N431 Care Plan #1

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Lakeview College of Nursing

N431: Adult Health II

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Demographics (3 points)

Date of Admission 06/06/2023	**Client Initials** D.J.	**Age** 71 years	**Gender** Female
Race/Ethnicity Caucasian	**Occupation** Retired	**Marital Status** Divorced	**Allergies** Codeine & Cephalexin
Code Status Full Code	**Height** 162 cm	**Weight** 155.6 kg	

Medical History (5 Points)

Past Medical History: Congestive heart failure, type II diabetes, chronic obstructive pulmonary disorder, stroke, morbid obesity, hypothyroid, and chronic hypoxia.

Past Surgical History: No past surgical history

Family History: Mother- hypertension and diabetes mellitus

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

Assistive Devices: The patient uses a walker.

Living Situation: The patient lives at home with her husband.

Education Level: Highschool diploma

Admission Assessment

Chief Complaint (2 points): Respiratory distress

History of Present Illness – OLD CARTS (10 points): The patient presented to the emergency room complaining of shortness of breath and low oxygen saturation. The patient's oxygen saturation was 72% upon arrival to the emergency room. The patient states that she has been feeling short of breath since the morning upon arrival. Walking, standing, and laying make the shortness of breath worse. Nothing made the shortness of breath better. The patient has been

treated for this before, as she has a history of congestive heart failure and chronic obstructive pulmonary disorder.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Congestive heart failure exacerbation

Secondary Diagnosis (if applicable): N/A

Pathophysiology of the Disease, APA format (20 points):

Congestive heart failure (CHF) is a condition that results from a weakened ventricular muscle that is not able to pump blood to meet the body's requirements (Capriotti, 2020). Hypertension, coronary artery disease, metabolic syndrome, and diabetes mellitus increase the risk of congestive heart failure (Capriotti, 2020). Classification of heart failure is based on calculating left ventricular ejection fracture (LVEF) and symptoms (Malik et al., 2022). Heart failure can increase the risk of mortality and decrease the individual's functional capacity (Malik et al., 2022). Signs and symptoms of this condition can include dyspnea, fatigue, edema, weight gain, heart palpitations, and chest pain (Capriotti, 2020).

In CHF, cardiac physiology adapts compensatory mechanisms to meet the systemic demeans and maintain cardiac output (Malik et al., 2022). A decrease in cardiac output can stimulate the neuroendocrine system (Malik et al., 2022). The neuroendocrine system will release vasopressin, endothelin, norepinephrine, and epinephrine, which causes vasoconstriction leading to an increased afterload (Malik et al., 2022). Increased myocardial contractility also occurs due to increased cyclic adenosine monophosphate (cAMP). Increased myocardial contractility and afterload can increase myocardial oxygen demand (Malik et al., 2022). There is a need for increased cardiac output to meet the cardiac demand, which then leads to apoptosis

and cell death (Malik et al., 2022). A decreased cardiac output will stimulate the renin-angiotensin-aldosterone system (RAAS). This will cause an increase in water and salt retention, increasing vasoconstriction (Malik et al., 2022). RAAS will release angiotensin II, which increases interstitial fibrosis and cellular hypertrophy (Malik et al., 2022). In heart failure with preserved ejection fracture (HFpEf), the ventricle's stiffness will increase due to the higher ventricular afterload (Malik et al., 2022). This can all stimulate maladaptive compensations and progressively lead to heart failure (Malik et al., 2022).

With CHF, there will be an increase in the brain natriuretic peptide (BNP) which is used for determining CHF (Capriotti, 2020). Labs like cardiac troponin, blood urea nitrogen (BUN), creatinine (CR), alanine aminotransferase (ALT), aspartate aminotransferase (AST), complete blood counts (CBC), and serum electrolytes can also add insight to the diagnostics of CHF (Capriotti, 2020). Patients with CHF can appear to have wheezing, crackles, jugular vein distension, edema, diaphoresis, and poor nutritional status (Malik et al., 2022). Alongside the labs to diagnose CHF, a chest x-ray, electrocardiogram, echocardiogram, or cardiac catheterization may be done to diagnose CHF (Capriotti, 2020). Although there is no cure for CHF, treatments to manage this condition include medications like diuretics and vasodilators, changes in nutritional status like lowering sodium intake, physical activity, and smoking cessation can all aid in managing the symptoms of CHF (Capriotti, 2020).

