

Firelands Regional Medical Center School of Nursing
AMSN 2026
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 9, 2026 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?

- History of heart failure or other heart related diagnoses (HTN, CAD, MI), history and results of any cardiac tests (heart catheterization, echocardiogram, ECG, BNP), history of comorbidities (diabetes, metabolic syndrome, advanced age, tobacco use, vascular disease)
- labs: BNP, chemistry panel, cardiac markers, liver function, kidney function, CBC, thyroid function, lipid profile, and urinalysis
- symptom onset
- recently had another illness or infection
- is the patient unable to sleep in bed; does she need to sleep in a chair, use extra pillows to prop up in bed, or wake up gasping for air
- has she been compliant with medications
- current diet and trends in weight

2. What assessment/ interventions would be appropriate for this patient?

- Continuous ECG and O2 monitoring
- Vital signs hourly (if unstable)
- Strict I/O (monitoring output hourly if unstable); patient may need an indwelling catheter if incontinent or too unstable to transfer to a bedside commode
- Put the patient in high fowlers position with legs horizontal in bed or dangling at the bedside to decrease venous return and increase thoracic capacity
- Stop IV fluids immediately
- Daily weights
- Supplemental oxygen
- Sodium and fluid restrictions as ordered
- Monitor for flash pulmonary edema
- Notify provider immediately
- IV diuretics as ordered
- Frequent auscultation of lungs and heart

3. What would you anticipate the healthcare provider to order?

- labs: BNP, chemistry panel, cardiac markers, liver function, kidney function, CBC, thyroid function, lipid profile, ABGs and urinalysis
- chest x-ray
- 12 lead ECG
- Oxygen and if not able to keep stats up then patient may need a bi-pap or c-pap
- Two-dimensional echocardiogram
- Nuclear imaging
- Cardiac catheterization
- Hemodynamic monitoring
- Drug therapy for Acute Decompensated Heart Failure –
 - Diuretics: loop diuretics (ex – furosemide) IV bolus or infusion
 - Vasodilators: IV nitroglycerin or sodium nitroprusside or IV nesiritide
 - Morphine IV bolus
 - Positive inotropics: B₁-agonists (ex – dopamine, dobutamine, norepinephrine [Levophed]); phosphodiesterase inhibitors (milrinone) and digitalis
- Na⁺ and fluid restrictions
- Strict I/Os hourly and daily weight
- Continuous telemetry
- Indwelling catheter

4. What medications would be appropriate for this patient (include all pertinent from the Unit 6 Pharmacology List) ? What doses? Nursing Interventions?

You will pick three of these medications to complete the ATI Medication Templates.

- Drug therapy for Acute Decompensated Heart Failure –
 - Diuretics: loop diuretics (ex – furosemide) IV bolus or infusion
 - Vasodilators: IV nitroglycerin or sodium nitroprusside or IV nesiritide
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 - Positive inotropics: B₁-agonists (ex – dopamine, dobutamine, norepinephrine [Levophed]); phosphodiesterase inhibitors (milrinone) and digitalis
- Drug therapy for Chronic Heart Failure
 - ACE Inhibitors: captopril, enalapril
 - ARBs: Losartan, Valsartan (if pt can't tolerate ACE Inhibitors)
 - Nephilysin-angiotensin receptor inhibitors: Sacubitril/valsartan (Entresto) is a combination of nephilysin inhibitor and an ARB
 - Aldosterone antagonists: spironolactone and eplerenone are potassium sparing diuretics
 - Nitrates: nitroglycerin
 - B-adrenergic blockers: Metoprolol succinate (Toprol XL), bisoprolol (Zebeta), and carvedilol (Coreg)
 - Hydralazine/isosorbide dinitrate combination (Bidil)
 - Digitalis (Digoxin)
 - Sodium-glucose cotransporter-2 (SGLT-2) inhibitor: Dapagliflozin (Farxiga)
 - Diuretics:
 - thiazide diuretics (ex – hydrochlorothiazide)
 - loop diuretics
 - furosemide (Lasix)
 - bumetanide (Bumex)
 - torsemide (Demadex)

5. What patient education would you provide to Frannie Failure?

- Diet therapy
 - Provide a list of permitted and restricted foods
 - Foods that are high and low in Na⁺
 - How to read food labels
 - Teach ways to enhance food flavors without salt (ex – adding lemon juice or spices)
 - Adhere to specific Na⁺ restriction guidelines by HCP
 - Typically, 2g in chronic HF
 - Adhere to fluid restriction guidelines by HCP
 - Track everything that melts at room temperature

- o Check labels of OTC medications such as laxatives, cough medicines, and antacids for sodium content
 - o Weigh yourself at the same time each day, preferably in the morning after first void, using the same scale and wearing similar clothes
- Activity program
 - o Increase walking and other activities gradually if they do not cause fatigue or dyspnea
 - o Cardiac rehabilitation program
 - o Avoid extreme heat and cold
- Ongoing Monitoring
 - o s/s of worsening HF
 - dyspnea, cough, orthopnea, PND, weight gain, edema, fluid retention, fatigue, and tiredness with physical activity
 - o report the following to the HCP immediately
 - weight gain of 3 lbs. in 2 days or 3-5 lbs. in a week
 - difficulty breathing especially with activity or lying flat
 - waking up breathless at night
 - frequent dry hacking cough especially when lying down
 - fatigue, weakness
 - swelling of ankles, feet, or abdomen
 - swelling of face or breathing if taking ACE inhibitors
 - nausea with abdominal pain, swelling, and tenderness
 - dizziness or fainting
 - o regular follow up appointments with HCP
 - o continue joining a local support group with family or caregiver
- Health Promotion
 - o Annual influenza vaccine
 - o Pneumococcal vaccination
 - o Develop a plan to reduce risk factors
 - BP control, tobacco cessation, blood sugar/A1C control, weight reduction
- Rest
 - o Plan a regular daily rest and activity program
 - o After exertion, such as exercise or ADLs, plan a rest period
 - o Shorten working hours, or schedule a rest period between hours
 - o Avoid emotional upsets
 - Share with HCP any concerns, fears, feelings of depression, etc.
- Drug therapy
 - o Take medication directly as prescribed

- Develop a system to make sure they have been taken such as daily chart or weekly pillbox
- Monitor HR and know parameters if medication should be taken or not if applicable to medication prescribed
- Monitor BP at determined intervals by HCP
- s/s of orthostatic hypotension and how to prevent them
 - change positions slowly