N431 Care Plan # 1

Lakeview College of Nursing

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Demographics (3 points)

Date of Admission 9/9/21	Patient Initials S.M.	Age 48	Gender Female
Race/Ethnicity African American	Occupation Not employed	Marital Status Single	Allergies Lisinopril
Code Status FULL	Height 5'6"	Weight 360 lbs	

Medical History (5 Points)

Past Medical History: Asthma, atrial fibrillation, congested heart failure, coronary artery disease, deep vein thrombosis, depression, diabetes, hyperlipidemia, hypertension, myocardial infarction, obstructive sleep apnea with cpap, pulmonary embolism

Past Surgical History: Left cardiac catherization, cesarean section, right perineum soft tissue procedure and thoracotomy

Family History: Maternal grandmother: heart disease; Paternal grandmother: diabetes; Mother: diabetes, thyroid; Father: hypertension, migraine headache with aura

Social History (tobacco/alcohol/drugs): Former cigarette smoker 0.50 packs/day for 20 years, 10 pack years. Quit smoking 1/31/14 and 7.6 years since quitting. Occasional alcohol intake, sometimes 2 times a year, no drug use.

Assistive Devices: Walker

Living Situation: Lives at home with mother and daughter

Education Level: High school graduate

Admission Assessment

Chief Complaint (2 points): Shortness of breath and chest pain

History of present Illness (10 points): On September 9th, a 48-year-old, single, female was admitted to Carle for chest pain. She was at a follow up appointment with her primary for

depression and was not feeling well. She reported that her chest felt tight and uncomfortable and she had been coughing green phlegm and short of breath for the past two weeks. Patient has a prior history of asthma, obstructive sleep apnea, congested heart failure, coronary artery disease, myocardial infarction, hypertension, hyperlipidemia, diabetes, deep vein thrombosis, atrial fibrillation, and pulmonary embolism. Upon arrival to the emergency department, patient was short of breath and her oxygen saturation was 83% on room air, had 3-5 word dyspnea, she was placed on 2 liters via nasal cannula which improved her oxygen saturation to 96% and was placed on a Lasix drip.

Primary Diagnosis

Primary Diagnosis on Admission (2 points):. Chest pain (acute on chronic heart failure with preserved ejection fraction)

Secondary Diagnosis (if applicable):.

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

Heart failure results from a weakened ventricular muscle that cannot sufficiently fill or eject blood to meet the body's demands for oxygen and nutrients (Hinkle & Cheever, 2018). Heart failure has various mechanisms and is described in several ways, such as acute or chronic and left or right-sided dysfunction (Capriotti & Frizzell, 2020). Acute heart failure describes the rapid onset that is often caused by substantial ventricular muscle injury, as in massive myocardial infarction (Capriotti & Frizzell, 2020). In contrast, chronic heart failure is when the heart gradually suffers from weakening over a long period (Capriotti & Frizzell, 2020).

A common cause of heart failure is chronic hypertension, where long-term high systemic arterial blood pressure causes high aortic pressure, which increases the left ventricle's workload

(Capriotti & Frizzell, 2020). When this occurs, the hypertrophied left ventricle is weakened and is predisposed to ischemia and myocardial infarction (Capriotti & Frizzell, 2020). Other causes of heart failure include coronary artery disease, valvular disorders, and renal dysfunction with volume overload (Hinkle & Cheever, 2018). There are several risk factors associated with heart failure, including ethnicity; the prevalence of heart failure among African Americans is 2.5 times greater than Caucasians younger than 65 years of age (Capriotti & Frizzell, 2020). Diabetes increases the risk of arteriosclerosis throughout the body, leading to coronary insufficiency, myocardial ischemia, and myocardial infarction (Capriotti & Frizzell, 2020). Obesity, associated with both hypertension and type 2 diabetes, causes decreased strength of the heart muscle (Capriotti & Frizzell, 2020). Other risk factors include family history and genetics, sleep apnea, and kidney conditions (Capriotti & Frizzell, 2020). SM has a history of coronary artery disease, diabetes, hypertension, obstructive sleep apnea, pulmonary embolism, and associated risk factors such as African American ethnicity and obesity that contribute to her heart failure.