The patient had CHF exacerbation and was admitted to the hospital because of fluid overload and respiratory distress related to CHF. The patient has edema, dyspnea, irregular heartbeats, and weight gain, all related to CHF. The patient also was experiencing atrial fibrillation, tachycardia, hyperglycemia, and hypertension, all of which can cause heart failure to become worse. The patient's cardiac troponins were normal, the BNP was elevated, and there

were abnormal lab values in the CBC, like a decrease in red blood cells, hemoglobin, and hematocrit levels. The patient had an echocardiogram, chest x-ray, and electrocardiogram done to monitor the heart and the progression of this condition. The patient was put on diuretics like furosemide and spironolactone to help get some fluid out of the body due to CHF. The patient was increased to 3 liters of oxygen and given a beta blocker to slow the heart rate and help with the patient's oxygen saturation.

Pathophysiology References (2) (APA):

Capriotti, T. M. (2020). *Davis advantage for pathophysiology: Introductory concepts and clinical perspectives* (2nd ed.). F. A. Davis Company. https://fadavisreader.vitalsource.com/books/9781719641470

Malik, A., Brito, D., Vawar, S., Chhabara, L., & Doerr, C. (2022). *Congestive Heart Failure (Nursing)*. National Library of Medicine. www.ncbi.nlm.nih.gov/books/NBK574497/.

Laboratory Data (15 points)

CBC Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range	Admission Value	Today's Value	Reason for Abnormal Value
RBC (x10^6/µL)	3.80-5.30	3.56	3.74	RBC are decreased because in heart failure, anemia is associated because there are not enough healthy red blood cells to carry oxygen to the organs (Capriotti, 2020).
Hgb (g/dL)	12.0-15.8	10.0	10.5	HGB are decreased because in heart failure, anemia is associated because there are not enough healthy red blood cells to carry oxygen to the organs (Capriotti, 2020).

Hct (%)	36.0-47.0	31.4	32.3	HCT are decreased because in heart failure, anemia is associated because there are not enough healthy red blood cells to carry oxygen to the organs (Capriotti, 2020).
Platelets (x10^3/μL)	140-440	140	152	N/A
WBC (x10^3/μL)	4.00-12.00	11.80	8.50	N/A
Neutrophils (%)	47-73	72.2	67.3	N/A
Lymphocytes (%)	18-42	40.4%	30.2%	N/A
Monocytes (%)	4.0-12.0	10.0	12.0	N/A
Eosinophils (%)	0.0-5.0	0.0	0.9	N/A
Bands (%)	0.0-10.0	N/A	N/A	N/A

Chemistry Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range	Admission Value	Today's Value	Reason For Abnormal
Na+ (mEq/L)	136-145	136	144	N/A
K+ (mEq/L)	3.5-5.1	4.1	5.0	N/A
Cl- (mEq/L)	98-107	98	100	N/A
CO2 (mEq/L)	21-31	22	26	N/A
Glucose (mg/dL)	74-109	624	92	Glucose is elevated because the patient has type 2 diabetes. The pancreas is not making enough insulin resulting in hyperglycemia (Capriotti, 2020).
BUN (mg/dL)	7-25	44	40	N/A
Creatinine (mg/dL)	0.7-1.3	1.71	1.07	This is elevated because it is showing a decrease in kidney function. This can correlate to decreased cardiac output because of the reduced perfusion to the kidneys (Capriott, 2020).

Albumin (g/dL)	3.5-5.2	3.5	3.6	N/A
Calcium (mg/dL)	8.6-10.3	9.6	9.6	N/A
Mag (mEq/L)	1.6-2.6	2.5	2.0	N/A
Phosphate (mg/dL)	2.4-4.5	N/A	N/A	N/A
Bilirubin (mg/dL)	0.3-1.0mg/ dL	N/A	N/A	N/A
Alk Phos (units/L)	34-104units/L	98	91	N/A
AST	13-39 units/L	18	20	N/A
ALT	7-52 units/L	24	21	N/A
Amylase	29-103 units/L	N/A	N/A	N/A
Lipase	11-82 units/L	N/A	N/A	N/A
Lactic Acid	<2.5	N/A	N/A	N/A
Troponin	0.000-0.040	0.036	N/A	N/A
CK-MB (%)	5-25 µg/L	N/A	N/A	N/A
Total CK (units/L)	22-198 U/L	N/A	N/A	N/A

