

N431 CARE PLAN # 1

Ragin Baker

Lakeview College of Nursing

N441: Adult Health 3

Professor Bergen

11-10-2024

Demographics

Date of Admission 11-2-2024	Client Initials TW	Age 81 years old	Biological Gender Male
Race/Ethnicity White	Occupation Not employed	Marital Status Single	Allergies Amoxicillin and Imdur (isosorbide Mononitrate)
Code Status Full	Height 172.7cm 5'8"	Weight 93kg 205lb	

Medical History

Past Medical History: Benign neoplasm of colon, coronary artery disease, type II diabetes, hypertension, gastroesophageal reflux disease, hyperlipidemia, retinal tear of the right eye, and benign prostatic hyperplasia.

Past Surgical History: Coronary artery bypass graft, colonoscopy, coronary angiography, laser retinopexy, left heart catheterization, phacoemulsification of cataract both of both eyes, and stent coronary graft.

Family History: Father (HTN and heart disease) Mother (diabetes, glaucoma, and heart disease)

Social History (tobacco/alcohol/drugs including frequency, quantity and duration of use):

Patient reports he used to smoke cigarettes every day. The patient reports he quit smoking on 10-25-1980, which has been 44 years ago. The patient states he has never used smokeless tobacco.

The patient reports that he does drink alcohol. He states he drinks 4-5 cans of beers per week.

The patient reports no use of drugs.

Education: High school education

Living Situation: The patient lives at home alone.

Assistive devices: N/A

Admission History

Chief Complaint: Mild chest pressure and shortness of breath with exertion and while lying flat.

History of Present Illness (HPI)– OLD CARTS

An 81-year-old male presented to the emergency department complaining of chest pressure and shortness of breath. The patient has a severe history of multivessel coronary artery disease treated with a coronary artery bypass graft surgery in 2010, obesity, type II diabetes, neuropathy, hyperlipidemia, hypertension, benign prostatic hyperplasia, ejection fraction of 45%-50% in 2022. The patient stated that the chest pressure and shortness of breath has been worsening for 1 week. The patient reports he can only walk 20 feet before needing to take a break because his dyspnea is so bad. The patient also reports that all week he has been waking up feeling short of breath and when he lies down in bed the shortness of breath gets worse, requiring him to sleep in the recliner. The patient reports worsening edema in lower extremities. He notes intermittent nonradiating substernal chest pressure that is typically brought on by exertion. The patient did not report any relieving factors. The patient was hemodynamically stable on presentation to the ED.

Admission Diagnosis

Primary Diagnosis: Acute on chronic systolic congestive heart failure

Secondary Diagnosis (if applicable): N/A

Pathophysiology

Systolic heart failure is also known as heart failure with reduce ejection fraction (“Systolic heart failure,” 2022). This happens when your left ventricle cannot pump blood efficiently. The left ventricle is the largest and strongest chamber of the heart, its role is to pump oxygen-rich blood from the lungs to the rest of the body (“Systolic heart failure,” 2022). When the left ventricle fails it can cause fluid to build up in the lungs, resulting in shortness of breath or fatigue (“Systolic heart failure,” 2022). An individual who has systolic heart failure, the heart muscle is weak, and the left ventricle is not contracting properly when the heart beats. This means less blood is circulating throughout the body effectively (“Systolic heart failure,” 2024). It can also cause swelling in your legs and feet.

Ejection fraction (HFrEF) measures the percentage of blood the left ventricle pumps out with every contraction (“Systolic heart failure,” 2022). A normal ejection fraction is 55%-70%. An ejection fraction of 40% or lower may indicate systolic heart failure (“Systolic heart failure,” 2022). The patient had an ECHO last done on the 16th of December in 2022 and the patient’s EF was 45%-50%. The patient was supposed to be having another ECHO performed on 11-4-2024.

