**POLICY AND PROCEDURE:**

**Intravenous (IV) Push Furosemide (Lasix) Administration in the Home Care Setting**

1. **PURPOSE:**

To assure the safe and effective administration of intravenous (IV) push furosemide (Lasix) in the home care setting for eligible patients with heart failure. This policy aligns with Centers for Medicare & Medicaid Services (CMS) Conditions of Participation, The Joint Commission standards, Massachusetts and New Hampshire Boards of Registration in Nursing, and Department of Public Health (DPH) requirements.

1. **ELIGIBILITY & SCOPE OF PRACTICE:**
   1. Massachusetts: Only Registered Nurses (RNs) may administer IV push Lasix following documented competency. Licensed Practical Nurses (LPNs) may assist with monitoring and line maintenance but are not permitted to administer IV push Lasix.
   2. New Hampshire: RNs may administer after competency validation. LPNs with Board-approved IV therapy certification may administer under direct RN supervision, per New Hampshire Board of Nursing guidance.
   3. Competency: All nurses must complete agency IV therapy training, demonstrate initial competency, and revalidate annually.
2. **PATIENT SELECTION & CONTRAINDICATIONS:**
   1. Eligible Patients:
      1. Heart failure with fluid overload that is unresponsive to oral diuretics.
      2. Hemodynamically stable (SBP >90 mmHg, no acute arrhythmia(s), no cardiogenic shock).
      3. Acceptable recent laboratory results (K >3.0, Na >125, stable creatinine).
      4. Safe home environment with caregiver support and reliable communication access.
      5. Informed consent obtained.
   2. Contraindications:
      1. Systolic blood pressure <90 mmHg or symptomatic hypotension.
      2. Acute myocardial infarction, sepsis, stroke, or unstable arrhythmia.
      3. • Severe electrolyte abnormalities (K <3.0 mEq/L or >5.5 mEq/L; Na <125 mEq/L).
      4. Anuria or end-stage renal disease without urine output.
      5. Known allergy to sulfa or furosemide.
      6. Unsafe home environment or lack of consent.
3. **DOSAGE & ADMINISTRATION**
   1. Maximum single dose (home setting): 120 mg.
   2. Maximum daily dose (home setting): 240 mg. Higher daily doses (up to 600 mg/day) are described in inpatient settings but are not permitted in home care unless explicitly ordered by a physician with documented justification, close monitoring, and follow-up labs.
   3. Dilution: Doses ≤80 mg may be administered undiluted. Doses >80 mg must be diluted to a total volume of 10–20 mL with 0.9% sodium chloride to reduce risk of vein irritation and ototoxicity.
   4. Administration rate: Administer slowly at a rate of 20 mg per minute, not to exceed 40 mg per minute.
   5. Flush: Flush IV line with 5–10 mL normal saline before and after administration.
4. **PRE-ADMINISTATIVE REQUIREMENTS**
   1. Verify prescriber’s order for IV push furosemide.
   2. Confirm patient identity using two identifiers.
   3. Complete pre-dose assessment including:
      1. Vital signs (BP, HR, RR, O₂ saturation, temperature).
      2. Lung sounds and peripheral edema.
      3. Weight and intake/output trends.
      4. Recent laboratory values (K, Na, Mg, BUN, Cr).
      5. Allergy verification.
   4. Obtain informed consent: A signed Skilled Nursing/IV Therapy at Home consent form must be on file; verbal understanding should be confirmed at each administration.
   5. Ensure safe environment and emergency preparedness (911 access, on-call provider number, BP cuff, stethoscope, oxygen if ordered).
5. **MONITORING**
   1. Vital signs must be obtained pre-dose, 15 minutes, 30 minutes, and 1 hour post-dose.
   2. If the nurse leaves before 1 hour, arrangements must be made for telehealth or caregiver monitoring.
   3. Monitor for urine output within 1 hour post-dose.
   4. Assess for dizziness, tinnitus, cramps, dyspnea, or hypotension.
   5. Obtain follow-up labs (BMP) within 24 hours or as ordered.
6. **EMERGENCY PROTOCOLS**
   1. If SBP <90 mmHg with symptoms, chest pain, acute respiratory distress, or syncope: Call 911 immediately, then notify provider.
   2. If inadequate diuresis or significant electrolyte abnormalities are identified: Notify provider promptly for further management.
   3. Follow any pre-authorized provider orders for management of hypotension (e.g., IV NS bolus).
7. **DOCUMENTATION**
   1. Document all administration details in the electronic health record (EHR), including:
      1. Date/time, dose, route, site, flush volumes.
      2. Pre/post vital signs and assessments.
      3. Urine output and patient response.
      4. Patient education and consent confirmation.
      5. Provider notifications.
      6. Adverse events and interventions.
8. **REFERENCES**
   1. Centers for Medicare & Medicaid Services (CMS), Conditions of Participation for Home Health Agencies (42 CFR §484.60).
   2. The Joint Commission, Comprehensive Accreditation Manual for Home Care, Medication Management (MM) and Provision of Care (PC) standards.
   3. Massachusetts Board of Registration in Nursing, Advisory Ruling on Infusion Therapy (AR 9204, 2023).
   4. New Hampshire Board of Nursing, Administrative Rules for IV Therapy by LPNs (2023).
   5. UpToDate, Furosemide: Drug Information (2025).