Other Tests Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab Test	Normal Range	Value on Admission	Today's Value	Reason for Abnormal
INR	<1	1.9	3.8	INR is elevated because the patient is taking warfarin which slows the amount of time it takes for the blood to clot (Capriotti, 2020).
PT (seconds)	10-14	22.5	45.4	PT is elevated because the patient is taking warfarin which slows the amount of time it takes for the blood

				to clot (Capriotti, 2020).
PTT (seconds)	30-40	N/A	N/A	N/A
D-Dimer	<500	N/A	N/A	N/A
BNP (pg/mL)	<100	448	N/A	BNP is elevated because heart failure is present, and the heart cannot effectively pump the way it should (Capriotti, 2020).
HDL (mg/dL)	>40	42	N/A	N/A
LDL (mg/dL)	<130	90	N/A	N/A
Cholesterol (mg/dL)	<200	97	N/A	N/A
Triglycerides (mg/dL)	<150	84	N/A	N/A
Hgb A1c	<5.7%	N/A	N/A	N/A
TSH (mU/L)	0.4 – 4.0	N/A	N/A	N/A

Urinalysis Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab Test	**Normal Range**	**Value on Admission**	**Today's Value**	**Reason for Abnormal**
Color & Clarity	Clear to slightly hazy, Yellow to amber	Clear, yellow	N/A	N/A
pH	5.0 – 9.0	5.0	N/A	N/A
Specific Gravity	1.001 – 1.030	1.021	N/A	N/A
Glucose	Negative	3+	N/A	The patient has hyperglycemia, and the kidneys cannot filter or reabsorb the glucose; therefore, it's being excreted in the urine (Capriotti, 2020).
Protein	Negative or trace	Negative	N/A	N/A
Ketones	Negative	Negative	N/A	N/A
WBC	0 – 5	Negative	N/A	N/A

RBC	0 – 5	Negative	N/A	N/A
Leukoesterase	Negative	Negative	N/A	N/A

Arterial Blood Gas Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Test	Normal Range	Value on Admission	Today's Value	Explanation of Findings
pH	7.35 – 7.45	N/A	N/A	N/A
PaO2 (mm Hg)	X – x	N/A	N/A	N/A
PaCO2 (mm Hg)	35 – 45	N/A	N/A	N/A
HCO3 (mEq/L)	22 – 26	N/A	N/A	N/A
SaO2 (%)	95 – 100	N/A	N/A	N/A

Cultures Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Test	Normal Range	Value on Admission	Today's Value	Explanation of Findings
Urine Culture	Negative	N/A	N/A	N/A
Blood Culture	Negative	N/A	N/A	N/A
Sputum Culture	Negative	N/A	N/A	N/A
Stool Culture	Negative	N/A	N/A	N/A

Lab Correlations Reference (1) (APA):

Capriotti, T. M. (2020). *Davis advantage for pathophysiology: Introductory concepts and clinical perspectives* (2nd ed.). F. A. Davis Company. https://fadavisreader.vitalsource.com/books/9781719641470

OSF Sacred Heart Medical Center. (2023). *Lab Values.* OSF Sacred Heart Medical Center

Diagnostic Imaging

All Other Diagnostic Tests and Correlations (5 points):

1. **Chest X-Ray 06/06/2023-** This patient had a chest x-ray to examine the heart and lungs. The patient presented to the hospital for shortness of breath and respiratory distress with a history of chronic obstructive pulmonary disorder and congestive heart failure. **The** chest X-ray can show abnormalities like inadequate lung expansion, pneumothorax, and fluid in the lungs (Capriotti, 2020, p. 480). The chest X-ray also looks at the shape and size of the heart (Capriotti, 2020. P. 480). The patient's results showed findings on cardiomegaly with moderate pulmonary congestive changes with congestive heart failure with some improvement compared to the prior study.
2. **Echocardiogram 06/08/2023-** The patient had an echocardiogram done because the patient was admitted to the hospital for congestive heart failure exacerbation. The echocardiogram was performed to demonstrate the activity and structures of the heart (Capriotti, 2020, p. 422). Echocardiograms can look at the size and function of the ventricles, valve function, and valve ventricles (Capriotti, 2020, p.422). Findings from this test showed left ventricular hypertrophy, a hyperdynamic left ventricle, no wall abnormalities, severe mitral stenosis, and pulmonary hypertension.

3. **Electrocardiogram (EKG) 12 lead- 06/06/2023-** The patient had a 12 lead electrocardiogram (EKG) done to view the electrical activity in the heart (Capriotti, 2020, p. 371). Twelve leads are recorded to view the heart's electrical forces from different positions on the body (Capriotti, 2020, p. 371). The provider ordered this test because the patient presented to the hospital with tachycardia and a history of atrial fibrillation. Findings showed atrial fibrillation with rapid ventricular rate, T wave abnormalities, and lateral ischemia. This showed an abnormal EKG.