Anyone can develop heart failure with reduced ejection fraction, but people who have coronary artery disease, diabetes, hypertension, a previous myocardial infraction, abnormal heart rhythm, heart valve disease, or myocarditis are placed at higher risk for developing systolic heart failure (“Systolic heart failure,” 2022). The patient has coronary artery disease, diabetes, and hypertension, which put him at higher risk for developing this condition. Some symptoms of this condition that individuals might experience are chest pain, fatigue, weakness, nausea, rapid/irregular heart rate, shortness of breath with exertion or lying down, and swelling in belly, feet, or legs (“Systolic heart failure,” 2022). The patient was experiencing chest pressure, shortness of breath on exertion and while lying down, and edema in the lower extremities

bilaterally. Some diagnostics are chest XR, ECHO, EKG, and physical exam (“Systolic heart failure,” 2022). The patient had an CXR, EKG, and a physical done. He was also going to have an ECHO performed the next day. This condition is treated by lifestyle modifications and medications (“Systolic heart failure,” 2022). The patient quit smoking 44 years ago, but still drinks. The patient is also taking medications such as Lasix, metoprolol, Nitroglycerin, and Amlodipine.

Pathophysiology References (2) (APA):

Systolic heart failure. (2022, June 14). Cleveland Clinic.

<https://my.clevelandclinic.org/health/diseases/23276-systolic-heart-failure>

Systolic heart failure. (2024). John Hopkins Medicine.

<https://www.hopkinsmedicine.org/health/conditions-and-diseases/systolic-heart-failure#:~:text=Systolic%20heart%20failure%20is%20a,normally%20when%20the%20heart%20beats.>

Laboratory/Diagnostic Data

Lab Name	Admission Value	Today's Value	Normal Range	Reasons for Abnormal
Glucose POC	101 mg/dL	139 mg/dL	60-99 mg/dL	The patient has type II diabetes.
Troponin	33 ng/L	N/A	0-4 ng/L	The patient has systolic congestive heart failure, which causes damage to the heart tissues.

B-Natriuretic Peptide (BNP)	743.0 pg/mL	N/A	0.0-100.0 pg/mL	Due to the patient's congestive heart failure.
Chloride	107 mmol/L	108 mmol/L	98-107 mmol/L	Electrolyte imbalance due to the patient's congestive heart failure.

Diagnostic Test & Purpose	Clients Signs and Symptoms	Results
XR chest AP or PA	Shortness of breath and chest pressure	Mild-to-moderate pulmonary edema was present with small effusions and cardiomegaly was present as well.
ECG 12 lead	Chest pressure	An undetermined rhythm and non-specific intra-ventricular conduction block was found.

Diagnostic Test Reference (1) (APA):

Chest X-Ray. (2023, November 20). Cleveland Clinic.

<https://my.clevelandclinic.org/health/diagnostics/10228-chest-x-ray>

Sattar, Y., & Chhabra, L. (2023, June 5). Electrocardiogram. *National Library of Medicine*. <https://www.ncbi.nlm.nih.gov/books/NBK549803/#:~:text=The%20conventional%20ECG%20machine%20consists,leads%20include%20V1%20to%20V6.>

Active Orders

Active Orders	Rationale
Diabetic diet	The patient is a type II diabetic.
Daily weight	Due to the patient having congestive heart failure the nurse will want to monitor due to fluid purposes.
Vital signs	To monitor the patient's vital signs every Q4.
Continuous pulse ox monitoring	Want to monitor the patient's oxygen level.
Strict I/O monitoring	The patient has congestive heart failure, so the nurse wants to monitor how much fluid is being consumed and how much the patient is eliminating.
Cardiac monitoring	Due to the patient's congestive heart failure and shortness of breath.
Increase activity as tolerated	To help maintain adequate movement.
AC/HS blood sugar level monitoring	The patient is a type II diabetic, so the nurse needs to obtain blood glucose levels before meals.

