 1500 g). Insufficient data exist to suggest a specific time frame in which PN is ideally initiated in more mature preterm infants or critically ill term neonates.

Pediatric

• 4F: For the infant, child, or adolescent with a self-limited illness, it is reasonable to delay starting PN for 1 week. However, initiate PN within 1–3 days in infants and within 4–5 days in older children and adolescents when it is evident that they will not tolerate full oral intake or EN for an extended period.

5: Selecting Appropriate Vascular Access for PN Administration

Global Recommendations

• 5A: Individualize the selection of vascular access device (VAD) for PN administration based on an evaluation of the risks and benefits of the device, clinical factors, and psychosocial considerations.

• 5B: Choose the smallest device with the fewest number of lumens necessary for the patient’s needs.

• 5C: Dedicate 1 lumen of the VAD for PN administration when possible.

• 5D: Position the tip of the central venous access device (CVAD) in the lower third of the superior vena cava near the junction with the right atrium.

• 5E: Confirm optimal position of the CVAD tip prior to initiating PN.

6: Peripheral PN

Adult

• 6A: Use peripheral PN only for short-term purposes, no more than 10–14 days, as supplemental PN or as a bridge therapy during transition periods, where oral intake or EN is suboptimal or clinical circumstances do not justify placing a CVAD.
• 6B: Estimate the osmolarity of peripheral PN formulations.
• 6C: Maintain an upper limit of 900 mOsm/L for the peripheral PN formulations.

Neonatal and Pediatric

• 6D: In well-nourished neonatal and pediatric patients, use peripheral PN for short-term purposes until oral intake or EN can be established or to serve as a bridge to central PN.

7: Intradialytic PN

Global Recommendations

• 7A: Do not use intradialytic PN (IDPN) as the sole source of nutrition intervention in malnourished patients with chronic kidney disease (CKD).
• 7B: Consider IDPN for adult and pediatric patients with CKD who are malnourished and unable to tolerate adequate oral intake or EN.

8: Perioperative PN

Adult

• 8A: Consider preoperative PN in severely malnourished patients unable to tolerate sufficient oral intake or EN.
• 8B: Reserve postoperative PN for severely malnourished patients unable to tolerate EN for more than 7 days, unless initiated preoperatively.

Neonate and Pediatric

• 8C: Consider preoperative and postoperative PN in malnourished neonates and children who are unable to tolerate oral intake or EN.

9: PN Use in Palliative Care

Global Recommendations

• 9A: Do not use PN solely to treat poor oral intake and/or cachexia associated with advanced malignancy.
• 9B: Limit the use of PN in palliative care to carefully selected candidates, with an expected survival of 2–3 months, for whom oral intake or EN is not feasible.
• 9C: Evaluate clinical factors and performance status when selecting candidates for PN at the end of life.
• 9D: Involve patients and caregivers in a clear and complete dialogue regarding realistic goals of PN as well as the potential risks and burdens of therapy.

10: Home PN

Adult
• 10A: Consider home PN (HPN) for patients with intestinal failure who are clinically stable and able to receive therapy outside an acute care setting.

• 10B: Perform a thorough evaluation of medical and psychosocial factors that influence suitability for HPN.

• 10C: Address financial considerations/insurance coverage and patient responsibilities with patient and caregiver.

Pediatric

• 10D: Consider HPN for carefully selected, clinically stable pediatric patients who are expected to require PN for an extended period.

• 10E: Discharge all pediatric patients to the care of a pediatric home care team and infusion provider with pediatric experience.

11: Initiating PN in the Home Setting

Adult

• 11A: Establish organizational policies that delineate circumstances in which initiation of PN can take place outside the acute care setting.

• 11B: Delineate patient-centered eligibility criteria for initiating PN safely in the home setting.

• 11C: Develop strict protocols and procedures for initiating PN in the home setting, monitoring response to therapy, and documenting outcomes.

• 11D: Conduct a comprehensive medical, clinical, and psychosocial assessment of HPN candidates to assess risk factors for adverse events related to initiating PN.

• 11E: Consider initiating PN therapy at home only when assessment confirms that the benefits greatly outweigh the risks.