Diagnostic Test Reference (1) (APA):

Capriotti, T. M. (2020). *Davis advantage for pathophysiology: Introductory concepts and clinical perspectives* (2nd ed.). F. A. Davis Company. https://fadavisreader.vitalsource.com/books/9781719641470

Current Medications (10 points, 1 point per completed med)
10 <u>different</u> medications must be completed

Home Medications (5 required)

Brand/Generic	Alprazolam/ Xanax	Amlodipine/ Katerzia	Atorvastatin / Lipitor	Metoprolol / Lopressor	Levothyroxine/ Synthroid
Dose	0.25 mg	5 mg	40 mg	50 mg	125 mcg
Frequency	Daily	Daily	Daily	Twice daily	Daily
Route	PO	PO	PO	PO	PO
Classification	Benzodiazepine &	Calcium channel	HMG-CoA reductase	Beta-adrenergic	Synthetic thyroxine & Thyroid hormone replacement.

	Anxiolytic, antipanic	blocker & Antianginal, antihypertensive	inhibitor & Antihyperlipidemic	blocker & Antihypertensive, antianginal	
Mechanism of Action	"Increase of gamma-aminobutyric acid (GABA) binds to specific benzodiazepine receptors in cortical and limbic areas of the CNS. GABA inhibits excitatory stimulation, which helps control emotional behavior" (Jones, 2022).	"Inhibits the influx of extracellular calcium into vascular smooth muscle and myocardial cells. It results in a decrease of peripheral vascular resistance and a reduction of the heart rate-pressure product and myocardial oxygen" (Jones, 2022).	"Lowers cholesterol and lipoprotein levels by inhibiting HMG coA reductase and cholesterol synthesis in liver. It increases the number of hepatic LDL receptors on the cell surface to enhance the uptake and breakdown" (Jones, 2022).	"Inhibits stimulation of beta-receptor sits, resulting in decreased cardiac excitability, cardiac output, and myocardial oxygen demand. Also helps reduce blood pressure by decreasing renal release of renin" (Jones, 2022).	"Replaces endogenous thyroid hormone, which may exert its physiological effects by controlling DNA transcription and protein synthesis" (Jones, 2022).
Reason Client Taking	To manage anxiety	To manage hypertension	To manage hyperlipidemia	To manage hypertension	To manage hypothyroidism
Contraindications (2)	Acute angle-closure glaucoma and hypersensitivity to alprazolam and its components (Jones, 2022).	Hypotension and Cardiogenic shock (Jones, 2022).	Active hepatic disease and unexplained persistent rise in serum transaminase level (Jones, 2022).	Cardiogenic shock and second- or third-degree heart block (Jones, 2022).	Thyrotoxicosis and Active cardiac arrhythmias (Jones, 2022).
Side Effects/Adverse Reactions (2)	Agitation, Insomnia (Jones,	Edema, Rash (Jones, 2022).	Chest pain, constipation (Jones,	Depression, shortness of breath	Arrhythmias, tachycardia (Jones, 2022).

	2022).		2022).	(Jones, 2022).	
Nursing Considerations (2)	Monitor respiratory and cardiovascular status. Monitor basic metabolic panel labs (Jones, 2022).	Monitor blood pressure and liver function tests (Jones, 2022).	Monitor for skeletal muscle effects. Monitor lipid levels. (Jones, 2022).	Monitor blood pressure. Monitor heart rate and rhythm (Jones, 2022).	Monitor blood glucose. Use cautiously in patients with cardiovascular disease (Jones, 2022).
Key Nursing Assessment(s)/ Lab(s) Prior to Administration	Respiration and pulse.	Blood pressure and heart rate.	Alt, Ast, and lipid levels.	Blood pressure and heart rate.	TSH, pulse, T3, & T4
Client Teaching Needs (2)	Avoid driving or performing tasks that require alertness. Do not take with grapefruit juice.	Can be taken with or without food. Take medicine near the same time every day.	Take at bedtime. Swallow tablet whole.	Teach patient how to check pulse and blood pressure. Do not drink alcohol.	Take in the morning. Take on an empty stomach.