Heart failure is presented with signs and symptoms related to congestion and poor perfusion (Hinkle & Cheever, 2018) and is associated with having either left or right-sided heart failure. Clinically, most patients present with a combination of left-sided and right-sided heart failure (Capriotti & Frizzell, 2020). Common signs and symptoms include dyspnea, cough, pulmonary crackles, weight gain, dependent edema, abdominal bloating, jugular vein distention, lightheadedness, confusion, and decreased exercise intolerance (Hinkle & Cheever, 2018). SM presented to the emergency department complaining of shortness of breath, had an oxygen saturation of 83% on room air, and coughing which are consistent signs and symptoms of heart failure. She also experienced uncomfortable chest tightness, and her d-dimer value on admission was elevated at 0.92.

Expected laboratory and diagnostic findings of heart failure are an elevated BNP, serum electrolyte imbalances, a chest x-ray that shows an enlargement of the heart, an ECG that may show various abnormalities, an echocardiogram that can demonstrate the activity and structure of the heart, and a cardiac catheterization to measure pressures and volumes within the heart (Capriotti & Frizzell, 2020). The physician ordered a chest x-ray that showed mild pulmonary vascular congestion, a CT, which was negative for visible PE but had low lung volumes and atelectasis. SM also had an ECG that showed normal sinus rhythm with poor precordial R wave progression and prolonged QT. She was recovering from a right cardiac catheterization and was put on a Lasix drip to decrease fluid volume overload and was also given Metalazone, another diuretic to help excrete excess fluids. SM's urine output was recorded for 1000 mL at 1000.

SM is also taking Metoprolol, a beta-blocker that helps to dilate blood vessels, decrease afterload, and decrease the signs and symptoms of heart failure. Other pharmacological treatments for heart failure include ACE inhibitors, which SM is allergic to, angiotensin receptor blockers, digitalis, hydralazine, and isosorbide dinitrate (Hinkle & Cheever, 2018). Other treatment options for heart failure include oxygen therapy; SM was placed on 2 liters via nasal cannula at admission, lifestyle modifications such as a low-fat diet and limiting fluid, salt, cholesterol, and increasing physical activity (Capriotti & Frizzell, 2020). SM was placed on a cardiac diet and complained that her sausage links didn't arrive on her breakfast tray. Once SM was cleared from bed rest, she could ambulate with one assist to the bathroom and was thrilled that she was able to sit in the recliner instead of lying in bed.

Pathophysiology References (2) (APA):

Capriotti, T., & Frizzell, J. (2020). *Pathophysiology: Introductory concepts and clinical perspectives*. F.A. Davis Company.

Hinkle, J.L. & Cheever, K.H. (2018). *Brunner & Suddarth's textbook of medical-surgical nursing* (14th ed.). Wolters Kluwer Health Lippincott Williams & Wilkins.

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	**4.20 – 5.40**	**4.58**	**4.30**	
Hgb	**12.0 – 16.0**	**12.8**	**12.4**	
Hct	**37.0 – 47.0**	**41.1**	**39.2**	
Platelets	**150 - 400**	**255**	**271**	
WBC	**4.3 – 11.0**	**6.03**	**5.70**	
Neutrophils	**37.0 – 85.0**	**2.88**	**2.42**	Decreased neutrophils are typically indicative of aplastic anemia, dietary deficiency, bacterial or viral infections, radiation therapy, or drug therapy (Pagana et al., 2019). SM's decreased level of neutrophils could be explained from the Lasix drip.
Lymphocytes	**20.0 – 45.0**	**40.0**	**44.4**	
Monocytes	**0.0 – 15.0**	**9.1**	**0.59**	Increased monocytes are indicative of chronic inflammatory disorders, viral infections, tuberculosis, chronic ulcerative colitis, malaria and drugs such as aspirin, epinephrine, heparin, and steroids (Pagana et al., 2019). SM's increased level of monocytes could be explained from a chronic inflammatory disorder such as asthma.
Eosinophils	**0.0 – 6.0**	**2.3**	**0.13**	