Pediatric

• 11F: In pediatric patients, do not initiate PN in the home setting; admit all patients to the hospital for initiating HPN.

12: Reducing the Risk of PN-Associated Complications

Global Recommendations

• 12A: Employ standardized processes for managing PN.

• 12B: Incorporate measures to reduce the risk of complications into organizational policies and procedures for administering PN.

• 12C: Utilize an interprofessional team of clinicians with expertise in nutrition support to manage PN.
•12D: Educate PN prescribers, and demonstrate prescribing competencies for all clinicians writing PN orders.

13: PN Monitoring

Global Recommendations

•13A: For patients of all ages and in all healthcare settings, provide interprofessional monitoring of clinical status and response to PN therapy by clinicians with expertise in managing PN.

•13B: Modify the PN prescription as indicated per ongoing evaluation of gastrointestinal function, nutrition status, electrolyte balance, and (for pediatric patients) growth.

•1: Wean PN when oral intake and/or EN achieves 50%–75% of requirements for energy, protein, and micronutrients, unless impaired gastrointestinal function precludes 100% absorption of nutrient needs.

•2: Consider using a weaning protocol during the transition from PN to EN.

14: Tracking Appropriateness of PN Use

Adult

•14A: Conduct a clinical review for each patient to assess PN appropriateness prior to compounding the PN admixture.

•14B: Implement a quality improvement process (eg, clinical audit, plan-do-study-act cycle, medication use evaluation) to ensure appropriate use of PN based on the best available evidence.

Pediatric

•14C: Emphasize the measurement of PN appropriateness in neonates, children, and adolescents as a priority in institutional quality improvement efforts.

•14D: Design metrics for monitoring PN appropriateness for each pediatric healthcare network or institution with available information technology and personnel resources to measure and adjust local practices.

INTRADIALYTIC PARENTERAL NUTRITION AND INTRAPERITONEAL NUTRITION

Protein energy wasting (PEW) is a common condition in individuals with end-stage renal disease (ESRD). While the nutritional status assessment in individuals with ESRD is multifactorial, measurement of serum albumin levels is a clinically practiced method in evaluation of protein calorie malnutrition, which is associated with increased morbidity and mortality. Although albumin concentrations can be affected by multiple other disease states, these levels are considered to be a clinically relevant measurement for assessing nutritional status by the National Kidney Foundation (NKF)/Kidney Disease Outcomes Quality Initiative (KDOQI). The KDOQI guidelines recommend dietary protein intake of no less than 1.2 g/kg in individuals undergoing hemodialysis, and no less than 1.3 g/kg in individuals undergoing peritoneal dialysis.
Generally, serum albumin concentration of 3.5 g/dL to 5.5 g/dL are considered normal; although the KDOQI guidelines recommend a serum albumin concentration of 4.0 g/dL. Serum albumin concentrations below 3.5 g/dL are associated with twice the mortality rate of that of concentrations greater than or equal to 4.0 g/dL, while concentration below 2.5 g/dL are associated with a 10-fold increase in mortality.

Available published peer-reviewed medical literature on IDPN consists of poorly designed randomized controlled trials (RCTs), as well as case series which do not control for critical variables common in individuals with chronic kidney disease. In a 2010 systematic review, the authors concluded that the three available RCTs published to date were insufficient to demonstrate net benefit or net harm associated with IDPN and that further clinical trials are warranted to demonstrate net benefits in health outcomes. To date, there are no studies addressing IPN in individuals undergoing peritoneal dialysis.

The National Institute of Health and Clinical Excellence (NICE) published guidelines in 2006 to address nutritional support in adults and states nutritional support should be considered in the following populations:

Malnourished individuals as defined by any of the following:

- A BMI of less than 18.5 kg/m2
- Unintentional weight loss greater than 10% within the last 3-6 months
- A BMI of less than 20 kg/m2 and unintentional weight loss greater than 5% within the last 3-6 months
- Individuals at risk of malnutrition as defined by any of the following:
  - Have poor absorptive capacity and/or have high nutrient losses and/or have increased nutritional needs from causes such as catabolism
  - Have eaten little or nothing for more than five days and/or are likely to eat little or nothing for the next five days or longer