Hospital Medications (5 required)

Brand/Generic	Aldactone/ Spironolactone	Famotidine/ Pepcid	Furosemide/ Lasix	Pregabalin/ Lyrica	Warfarin/ Coumadin
Dose	25 mg	20 mg	40 mg	50 mg	5 mg
Frequency	Daily	Daily	Twice daily	Daily	Daily
Route	PO	PO	IV	PO	PO
Classification	Potassium-	Histamine-2	Loop diuretic	Gamma-	Coumadin

	sparing diuretic & Diuretic	blocker & Antiulcer agent	& Antihypertensive	aminobutyric acid (GABA) analogue & Analgesic, anticonvulsant	derivative & Anticoagulant.
Mechanism of Action	"Spironolactone competes with aldosterone and prevents sodium and water reabsorption. This causes their excretion through the distal convoluted tubules. This can reduce blood volume and blood pressure" (Jones, 2022).	"H2-receptor antagonist, reduces HCL formation by preventing histamine from binding with H2 receptors on the surface of parietal cells" (Jones, 2022).	"Inhibits sodium and water reabsorption in the loop of Henle and increases urine formation" (Jones, 2022).	"Binds TO alpha-delta site, an auxiliary subunit of voltage calcium channels, in CNS tissue where it may reduce calcium-dependent release of several neurotransmitters, possibly by modulating calcium channel function" (Jones, 2022).	"Interferes with the liver's ability to synthesize vitamin-K dependent clotting factors, depleting clotting factors II (prothrombin), VII, IX, and X. Depleting vitamin K-dependent clotting factors and interfering with the clotting cascade, warfarin prevents coagulation" (Jones, 2022).
Reason Client Taking	To manage congestive heart failure.	To manage heartburn.	To reduce fluid caused by heart failure.	To relieve neuropathic pain.	To prevent clots caused by atrial fibrillation.
Contraindications (2)	Hyperkalemia and Addison's disease (Jones, 2022).	Hypersensitivity to famotidine and renal impairment (Jones,	Anuria and hypoalbuminemia (Jones, 2022).	Diabetes and renal impairment (Jones, 2022).	Bleeding and central nervous system hemorrhage (Jones,

		2022).			2022).
Side Effects/Adverse Reactions (2)	Hypotension Hyponatremia (Jones, 2022).	Palpitations Constipation (Jones, 2022).	Ototoxicity Muscle pains (Jones, 2022).	Hypoglycemia Suicidal ideation (Jones, 2022).	Hypotension and ecchymosis (Jones, 2022).
Nursing Considerations (2)	Monitor potassium levels. Monitor renal function (Jones, 2022).	Monitor renal function. Decrease dosages with renal failure (Jones, 2022).	Monitor blood glucose. Obtains patient's weight before therapy (Jones, 2022).	Monitor patient closely for adverse reactions. Monitor patient closely for evidence of suicidal behavior or thinking (Jones, 2022).	Monitor INR and PT levels. Avoid I.M. injections during therapy due to increase risk of bleeding (Jones, 2022).
Key Nursing Assessment(s)/Lab(s) Prior to Administration	Potassium, creatinine, & blood pressure.	Monitor CBC, creatinine, and BUN.	Blood pressure, BUN, blood glucose, creatinine, electrolyte, and uric acid levels.	Blood glucose and creatine kinase.	PT/INR levels and CBC.
Client Teaching Needs (2)	Teach patient how to measure blood pressure. Can be taken with or without food.	Swallow the tablet whole. Avoid foods or drinks that could cause heartburn.	Teach the patient to lower sodium intake. Advise to check blood glucose, as this can cause hyperglycemia.	Educate the patient that this drug may cause weight gain and edema. Instruct diabetic patient to inspect their skin while taking this medication.	Educate about bleeding precautions. Instruct patient to take drug at the same time each evening.

Medications Reference (1) (APA):

Jones & Bartlett Learning. (2022). *2022 nurse's drug handbook* (21st ed.). Jones & Bartlett Learning.

Assessment

Physical Exam (18 points) – HIGHLIGHT ALL PERTINENT ABNORMAL FINDINGS

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	A/O x4. Patient was alert and oriented. Patient was in no acute distress. Patient was well groomed.
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** 14 **Drains present: Y☐ N ☒** **Type:**	The patient's skin color was appropriate to ethnicity. The patient had dry and scaley skin. The patient's skin was warm and skin turgor was less than three seconds. The patient was free from rashes, bruises, and lesions. The patient had no drains. Braden score was 14.
HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	Patients head and neck are symmetrical. Thyroid is non palpable. Trachea is midline with no deviation. Bilateral carotid pulses are palpable and 2+. Bilateral sclera white, bilateral conjunctiva is pink, and bilateral cornea is clear. Bilateral lids are pink and moist without any lesions or discharge. PERRLA is bilaterally and EOM's intact bilaterally. The nose is midline, and the septum is midline. Turbinate's are moist and pink bilaterally with no visible drainage or polyps. Bilateral frontal sinuses are nontender to palpation. Tongue and buccal mucosa were pink, and moist, with no lesions. The patient had six teeth missing.