Medications

Home Medications (Must List ALL)

Brand/ Generic	Amlodipine (Norvasc) 2.5 mg and 5mg to make 7.5 mg	Aspirin (Acetylsalicylic acid, ASA) 81mg	Atorvastatin (Lipitor) 20 mg	Clopidogrel (Plavix) 75 mg
Classification	Pharmacologic: calcium channel blocker (NDH, 2023). Therapeutic: antianginal and antihypertensive (NDH, 2023).	Pharmacologic: salicylate (NDH, 2023). Therapeutic: NSAID (NDH, 2023).	Pharmacologic: HMG-CoA reductase inhibitor (NDH, 2023). Therapeutic: antihyperlipidemia (NDH, 2023).	Pharmacologic: P2Y12 platelet inhibitor (NDH, 2023). Therapeutic: platelet aggregation inhibitor (NDH, 2023).
Reason Client Taking	Hypertension	Reduce severity of MI	Hyperlipidemia	Reduce rate of CVA or MI
List two teaching needs for the medication pertinent to the client	<ol style="list-style-type: none"> 1. Monitor blood pressure routinely (NDH, 2023). 2. Monitor for chest pain (NDH, 2023). 	<ol style="list-style-type: none"> 1. Take medication with food or meals to help not upset stomach (NDH, 2023). 2. Avoid alcohol while taking this medication (NDH, 2023). 	<ol style="list-style-type: none"> 1. Take at the same time each day to maintain full effect (NDH, 2023). 2. Advise the patient with diabetes to monitor sugars closely (NDH, 2023). 	<ol style="list-style-type: none"> 1. Remind the patient to take aspirin with this medication (NDH, 2023). 2. Report any unusual bleeding (NDH, 2023).
Key nursing assessment(s) prior to	Take blood pressure before administration of	The nurse should monitor the patient for bleeding and	The nurse should check the patient's blood	The nurse needs to monitor the patient for

administration	medication and monitor the patient for arrhythmias (NDH, 2023).	monitor if the patient is taking another NSAID because it will increase the risk for bleeding (NDH, 2023).	sugar frequently and be cautious in patients who consume a substantial quantity of alcohol because this medication increases the risk for liver dysfunction (NDH, 2023).	bleeding and monitor labs/blood counts (NDH, 2023).
Brand/ Generic	Furosemide (Lasix) 40 mg	Losartan (Cozaar) 100 mg	Metformin (Glucophage) 500 mg	Metoprolol Succinate ER (Toprol XL) 50 mg
Classification	Pharmacologic: loop-diuretic (NDH, 2023). Therapeutic: antihypertensive and diuretic (NDH, 2023).	Pharmacologic: angiotensin II receptor blocker (ARB) (NDH, 2023). Therapeutic: antihypertensive (NDH, 2023).	Pharmacologic: Biguanide (NDH, 2023). Therapeutic: antidiabetic (NDH, 2023).	Pharmacologic: beta1-adrenergic blocker (NDH, 2023). Therapeutic: antianginal and antihypertensive (NDH, 2023).
Reason Client Taking	Treat CHF and edema	Hypertension	Reduce blood sugar in type II diabetes	Hypertensive
List two teaching needs for the medication pertinent to the client	<ol style="list-style-type: none"> 1. Take last dose several hours before bed to avoid sleep interruption (NDH, 2023). 2. Teach the patient the importance of daily weights 	<ol style="list-style-type: none"> 1. Educate the patient to avoid potassium-containing salt substitutes, it will increase the risk for hyperkalemia (NDH, 2023). 2. Avoid drinking excessive amounts of 	<ol style="list-style-type: none"> 1. Check blood sugar levels regularly (NDH, 2023). 2. Report any signs or symptoms of dizziness, malaise, or muscle pain (NDH, 	<ol style="list-style-type: none"> 1. Instruct the patient to take with same meal every day (NDH, 2023). 2. Urge the diabetic patient to check their blood sugar

	and diet (NDH, 2023).	alcohol (NDH, 2023).	2023).	often (NDH, 2023).
Key nursing assessment(s) prior to administration	The nurse should obtain a weight before administering the medication and monitor for hypokalemia (NDH, 2023).	The nurse needs to monitor the patient's blood pressure and monitor the patient's potassium level (NDH, 2023).	The nurse should monitor the patient's blood sugar and monitor for signs or symptoms of lactic acidosis (NDH, 2023).	The nurse should use caution in patients with congestive heart failure because beta blockers can depress myocardial contractility, worsening the heart failure (NDH, 2023).
Brand/ Generic	Nitroglycerin (Nitrostat) 0.4 mg	Tamsulosin (Flomax) 0.4 mg		
Classification	Pharmacologic: nitrate (NDH, 2023). Therapeutic: antianginal and vasodilator (NDH, 2023).	Pharmacologic: alpha-adrenergic antagonist (NDH, 2023). Therapeutic: Benign prostatic hyperplasia (BPH) agent (NDH, 2023).		
Reason Client Taking	Prevent anginal attacks due to coronary artery disease	To treat benign prostatic hyperplasia (BPH)		
List two teaching needs for the medication pertinent to the client	<ol style="list-style-type: none"> 1. Commonly causes headache (NDH, 2023). 2. Urge the patient to avoid alcohol while on this medication (NDH, 	<ol style="list-style-type: none"> 1. Instruct the patient to take the medication about 30 minutes after the same meal everyday (NDH, 2023). 2. Advise the patient to 		