The NICE guidelines also state parenteral nutrition should only be considered in malnourished individuals or individuals at risk of malnutrition if they meet either of the following criteria:

- Inadequate or unsafe oral and/or enteral nutritional intake
- A non-functional, inaccessible, or perforated (leaking) gastrointestinal tract

The National Kidney Foundation/Kidney Disease Outcomes Quality Initiative (KDOQI), published clinical practice guidelines for nutrition in children with chronic kidney disease (2008). They state that a trial of IDPN should be considered in malnourished children, as defined by BMI-for-height-age <5th percentile, on hemodialysis, who do not meet adequate nutritional intake through oral and tube feeding.

Guidelines by the German Association of Nutritional Medicine on Parenteral Nutrition recommend use of IDPN only when modifiable causes of malnutrition are excluded, and enhanced oral or enteral supply is unsuccessful or cannot be carried out.

Overall, the evidence of efficacy of intradialytic parenteral nutrition in individuals with chronic kidney disease is limited. Although the available published peer-reviewed scientific literature is not robust, it suggests that IDPN therapy may be beneficial in a subset of the population in whom both oral and
enteral nutrition have continually failed to provide patients' nutritional needs. Additional well-designed prospective studies, with outcomes in long-term data, survival, and quality of life are warranted.

**Regulatory Status**

Total parenteral nutrition and associated infusion products are subject to FDA regulation. Numerous FDA approved solutions and infusion products are available.

**Policy Statement**

GEHA will provide coverage for parenteral nutrition when it is determined to be medically necessary because the medical criteria and guidelines as documented below have been demonstrated.

**Benefit Application**

This medical policy relates only to the services or supplies described herein. Please refer to the Member's Benefit Booklet for availability of benefits.

Member's benefits may vary according to benefit design; therefore member benefit language should be reviewed before applying the terms of this medical policy.

TPN that is used in the inpatient setting for acutely ill patients on a short term basis does not require precertification.

**When Parenteral Nutrition is covered**

Total parenteral nutrition (TPN) is considered medically necessary when either of the following indications are met:

A. The individual has a long term impaired* (non-functioning) gastrointestinal tract resulting in insufficient absorption of nutrients to maintain adequate strength and weight.

B. The individual failed to tolerate a tube trial of enteral nutrition through an enteral feeding tube by meeting at least one of the following:
   1. A concerted effort was made to place an enteral feeding tube without success
   2. An enteral feeding tube is contraindicated
   3. A trial with enteral nutrition was made, with appropriate attention to dilution, rate, and alternative formulas, to address side effects of diarrhea proved unsuccessful

AND EITHER:

A. The individual meets one of the following conditions; which are considered to be severe enough that the individual would not be able to maintain weight and strength on only oral intake or through an enteral feeding tube:
   1. The individual has undergone a recent (within the past 3 months) massive small bowel resection leaving less than or equal to 5 feet of small bowel beyond the ligament of Treitz, or
   2. The individual has a short bowel syndrome that is severe enough that the individual has net gastrointestinal fluid and electrolyte malabsorption such that on an oral intake of 2.5-3 liters/day the enteral losses exceed 50% of the oral/enteral intake and the urine output is less than 1 liter/day, or
3. The individual requires bowel rest for at least 3 months and is receiving intravenously 20-35 cal/kg/day for treatment of symptomatic pancreatitis with/without pancreatic pseudocyst, severe exacerbation of regional enteritis, or a proximal enterocutaneous fistula where tube feeding distal to the fistula isn’t possible, or

4. The individual has complete mechanical small bowel obstruction where surgery is not an option, or

5. The individual is significantly malnourished (10% weight loss over 3 months or less and serum albumin less than or equal to 3.4 gm/dl) and has very severe fat malabsorption (fecal fat exceeds 50% of oral/enteral intake on a diet of at least 50 gm of fat/day as measured by a standard 72 hour fecal fat test), or

6. The individual is significantly malnourished (10% weight loss over 3 months or less and serum albumin less than or equal to 3.4 gm/dl) and has a severe motility disturbance of the small intestine and/or stomach which is unresponsive to prokinetic medication and is demonstrated by either:
   a) Scintigraphically (solid meal gastric emptying study demonstrates that the isotope fails to reach the right colon by 6 hours following ingestion), or
   b) Radiographically (barium or radiopaque pellets fail to reach the right colon by 6 hours following administration). These studies must be performed when the individual is not acutely ill and is not on any medication which would decrease bowel motility.