CARDIOVASCULAR: **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** **Peripheral Pulses:** **Capillary refill:** **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☒ N ☐** **Location of Edema:**	S1 and S2 heart sounds were clear and audible without murmurs or gallops. Atrial fibrillation with rapid ventricular response on cardiac monitor. Heart rate was fast. Carotid and radial pulses were palpable and are 3+. Dorsalis pedis pulses were 2+ in feet bilaterally. Capillary refill was <3 seconds in fingers and toes bilaterally. No jugular vein distention was seen. Patient had 2+ pitting edema in legs/feet bilaterally.
RESPIRATORY: **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	No abnormal lung sounds during auscultation. Lung sounds were clear anterior/posterior bilaterally. No accessory muscles were used for respiration. No wheezes, crackles, or rhonchi were noted. The patient was on 3L of oxygen nasal canula.
GASTROINTESTINAL: **Diet at home:** Regular **Current Diet:** Calorie count **Height:** 162 cm **Weight:** 155.6 kg **Auscultation Bowel sounds:** **Last BM:** 6/8/2023 **Palpation: Pain, Mass etc.:** **Inspection:** **Distention:** **Incisions:** **Scars:** **Drains:** **Wounds:** **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Size:** **Feeding tubes/PEG tube Y ☐ N ☒** **Type:**	The patient was on a regular diet at home and a calorie count diet at the hospital. The patient's weight was 155.6 kg, and height was 162 cm. Active bowel sounds in all four quadrants. The abdomen was free of scars, drains, incisions, and wounds. The patient has no ostomy, nasogastric, or feeding tubes. The patient's last bowel movement was on 6/8/2023.
GENITOURINARY: **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☐ N ☒** **Type:**	Yellow and clear urine. The patient had 700 mL of urine in the suction canister. Did not assess genitals.

Size:	
MUSCULOSKELETAL: **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☒ N ☐** **Fall Risk: Y ☒ N☐** **Fall Score:** 95 **Activity/Mobility Status:** **Independent (up ad lib)** ☐ **Needs assistance with equipment** ☒ **Needs support to stand and walk** ☒	Intact neurovascular status. The patient has active range of motion in both arms and both legs. The patient uses a walker to walk with. Both arms are a 5/5 with strength. Both legs were a 4/5 with strength. The patient is a fall risk and needs assistance when walking or standing. The patient's fall score was 95.
NEUROLOGICAL: **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐** **Strength Equal: Y ☐ N ☒ if no -** **Legs ☒ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	The patient is A&Ox4. The patient's strength is equal in both arms. The patient has 4/5 strength in both legs. The patient is awake and oriented to her surroundings. The patient has clear speech and can answer questions appropriately.
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 enjoys being with her husband and children. The patient likes to knit and watch television to cope. The patient's developmental level is appropriate for her age. The patient is Christian but does not go to church. The patient has lots of support from her family.

Vital Signs, 2 sets (5 points) – HIGHLIGHT ALL ABNORMAL VITAL SIGNS

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0830	156 bpm	172/45 mm Hg	18 resp/min	37.0˚C oral	96% 3L nasal cannula
1130	120 bpm	134/78 mm Hg	18 resp/min	37.3˚C oral	98% 3L nasal cannula

Vital Sign Trends: Pulse and blood pressure were unstable.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
1030	Numeric	Headache	7/10	Dull	Gave Tylenol.
1215	Numeric	Chest pain	5/10	Tight/Pressure	Not appropriate at the time

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: 20g **Location of IV:** Right wrist **Date on IV:** 6/6/2023 **Patency of IV:** Flushes easily **Signs of erythema, drainage, etc.:** N/A **IV dressing assessment:** IV dressing is clean and intact.	No fluids running at this time. Saline lock in place.

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
25% of breakfast 600 mL of water	700 mL of urine in suction canister.

Nursing Care

Summary of Care (2 points)

Overview of care: Patient was an active participant in her care. Gave the patient morning medications with the nurse, bathed the patient, and did a head-to-toe assessment.

Procedures/testing done: CBC, CMP, and EKG.

Complaints/Issues: The heart rate was fast patient was experiencing chest discomfort.

Vital signs (stable/unstable): Unstable; pulse and blood pressure were high.

Tolerating diet, activity, etc.: Calorie count diet and walked about 25 feet.

Physician notifications: Referral for a cardiologist.

Future plans for client: Continue maintaining a lower/stable heart rate/rhythm and blood pressure. The patient was waiting to consult with a cardiologist. Plan of discharge was on 6/10/2023.

Discharge Planning (2 points)

Discharge location: Home with her husband.

Home health needs (if applicable): N/A

Equipment needs (if applicable): N/A

Follow up plan: To follow up with a primary doctor after discharge**.**

Education needs: Education on diet and nutritional needs.

