

Continuum Supplied Parenteral Nutrition Guidance

Purpose: To outline the workflow for using UVA Health Continuum Home Infusion-dispensed patient-supplied Parenteral Nutrition (PN) bags upon hospital admission. This measure seeks to mitigate the impact of the national fluid shortage due to Hurricane Helene's effect on Baxter's manufacturing facility in North Carolina, thus reducing fluid utilization by the inpatient pharmacy by leveraging Continuum-dispensed PN bags.

Workflow:

1. Patient Education:
 - a. Patients will be educated by Continuum pharmacists at intake. Patients will be educated to bring their un-spiked PN supply with them to the hospital for any planned or possible admissions (as able). PN bags should be transported in the Continuum-supplied cooler to the hospital.
2. Patient Admission and PN Evaluation:
 - a. Patient Notification: Patients should inform the admitting team about their PN bags.
 - b. Initial PN Bag Review: Home PN bags will undergo clinical and safety evaluation by LIP, dietitians, and pharmacist before administration upon dietitian consult.
 - i. Dietitians are available daily (including weekends) with nutritional support available when necessary.
 - c. Due to stability, certain additives such as famotidine, insulin, and multivitamins are not added by Continuum and cannot be added by UVA Health upon admission.
 - i. Multivitamin: If patient is able to take oral pills, a chewable multivitamin can be ordered, otherwise the patient would forgo the multivitamin for a **maximum duration of 4-5 days** at the discretion and recommendation of a dietitian. Multivitamin and Thiamine supplementation may be supplemented as a separate infusion on a patient-specific basis with consideration for available fluids during a shortage.
 - ii. Famotidine: Can be ordered separately from PN bag as an IV push
 - iii. Insulin: Should be ordered separately. Dose and type of insulin may need to be adjusted to avoid hypoglycemia. Insulin is not used in pediatric or neonatal PN's.
3. Storage and Equipment
 - a. Inpatient pharmacy will store patient-supplied PN bags in a designated area within the inpatient pharmacy walk-in refrigerator.
 - b. Although patients may have personal pumps, patient-supplied PN bags will be administered through UVA-owned pumps and compatible tubing.
4. Order Entry and Verification
 - a. Notification of Readmission to Continuum Pharmacists: Continuum pharmacists will post CareTend work sheet (compounding record) into Epic as a pharmacy note upon communication by inpatient dietitians to allow inpatient pharmacists to input order as dispensed and validate contents.
 - b. Pediatric RD note from GI visit will also provide full PN recipe from Continuum.

- c. Continuum-labeling on PN bag may also serve as primary source for order entry when Continuum is unable to document Epic note during off-hours.
 - d. Order Entry
 - i. An inpatient clinical pharmacist will enter the PN order using “Patient Supplied Parenteral Nutrition (Continuum)” available through the preference list.
 - 1. Pharmacist will enter the total volume into order.
 - 2. Pharmacist will enter PN rate and duration through SmartText in admin instructions.
 - 3. In the rare circumstance where a taper rate and duration is needed, the dietitian and pharmacist would work to add that to the admin instructions.
 - 4. PN formula will be available for access as a pharmacy note if and when needed by provider team, dietitian, and/or pharmacist.
 - ii. Number of doses will be equal to bags of home supply available.
 - iii. Continuum dispensed PNs are prepared as 3-in-1 bags, including lipids in the same bag. Inpatient dispensed bags are 2-in-1 bags with lipids in a separate bag. Continuum dispensed PN will have a milk appearance to inclusion of lipids.
 - e. Verification
 - i. Order has been defaulted to patient supplied and can be verified through review of Continuum work card and visual inspection of supplied bags.
 - f. Documentation
 - i. Inpatient clinical pharmacist will document patient-supplied PN information into iVent, with any relevant information as needed.
 - g. Labeling
 - i. Upon verification of patient-supplied PN, verification label will print and allow for administration scans.
 - ii. Pharmacist will need to reprint the label as many times as necessary to label all bags provided by patient upon admission.
 - iii. Bags will be stored in designated area in inpatient pharmacy refrigerator.
 - h. Expiration Dates for Patient-Supplied PN Bag
 - i. Noted on PN bag label as “Discard After”
5. Administration
- a. Pharmacy will deliver PN bag with other PN deliveries during the day.
 - b. Nurse will administer PN bag through UVA Medical Center owned pumps and tubing in accordance with the [“Use of Patient Supplied Medications in the Provision of Care”](#) policy.
 - c. Infusion will be programmed through manual programming with guardrails following rate and duration noted by pharmacist on admin instructions on Epic label.
 - d. Nurse will be able to scan Epic label barcode for administration on MAR.