7. The individual has severe Hyperemesis Gravidarum.

OR:

B. The individual meets All of the following criteria:

1. Maintenance of weight and strength commensurate with the individual’s overall health status requires intravenous nutrition and is not possible by utilizing both of the following approaches:
   (a) Modifying the nutrient composition of the enteral diet (e.g., lactose free, gluten free, low in long chain triglycerides, substitution with medium chain triglycerides, provision of protein as peptides or amino acids, etc.), and
   (b) Utilizing pharmacologic means to treat the etiology of the malabsorption (e.g., pancreatic enzymes or bile salts, broad spectrum antibiotics for bacterial overgrowth, prokinetic medication for reduced motility, etc.);

2. The individual is malnourished (10% weight loss over 3 months or less and serum albumin less than or equal to 3.4 gm/dl); and

3. A disease and clinical condition has been documented as being present and it has not responded to altering the manner of delivery of appropriate nutrients (e.g., slow infusion of nutrients through an enteral feeding tube with the tip located in the stomach or jejunum).

When Intradialytic nutrition is covered

Intradialytic parenteral nutrition (IDPN) is considered medically necessary for either of the following:
A. When it is infused as an alternative to a regularly scheduled regimen of TPN in individuals who meet the medical necessity criteria for TPN, or

B. In individuals with a functional gastrointestinal tract when all of the following criteria are met:
   1. The individual has a documented comprehensive nutritional assessment and dietary counseling
   2. In spite of enteral nutrition via tube feeding, or adequate oral nutrition, the individual has evidence of protein or energy malnutrition as defined by any of the following:
      - Evidence of protein intake <1.2g/Kg or calories<25 Kcal/Kg
      - Evidence of weight loss 10-20% of usual body weight within 3-6 months
      - Serum Albumin Levels <3.4 g/l (3 months average)
   3. The individual has evidence of adequate dialysis therapy

**When intraperitoneal nutrition is covered**

Intraperitoneal nutrition (IPN) is considered medically necessary and, therefore, covered when all of the following criteria are met:

1. The individual has a documented comprehensive nutritional assessment and dietary counseling; and
2. In spite of enteral nutrition via tube feeding, or adequate oral nutrition, the individual has evidence of protein or energy malnutrition as defined by any of the following:
   1) Evidence of protein intake <1.2g/Kg or calories<25 Kcal/Kg
   2) Evidence of weight loss 10-20% of usual body weight within 3-6 months
   3) Serum albumin Levels <3.4 g/l (3 months average); and
3. The individual has evidence of adequate dialysis therapy

**When Parenteral Nutrition is not covered**

TPN is considered not medically necessary and, therefore, not covered for individuals with a functioning gastrointestinal tract whose need for parenteral nutrition is only required because of any of the following conditions, such as, but not limited to:

A. Swallowing disorder
B. Temporary defect in gastric emptying, such as a metabolic or electrolyte disorder
C. Psychological disorder impairing food intake, such as depression
D. Metabolic disorder inducing anorexia, such as cancer
E. Physical disorder impairing food intake, such as the dyspnea of severe pulmonary or cardiac disease
F. Side effect of a medication
G. Renal failure and/or dialysis

**Policy Guidelines**

When an infusion therapy service is covered, many of the associated services (e.g., solutions, additives, equipment and/or supplies, nursing) may be eligible for reimbursement.