Nursing Diagnosis (15 points)
Must be NANDA approved nursing diagnosis and listed in order of priority

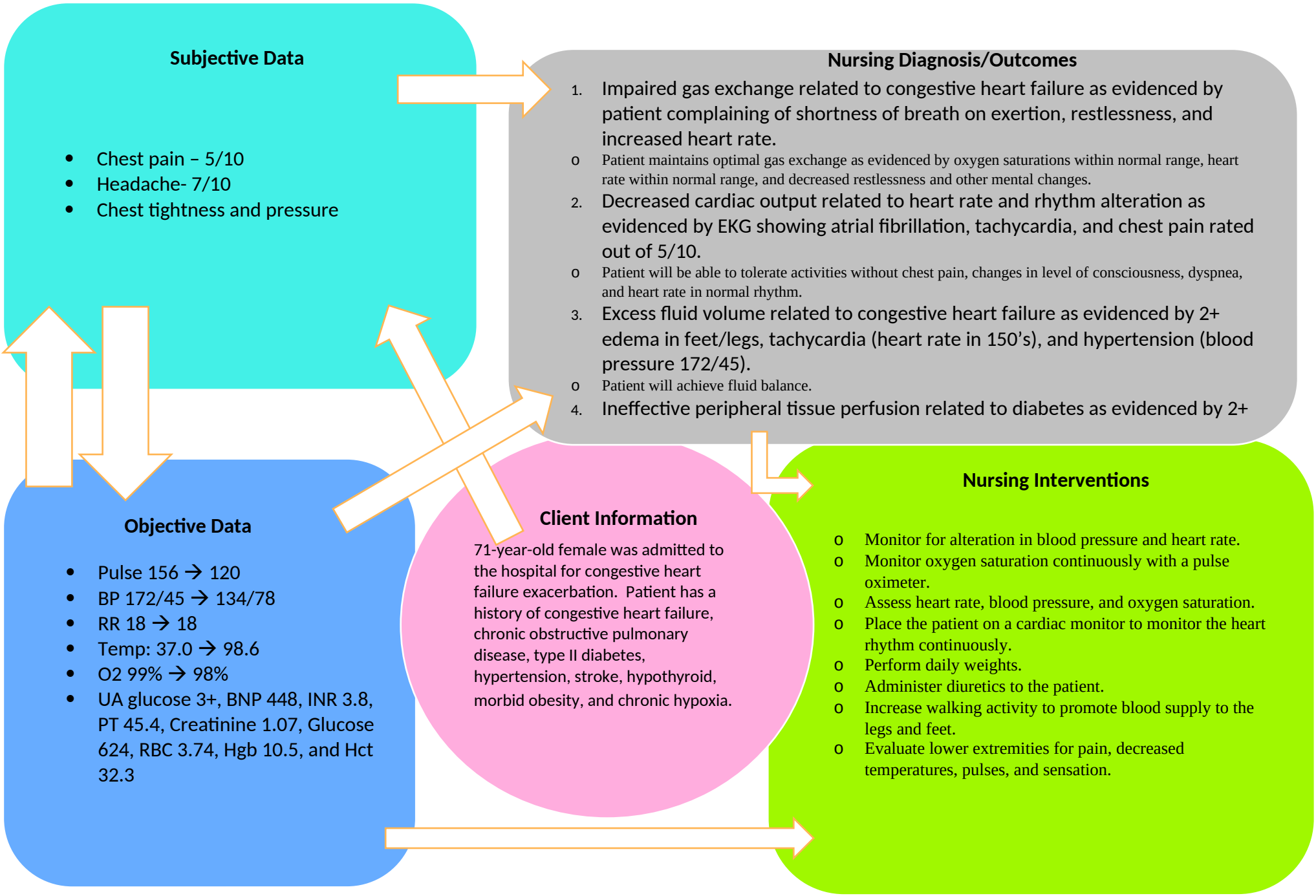
Nursing Diagnosis • Include full nursing diagnosis with "related to" and "as evidenced by" components • Listed in order by priority – highest priority to lowest priority pertinent to this client	**Rationale** • Explain why the nursing diagnosis was chosen	**Interventions (2 per dx)**	**Outcome Goal (1 per dx)**	**Evaluation** • How did the client/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Impaired gas exchange related to congestive heart failure as evidenced by patient complaining of shortness of breath on exertion, restlessness, and increased heart rate.	This was chosen because the patient struggles with shortness of breath on exertion, restlessness, and tachycardia due to congestive heart failure. This is important because it decreases the ability for blood to carry oxygen.	**1.**Monitor for alteration in blood pressure and heart rate. **2.**Monitor oxygen saturation continuously with a pulse oximeter.	**1.** Patient maintains optimal gas exchange as evidenced by oxygen saturations within normal range, heart rate within normal range, and decreased restlessness and other mental changes.	The patient responded well to what was told to her. The patient is in agreeance of what needs to be monitored and is willing to do anything to make her feel better.
2. Decreased cardiac output related to	This was chosen because the decreased	**1.** Assess heart rate, blood pressure, and oxygen	**1**. Patient will be able to tolerate activities	The patient understands what needs to be monitored and was