Bands	**0.0 – 4.0**	**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-	**135 - 145**	**139**	**139**	
K+	**3.5 – 5.5**	**4.4**	**3.9**	
Cl-	**95 - 110**	**97**	**96**	
CO2	**23 - 31**	**31.0**	**32.0**	SM's slightly elevated CO2 level could be explained because drugs such as loop diuretics can cause an increase in serum CO2 (Pagana et al., 2019).
Glucose	**70 - 110**	**155**	**119**	Elevated glucose is indicative of diabetes mellitus (Pagana et al., 2019).
BUN	**8 - 25**	**48**	**53**	Elevated BUN can be associated with hypovolemia, congestive heart failure, myocardial infarction, renal disease, and drugs such as thiazide diuretics (Pagana et al., 2019). SM's elevated BUN could be explained because she has congested heart failure and is on Spironolactone.
Creatinine	**0.70 – 1.50**	**1.09**	**0.90**	
Albumin	**3.5 – 5.0**	**N/A**	**2.8**	Decreased albumin levels are associated with acute reactions such as surgery, stress, and myocardial infarction. It is also associated with chronic inflammatory such as chronic infections, cirrhosis, and nephrotic syndrome (Pagana et al., 2019). SM's decreased albumin could be explained because she could be stressed, she was recovering from a cardiac catherization.

Calcium	**8.4 – 10.3**	**9.6**	**9.5**	
Mag	**1.6 – 2.6**	**1.9**	**2.2**	
Phosphate	**2.5 – 4.5**	**N/A**	**N/A**	
Bilirubin	**0.2 – 1.2**	**N/A**	**0.8**	
Alk Phos	**40 - 150**	**N/A**	**109**	
AST	**16 - 40**	**N/A**	**17**	
ALT	**7 - 52**	**N/A**	**16**	
Amylase	**23 - 85**	**N/A**	**N/A**	
Lipase	**0 - 160**	**N/A**	**N/A**	
Lactic Acid	**0.50 – 2.20**	**N/A**	**N/A**	
Troponin	**0.0 – 0.04**	**N/A**	**N/A**	
CK-MB	**5 - 25**	**N/A**	**N/A**	
Total CK	**22 – 198**	**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	**0.8 – 1.2**	**N/A**	**N/A**	
PT	**10 – 14 sec**	**N/A**	**N/A**	
PTT	**30 – 45 sec**	**N/A**	**N/A**	
D-Dimer	**100.0 – 399.0**	**0.92**	**N/A**	
BNP	**15.00 – 99.90**	**N/A**	**N/A**	

HDL	**<200**	**N/A**	**N/A**	
LDL	**>60**	**N/A**	**N/A**	
Cholesterol	**<200**	**N/A**	**N/A**	
Triglycerides	**<140**	**N/A**	**N/A**	
Hgb A1c	**<6.5**	**N/A**	**N/A**	
TSH	**0.4 – 4.0**	**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	**Yellow**	**N/A**	**N/A**	
pH	**5.5 – 7.5**	**N/A**	**N/A**	
Specific Gravity	**1.015 – 1.25**	**N/A**	**N/A**	
Glucose	**Negative**	**N/A**	**N/A**	
Protein	**Negative**	**N/A**	**N/A**	
Ketones	**Negative**	**N/A**	**N/A**	
WBC	**Negative**	**N/A**	**N/A**	
RBC	**Negative**	**N/A**	**N/A**	
Leukoesterase	**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**	

PaO2	**80 - 100**	**N/A**	**N/A**	
PaCO2	**35 - 45**	**N/A**	**N/A**	
HCO3	**22 - 26**	**N/A**	**N/A**	
SaO2	**95 - 100**	**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		**N/A**	**N/A**	
Blood Culture		**N/A**	**N/A**	
Sputum Culture		**N/A**	**N/A**	
Stool Culture		**N/A**	**N/A**	

Lab Correlations Reference (1) (APA):

Pagana, K. D., Pagana, T. J., & Pagana, T. N. (2019). Mosby's diagnostic and laboratory test reference. Elsevier.

Diagnostic Imaging

All Other Diagnostic Tests (5 points):

Chest X-ray, CT of the chest, and ECG

Diagnostic Test Correlation (5 points):

Chest X-ray: SM had chest pain and hypoxia, she had a chest x-ray performed to visualize the heart and lungs. The results were suggestive of mild pulmonary vascular congestion.