	2023).	change position slowly while on this medication (NDH, 2023).		
Key nursing assessment(s) prior to administration	The nurse should check the patient's vital signs before administration of medication and monitor fluid intake and output (NDH, 2023).	The nurse needs to monitor the patient's blood pressure and respiratory rate (NDH, 2023).		

Hospital Medications (Must List ALL)

Brand/Generic	Enoxaparin (Lovenox) 40 mg	Insulin lispro (HumaLOG) correction 1-20 units	Amlodipine (Norvasc) 7.5 mg (Same as home medication)	Aspirin (Acetylsalicylic acid, ASA) 81 mg (Same as home medication)	Atorvastatin (Lipitor) 20 mg (Same as home medication)
Classification	Pharmacologic: low-molecular-weight heparin (NDH, 2023). Therapeutic: anticoagulant (NDH, 2023).	Pharmacologic: insulins (NDH, 2023). Therapeutic: rapid-acting (NDH, 2023).			
Reason Client Taking	To prevent deep vein thrombosis	Type II diabetic			
List two teaching needs for the medication	1. Monitor for bleeding	1. Monitor blood sugar regularly			

pertinent to the client	(NDH, 2023). 2. Do not rub the site to prevent bruising (NDH, 2023).	(NDH, 2023). 2. Diet teaching for the patient (NDH, 2023).			
Key nursing assessment(s) prior to administration	The nurse should use caution in patients with bleeding disorders and monitor the patient's platelet count/watch for bleeding (NDH, 2023).	The nurse should obtain blood sugar level to determine how many units to administer and should monitor signs and symptoms after administration for hypoglycemia (NDH, 2023).			
Brand/Generic	Clopidogrel (Plavix) 75 mg (Same as home medication)	Furosemide (Lasix) 40 mg (Same as home medication)	Losartan (Cozaar) 100 mg (Same as home medication)	Metformin (Glucophage) 500 mg (Same as home medication)	Metoprolol Succinate ER (Toprol XL) 50 mg (Same as home medication)
Classification					
Reason Client Taking					
List two teaching needs for the medication pertinent to the client					
Key nursing assessment(s) prior to administration					

Brand/Generic	Nitroglycerin (Nitrostat) 0.4 mg (Same as home medication)	Tamsulosin (Flomax) 0.4 mg (Same as home medication)			
Classification					
Reason Client Taking					
List two teaching needs for the medication pertinent to the client					
Key nursing assessment(s) prior to administration					

Prioritize Three Hospital Medications

Medications	Why this medication was chosen	List 2 side effects. These must correlate to your client
1. Furosemide (Lasix) 40 mg	The patient has congestive heart failure and was retaining fluid and had edema in his lower extremities.	1. Arrhythmias (NDH, 2023). 2. Hyperglycemia (NDH, 2023).

<p>2. Insulin lispro (HumaLOG) 1-20 units</p>	<p>The patient is a type II diabetic.</p>	<p>1. Hypoglycemia (NDH, 2023). 2. Diabetic ketoacidosis (NDH, 2023).</p>
<p>3. Nitroglycerin (Nitrostat) 0.4 mg</p>	<p>The patient has been having chest pressure, this medication will help prevent anginal attacks.</p>	<p>1. Hypotension (NDH, 2023). 2. Edema (NDH, 2023).</p>

Medications Reference (1) (APA)

Nurse's Drug Handbook. (2023). Jones & Bartlett Learning.