When an infusion therapy service is not covered, all associated services (e.g., solutions, equipment and/or supplies, nursing) are considered not covered, and, therefore, not eligible for reimbursement.
**Required documentation**

GEHA may conduct reviews and audits of services to our members regardless of the participation status of the provider. Medical record documentation must be maintained on file to reflect the medical necessity of the care and services provided. These medical records may include but are not limited to: records from the professional provider’s office, hospital, nursing home, home health agencies, therapies, and test reports. This policy is consistent with Medicare's documentation requirements, including the following required documentation:

A. **NON-FUNCTIONING GASTROINTESTINAL TRACT**

B. **PRESCRIPTION (ORDER) REQUIREMENTS**
   • Before submitting a claim to the Company, the supplier must have on file a timely, appropriate, and complete order for each item billed that is signed and dated by the professional provider who is treating the member. Requesting a provider to sign a retrospective order at the time of an audit or after an audit for submission as an original order, reorder, or updated order will not satisfy the requirement to maintain a timely professional provider order on file.
   • A total caloric daily intake (parenteral, enteral and oral) of 20-35 cal/kg/day is considered sufficient to achieve or maintain appropriate body weight. The ordering professional provider must document in the medical record the medical necessity for a caloric intake outside this range for the individual.
   The ordering professional provider must document the medical necessity for protein orders outside of the range of 0.8-1.5 gm/kg/day, dextrose concentration less than 10%, or lipid use greater than 1500 grams per month.

C. **PROOF OF DELIVERY**
   • Medical record documentation must include a contemporaneously prepared delivery confirmation or member’s receipt of supplies and equipment. The medical record documentation must include a copy of delivery confirmation if delivered by a commercial carrier and a signed copy of delivery confirmation by member/caregiver if delivered by the DME supplier/provider. All documentation is to be prepared contemporaneous with delivery and be available to the Company upon request.

D. **CONSUMABLE SUPPLIES**
   • The durable medical equipment (DME) supplier must monitor the quantity of accessories and supplies an individual is actually using. Contacting the individual regarding replenishment of supplies should not be done earlier than approximately seven days prior to the delivery/shipping date. Dated documentation of this contact with the individual is required in the individual’s medical record. Delivery of the supplies should not be done earlier than approximately five days before the individual would exhaust their on-hand supply.

If required documentation is not available on file to support a claim at the time of an audit or record request, the durable medical equipment (DME) supplier may be required to reimburse the Company for overpayments.
The following codes are for reference purposes only and do not imply that the service is covered or non-covered. Applicable codes include but are not limited to:

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<td>Parenteral nutrition solution; amino acid, 5.5% through 7%, (500 ml = 1 unit) -- homemix</td>
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<td>Parenteral nutrition solution; lipids, 10% with administration set (500 ml = 1 unit)</td>
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<td>Parenteral nutrition solution, per 10 grams lipids</td>
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</tbody>
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| S9364    | Home infusion therapy, total parenteral nutrition (TPN); administrative services, professional pharmacy services, care coordination, and all necessary supplies and equipment including standard TPN formula (lipids, specialty amino acid formulas, drugs other than in standard formula and nursing visits coded separately), per diem |
| S9365    | Home infusion therapy, total parenteral nutrition (TPN); 1 liter per day, administrative services, professional pharmacy services, care coordination, and all necessary supplies and equipment including standard TPN formula (lipids, specialty amino acid formulas, drugs other than in standard formula and nursing visits coded separately), per diem |
| S9366    | Home infusion therapy, total parenteral nutrition (TPN); more than 1 liter but no more than 2 liters per day, administrative services, professional pharmacy services, care coordination, and all necessary supplies and equipment including standard TPN formula (lipids, specialty amino acid formulas, drugs other than in standard formula and nursing visits coded separately), per diem |
| S9367    | Home infusion therapy, total parenteral nutrition (TPN); more than 2 liters but no more than 3 liters per day, administrative services, professional pharmacy services, care coordination, and all necessary supplies and equipment including standard TPN formula (lipids, specialty amino acid formulas, drugs other than in standard formula and nursing visits coded separately), per diem |
| S9368    | Home infusion therapy, total parenteral nutrition (TPN); more than 3 liters per day, administrative services, professional pharmacy services, care coordination, and all necessary supplies and equipment including standard TPN formula (lipids, specialty amino acid formulas, drugs other than in standard formula and nursing visits coded separately), per diem |

**Scientific references**


**Policy implementation and updates**

October 2018: Policy reformatted and updated

Oct. 2019: Formatting updates, background content to include pediatric considerations, no coverage changes