CT of the chest: SM had positive d-dimer elevation, she had a CT of the chest to help diagnose and evaluate pathologic conditions such as tumors, cysts, abscesses, and pleural effusion (Pagana et al., 2019). The results were negative for aortic distention and pulmonary effusion but were suggestive for low lung volumes and atelectasis.

ECG: SM had chest pain and had a ECG performed to visualize the electrical activity of the heart from a variety of spatial perspectives (Pagana et al., 2019). The results were suggestive of left axis deviation, poor precordial R wave progression, left anterior fascicular block and prolonged QT.

Diagnostic Test Reference (1) (APA):

Pagana, K. D., Pagana, T. J., & Pagana, T. N. (2019). Mosby's diagnostic and laboratory test reference. Elsevier.

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

Home Medications (5 required)

Brand/ Generic	Tylenol/ Acetamino phen	Amrix/ Cyclobenza prine	Flonase/ Fluticasone	Humalog/ Lispro	Metoprolol/ Lopressor
Dose	500 mg	10 mg	110 mcg	100 unit/mL	25 mg
Frequency	Every 6 hours as needed	2x a day as needed	2x daily	3x daily before meals	1 x day
Route	Oral	Oral	Inhalation	Subcutaneously	Oral
Classification	Nonopioid analgesic	Skeletal muscle relaxant	Antiasthmatic	Rapid-acting insulin	Antihyper tensive
Mechanism of Action	Inhibits cyclooxygenase blocking	Acts in the brain stem to reduce or abolish tonic	Inhibits cells involved in the inflammatory	Lowers blood glucose by stimulating	Inhibits stimulation of beta 1 receptor

	prostaglandin production and interfering with pain impulse.	muscle hyperactivity.	response of asthma, such as basophils, eosinophils, lymphocytes, macrophages, mast cells, and neutrophils.	peripheral glucose uptake by skeletal muscle and fat, and by inhibiting hepatic glucose production.	sites, located mainly in the heart, resulting in decreased cardiac excitability, cardiac output, and myocardial oxygen demand.
Reason Client Taking	To relieve pain	For relief of muscle spasms	To prevent asthma attacks	To manage diabetes	To manage hypertension
Contraindi cations (2)	Hypersensitivity to acetaminophen or its components and severe hepatic impairment	Acute recovery phase of MI; arrhythmias; heart failure	Hypersensitivity to fluticasone or its components. Primary treatment of status asthmaticus or other acute asthma episodes that require intensive measures.	During episodes of hypoglycemia. Patients who are hypersensitive to Humalog or to any of its excipients.	Acute heart failure Pulse less than 45 beats/minute
Side Effects/ Adverse Reactions (2)	Hepatotoxicity Hypotension	Seizures Arrhythmias	Adrenal insufficiency Bronchospasm	Hypoglycemia Hypokalemia	Heart failure Bronchospasm
Nursing Considerations (2)	Ensure that the daily dose of acetaminophen from all sources does not exceed maximum daily limits. Monitor renal function in patients on long term therapy, and that blood or albumin in urine may indicate nephritis.	Take safety precautions to prevent falls if patient is confused, dizzy, or weak. Monitor closely if cyclobenzaprine is being given with other serotonergic drug because of risk of serotonin syndrome to develop.	If patient takes a systemic corticosteroid, expect to taper dosage by no more than 2.5 mg daily at weekly intervals. Be aware that if patient is switched from systemic corticosteroid to fluticasone, assess for adrenal	When giving subcutaneously , give the drug up to 15 minutes before a meal or immediately after a meal. When mixing rapid-acting insulin with a longer-acting insulin, always draw the rapid-acting insulin into the syringe	Use cautiously in patients with angina or hypertension who have congestive heart failure because beta blockers such as metoprolol can further depress myocardial contractility, worsening heart failure. Expect patients