heart rate and rhythm alteration as evidenced by EKG showing atrial fibrillation, tachycardia, and chest pain rated out of 5/10.	cardiac output can cause a rapid heartbeat and arrhythmias.	saturation. **2.** Place the patient on a cardiac monitor to monitor the heart rhythm continuously.	without chest pain, changes in level of consciousness, dyspnea, and heart rate in normal rhythm.	educated on interventions being placed to help slow down her heart rate.
3. Excess fluid volume related to congestive heart failure as evidenced by 2+ edema in feet/legs, tachycardia (heart rate in 150's), and hypertension (blood pressure 172/45).	This was chosen because the patient was in hypervolemia due to congestive heart failure and had symptoms of excess fluid volume.	**1.**Perform daily weights. **2** Administer diuretics to the patient.	**1.** Patient will achieve fluid balance.	The patient understands why she is on diuretics. The patient also was concerned about her tachycardia and hypertension. The nurse and student nurse administered metoprolol to help with her blood pressure and heart rate.
4. Ineffective peripheral tissue perfusion related to diabetes as evidenced by 2+ pitting edema in legs/feet and diminished feet pulses.	This was chosen because the patient had edema in her feet and diminished feet pulses. This describes the lack of oxygenated blood to the periphery.	**1.**Increase walking activity to promote blood supply to the legs and feet. **2.** Evaluate lower extremities for pain, decreased temperatures, pulses, and sensation.	**1.** Patient will understand the need to maintain a moderate activity level to promote circulation**.**	The patient understands that she needs to increase activity to promote blood flow in the extremities. The patient wants to try walking for at least 5-10 minutes every other hour.

Other References (APA):

Phelps, L. L. (2020). *Sparks and Taylor's nursing diagnosis reference manual* (11th ed.). Wolters Kluwer.

Concept Map (20 Points):


Subjective Data
Chest pain – 5/10
Headache- 7/10
Chest tightness and pressure
Nursing Diagnosis/Outcomes
1. Impaired gas exchange related to congestive heart failure as evidenced by patient complaining of shortness of breath on exertion, restlessness, and increased heart rate.
o Patient maintains optimal gas exchange as evidenced by oxygen saturations within normal range, heart rate within normal range, and decreased restlessness and other mental changes.
2. Decreased cardiac output related to heart rate and rhythm alteration as evidenced by EKG showing atrial fibrillation, tachycardia, and chest pain rated out of 5/10.
o Patient will be able to tolerate activities without chest pain, changes in level of consciousness, dyspnea, and heart rate in normal rhythm.
3. Excess fluid volume related to congestive heart failure as evidenced by 2+ edema in feet/legs, tachycardia (heart rate in 150's), and hypertension (blood pressure 172/45).
o Patient will achieve fluid balance.
4. Ineffective peripheral tissue perfusion related to diabetes as evidenced by 2+
Objective Data
Pulse 156 → 120
BP 172/45 → 134/78
RR 18 → 18
Temp: 37.0 → 98.6
O2 99% → 98%
UA glucose 3+, BNP 448, INR 3.8, PT 45.4, Creatinine 1.07, Glucose 624, RBC 3.74, Hgb 10.5, and Hct 32.3
Client Information
71-year-old female was admitted to the hospital for congestive heart failure exacerbation. Patient has a history of congestive heart failure, chronic obstructive pulmonary disease, type II diabetes, hypertension, stroke, hypothyroid, morbid obesity, and chronic hypoxia.
Nursing Interventions
o Monitor for alteration in blood pressure and heart rate.
o Monitor oxygen saturation continuously with a pulse oximeter.
o Assess heart rate, blood pressure, and oxygen saturation.
o Place the patient on a cardiac monitor to monitor the heart rhythm continuously.
o Perform daily weights.
o Administer diuretics to the patient.
o Increase walking activity to promote blood supply to the legs and feet.
o Evaluate lower extremities for pain, decreased temperatures, pulses, and sensation.