Physical Exam

HIGHLIGHT ALL PERTINENT ABNORMAL FINDINGS

<p>GENERAL: Alertness: Orientation: Distress: Overall appearance: Infection Control precautions: Client Complaints or Concerns:</p>	<p>The patient was alert and oriented x4 to person, place, situation, and time. The patient was in no acute distress and was well groomed.</p>
<p>VITAL SIGNS: Temp: Resp rate: Pulse: B/P: Oxygen: Delivery Method:</p>	<p>The patient's vital signs were taken at 1052 and were the following: Temp: 97.7F oral Resp. rate: 20 Pulse: 67 B/P: 108/63 Oxygen: 96 on room air</p>
<p>PAIN ASSESSMENT: Time: Scale: Location: Severity: Characteristics: Interventions:</p>	<p>1052 the patient denied any presents of pain at the time.</p>
<p>IV ASSESSMENT: Size of IV:</p>	<p>The patient has an 18G in his right anterior antecubital. This IV was placed on 11-2-2024.</p>

Location of IV: Date on IV: Patency of IV: Signs of erythema, drainage, etc.: IV dressing assessment: Fluid Type/Rate or Saline Lock:	<p>The patency of the IV is good and there is no signs of erythema or drainage noted. The IV dressing was dry and intact. No fluids were running.</p>
INTEGUMENTARY: Skin color: Character: Temperature: Turgor: Rashes: Bruises: Wounds: . Braden Score: Drains present: Y <input type="checkbox"/> N <input type="checkbox"/> Type:	<p>The patient's skin color was normal for ethnicity. Skin was warm and dry upon palpation. The skin turgor was normal. The patient had no rashes, bruises, or wounds noted. The patient had a red blanchable spot on his coccyx. Braden score was a 23. No drains were present.</p>
HEENT: Head/Neck: Ears: Eyes: Nose: Teeth:	<p>The patient's head and neck were symmetrical. The patient's trachea was midline. The thyroid was not palpable. The patient's carotid pulses were a 2+ bilaterally. PERRLA and EMOs were intact bilaterally. The patient's sclera's were white with no lesions or drainage bilaterally. The patient's eyelids and conjunctiva were pink and moist with no lesions or drainage present. Septum was midline. No bleeding or drainage from nares noted. The patient's ears were symmetrical with no drainage or lesions present. The patient's mouth was moist and pink with no lesions noted. The patient had no missing teeth. The hard palate was intact, and the soft palate rises and falls symmetrically. No sinus tenderness noted upon palpation.</p>
CARDIOVASCULAR: Heart sounds: S1, S2, S3, S4, murmur etc. Cardiac rhythm (if applicable): Peripheral Pulses: Capillary refill: Neck Vein Distention: Y <input type="checkbox"/> N <input type="checkbox"/> Edema Y <input type="checkbox"/> N <input type="checkbox"/> Location of Edema:	<p>S1 and S2 were present. No gallops or murmurs noted. Normal rate and rhythm present. Peripheral pulses were 2+ bilaterally. PMI was palpable. The patient's capillary refill was 3 seconds or less in both lower and upper extremities bilaterally. No neck vein distention noted. Edema present in lower extremities bilaterally.</p>
RESPIRATORY: Accessory muscle use: Y <input type="checkbox"/> N <input type="checkbox"/>	<p>The patient had a normal rhythm. Breathing was non-labored and symmetrical. Breath sounds</p>

ADL Assistance: Y <input type="checkbox"/> N <input type="checkbox"/> Fall Risk: Y <input type="checkbox"/> N <input type="checkbox"/> Fall Score: Activity/Mobility Status: Activity Tolerance: Independent (up ad lib) Needs assistance with equipment Needs support to stand and walk	an 8.
NEUROLOGICAL: MAEW: Y <input type="checkbox"/> N <input type="checkbox"/> PERLA: Y <input type="checkbox"/> N <input type="checkbox"/> Strength Equal: Y <input type="checkbox"/> N <input type="checkbox"/> if no - Legs <input type="checkbox"/> Arms <input type="checkbox"/> Both <input type="checkbox"/> Orientation: Mental Status: Speech: Sensory: LOC:	The patient was alert and oriented x4. PERRLA and MAEW were intact bilaterally. The patient's strength was a 5 equally in both upper and lower extremities. The patient's mental status was adult level. The patient's speech was clear, and the patient was fully conscious.
PSYCHOSOCIAL/CULTURAL: Coping method(s): Developmental level: Religion & what it means to pt.: Personal/Family Data (Think about home environment, family structure, and available family support):	The patient has the developmental level of an adult. The patient used drinking as a coping method. The patient stated he does not associate with a religion. The patient lives at home alone but his family does support him.

