

Firelands Regional Medical Center School of Nursing
AMSN 2025
Unit 6: Heart Failure online assignment (1.5H)

Directions:

- Read Lewis Chapter 38, review ATI Pharmacology Made Easy 5.0: Cardiovascular Module: Drug Therapy for Heart Failure, and review the Unit 6 Pharmacology List.
- Utilizing the resources above, complete the case study. There will be many items for each question.
- Utilizing the Pharmacology List and ATI/Skyscape, complete three ATI Medication Templates from the Pharmacology List (see below for further details).
- This assignment is due in the Unit 6: HF assignment drop box by March 10, 2025 at 0800.
- Be prepared to discuss this assignment in class.
- You must complete the assignment in full to receive the 1.5H theory credit.

Assignment Objectives:

- Determine overall goals in the treatment of heart failure.

CASE STUDY:

Frannie Failure, a patient on 4P, calls the nurse and states, "I feel really puffy. My rings feel so tight on my fingers and I am having trouble catching my breath." The patient is lying flat in the bed and is alert and oriented x 3. Normal saline 0.9% @ 125mL/HR is running.

Assessment:

- Vital Signs: T 97.9 oral, HR 120, RR 24, SpO2 86% RA, BP 152/94, pain 0/10.
- Respiratory: Lung sounds- crackles throughout bilaterally, non-productive cough.
- Cardiac: Heart sounds- S3, pedal pulses not palpable, 3+ pitting edema bilateral feet and ankles.
- Skin intact, pale and cool.
- Gastrointestinal: Bowel sounds x4 WNL, BM yesterday morning.
- Intake/Output: Patient has had 900ml in and 200ml out over the last 8 hours.

- 1. What additional information would you want/need to know?**

- For this patient it is important to check her medical history, any recent med or diet changes, and symptoms like trouble breathing lying down or JVD. Keeping an eye on her fluid balance, weight, and key lab results will help figure out the next steps.
2. **What assessment/ interventions would be appropriate for this patient?**
 - Frannie Failure needs close monitoring for worsening fluid overload and breathing issues. Key interventions include giving oxygen, stopping or adjusting IV fluids, and likely administering diuretics. Positioning her upright, tracking intake/output, and checking labs like BNP and kidney function are also important.
 3. **What would you anticipate the healthcare provider to order?**
 - Frannie Failures provider will likely order supplemental oxygen, IV diuretics like furosemide, and a fluid restriction. They may also stop or adjust IV fluids and request labs such as BNP, electrolytes, and kidney function tests. A chest X-ray might be ordered to check for pulmonary congestion.
 4. **What medications would be appropriate for this patient (include all pertinent from the Pharmacology List) ? Doses? Nursing Interventions? You will pick three of these medications to complete the ATI Medication Templates.**
 - **Beta Blockers** - These can be used to manage heart failure and reduce the workload on the heart. **Dose:** 25-100 mg daily (depending on the patient's condition) **Nursing Interventions** Monitor heart rate and blood pressure before administration. Hold the medication if the heart rate is < 60 bpm or BP is too low. Assess for signs of dizziness, fatigue, or shortness of breath.
 - **Hydrochlorothiazide**- is a mild diuretic that helps remove excess fluid. It may be used if Frannie's condition improves with stronger diuretics. **Dose:** 12.5-100 mg daily **Nursing Interventions:** Monitor blood pressure and electrolytes, especially potassium. Assess for signs of dehydration or low potassium (muscle cramps, weakness). Encourage increased fluid intake unless contraindicated.
 - **Nitrates** - These can help reduce preload and afterload, improving heart function and reducing symptoms of fluid overload. **Dose:** 0.3-0.6 mg sublingually every 5 minutes for chest pain, up to 3 doses **Nursing Interventions:** Monitor blood pressure, especially for hypotension after administration. Instruct patient to sit or lie down before taking to prevent dizziness. Rotate the site if using a transdermal patch and avoid taking with erectile dysfunction medications.
 - **Digoxin** - This may be considered if there's concern about a low ejection fraction or heart rate irregularities but would depend on the patient's specific cardiac status. **Dose:** 0.5-1 mg daily (initial dose may vary depending on patient condition) **Nursing Interventions:** Monitor heart rate; hold if < 60 bpm. Check for signs of toxicity (e.g., nausea, vomiting, confusion, or visual disturbances). Monitor serum digoxin levels and electrolytes, particularly potassium.
 - **Milrinone**- helps improve heart function by increasing contractility and relaxing blood vessels, making it easier for the heart to pump. **Dose:** 50 mcg/kg IV loading dose, followed by a continuous infusion of 0.5mcg/kg/min **Nursing Interventions:** Monitor BP,

heart rate, and renal function closely. Watch for signs of arrhythmias and hypotension. Use a central line for IV administration to reduce risk of phlebitis.

5. What patient education would you include?

- Frannie should weigh herself daily and watch for swelling, reporting any sudden weight gain. She needs to take her meds as prescribed, limit fluids and salt, and watch for trouble breathing or tiredness. Regular doctor visits and healthy habits like not smoking and staying active are important too.