Discharge Planning

Discharge location: The patient is planning to discharge home. His family is going to take him to his house once he is discharged.

Home health needs: No home health needs are needed at this time.

Equipment needs: No equipment needs are needed at this time.

Follow up plan: The patient needs to follow up with his cardiologist and pulmonologist after he is discharged.

Education needs: The patient could use some more education on congestive heart failure, fluid retention, and hyperglycemia since his sugars have been higher.

Nursing Process

Must be NANDA approved nursing diagnosis and listed in order of priority

Nursing Diagnosis <ul style="list-style-type: none"> • Include full nursing diagnosis with “related to” and “as evidenced by” components • Listed in order by priority – highest priority to lowest priority pertinent to this client 	Rationale <ul style="list-style-type: none"> • Explain why the nursing diagnosis was chosen 	Outcome Goal (1 per dx)	Interventions (2 per goal)	Evaluation of interventions
1. Excess fluid volume related to congestive heart failure as evidence by lower extremities having edema (Phelps, 2023).	The patient has congestive heart failure and bilateral edema in lower extremities.	The outcome goal for the patient is for the patient to lose the excess fluid (Phelps, 2023).	<ol style="list-style-type: none"> 1. Daily weights (Phelps, 2023). 2. Strict intake and output (Phelps, 2023). 	The patient is following the strict intake restriction and has already lost 3lb since the night before.
2. Risk for ineffective breathing pattern related to congestive heart failure as evidence by shortness of breath (Phelps, 2023).	The patient has been having episodes of shortness of breath, especially while laying down.	The patient will report feeling comfortable while breathing (Phelps, 2023).	<ol style="list-style-type: none"> 1. Monitor the patient’s respiratory rate (Phelps, 2023). 2. Have the patient’s head of the bed elevated (Phelps, 2023). 	The patient has been sitting on the edge of the bed because it makes it easier for him to breath (Phelps, 2023).
3. Decreased cardiac output related to	The patient has shortness of breath and chest pressure because	The patient will experience no chest	<ol style="list-style-type: none"> 1. Monitor the patient’s blood pressure (Phelps, 2023). 	The patient’s blood pressure and oxygen levels have been

congestive heart failure as evidence by shortness of breath and chest pressure (Phelps, 2023).	the patient's heart is not pumping the blood proficiently to the rest of the body.	pressure or shortness of breath. Along with better cardiac perfusion (Phelps, 2023).	2 Monitor the patient's oxygen levels (Phelps, 2023).	within normal limits (Phelps, 2023).
4. Unstable blood glucose levels related to type II diabetes as evidence by elevated blood sugars (Phelps, 2023).	The patient is a type II diabetic and has had elevated blood sugars.	The patient will keep blood sugar levels in a safe range (Phelps, 2023).	1. Monitor the blood glucose regularly (Phelps, 2023). 2. Monitor the patient for signs and symptoms of hyper- or hypoglycemia (Phelps, 2023).	The patient has been having lower blood glucose levels (Phelps, 2023).
5. Risk for impaired skin integrity related to congestive heart failure and type II diabetes as evidence by edema in the lower extremities and a red blanchable spot on the patient's coccyx (Phelps, 2023).	The patient has congestive heart failure and diabetes which causes poor skin integrity. The patient also had a red blanchable spot on his coccyx.	The patient will refrain from any pressure injuries (Phelps, 2023).	1. Reposition the patient every 2 hours (Phelps, 2023). 2. Inspect the skin every 8 hours (Phelps, 2023).	The patient has been repositioning himself very well and walking (Phelps, 2023).

Other References (APA):

Phelps, L. (2021). *Nursing diagnosis reference manual* (12th ed.). Wolters Kluwer.