			insufficiency (fatigue, hypotension, lassitude, nausea, vomiting, weakness)	first to avoid dosage errors.	with acute MI who can't tolerate initial dosage or who delay treatment to start with maintenance dosage, as prescribed and tolerated.
Key Nursing Assessment(s)/ Lab(s) Prior to Administration	Monitor liver function, including AST, ALT, bilirubin, and creatinine levels for hepatotoxicity.	Fall assessment	Monitor closely at start of therapy for hypersensitivity.	Accu cheks	Assess ECG because they may be at risk for AV block. Check for signs of poor glucose control in patients with diabetes because metoprolol may interfere with therapeutic effects of insulin and mask hypoglycemia.
Client Teaching needs (2)	Caution patient not to exceed recommended dosage or to take other drugs containing acetaminophen because risk of liver damage. Teach patient to recognize signs of hepatotoxicity such as bleeding, easy bruising, and malaise, which commonly occurs with chronic overuse.	Urge patient to avoid alcohol and other CNS depressants during therapy. Advise patient to ask for assistance with activities of daily living if she experiences dizziness or weakness.	Educate patient that drug is not for acute bronchospasm. Instruct her to have a rescue inhaler accessible if acute bronchospasm occurs. Instruct patient to gargle and rinse her mouth after each dose of an oral inhaler to help prevent dry mouth and throat oropharyngeal	Be alert for symptoms of hypoglycemia and educate family and friends on fast-acting sugar. Inspect Humalog, it should appear clear and colorless and must be administered 15 minutes before or with a meal.	Instruct patient to take drug with food at the same time each day. Advise patient to notify provider if pulse rate falls below 60 beats/ minute.

			yeast infection and relieve throat irritation.		

Hospital Medications (5 required)

Brand/Generic	Vibramycin/ Doxycycline calcium	Protonix/ Pantoprazole Sodium	Lyrica/ Pregabalin	Aldactone/ Spironolactone	Aspirin/ Acetylsalicylic acid
Dose	100 mg	40 mg	100 mg	25 mg	81 mg
Frequency	2 x daily	1 x day	1 x day	1 x day	1 x day
Route	Oral	Oral	Oral	Oral	Oral
Classification	Antibiotic	Proton pump inhibitor Antiulcer	Analgesic Anticonvulsant	Diuretic	NSAID
Mechanism of Action	Exerts a bacteriostatic effect against a wide variety of gram-positive and gram-negative organisms.	Interferes with gastric acid secretion by inhibiting the hydrogen-potassium-adenosine triphoshatase enzyme system. Irreversibly inhibits the final step in gastric acid production by blocking the exchange of intracellular H and extracellular K, thus preventing H from entering the stomach and additional HCl from forming.	Binds to alpha 2-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.	Prevents sodium and water reabsorption and causing their excretion through the distal convoluted tubules which increases urinary excretion of sodium and water reduces blood volume and blood pressure.	Blocks the activity of cyclooxygenase, the enzyme needed for prostaglandin synthesis therefore, inflammatory symptoms subside. Inhibits platelet aggregation by interfering with production of thromboxane A2, a substance that stimulates platelet aggregation.
Reason Client Taking	To treat all other infections caused	To prevent GI upset	To relieve neuropathic	To treat symptoms of	To reduce the risk of recurrent

	by susceptible organisms		pain associated with diabetic peripheral neuropathy	heart failure	transient ischemic attacks or ischemic stroke
Contra indications (2)	Hypersensitivity to doxycycline, other tetracyclines, or their components.	Concurrent therapy with rilpivirine containing products. Hypersensitivity to pantoprazole, substituted benzimidazoles.	Hypersensitivity to pregabalin or its components.	Acute adrenal insufficiency, or other conditions associated with hyperkalemia, anuria, concomitant use of eplerenone, hyperkalemia, hypersensitivity to spironolactone or its components.	Active bleeding or coagulation disorders. Breastfeeding
Side Effects/ Adverse Reactions (2)	Pericarditis Hemolytic anemia	Hepatotoxicity Pancreatitis	Heart failure Suicidal ideation	Renal failure Hyponatremia	GI bleeding Angioedema
Nursing Considerations (2)	Don't give doxycycline I.M. or subcutaneous route. Monitor patient for diarrhea which may indicate pseudomembranous colitis.	Administer delayed-release oral suspension 30 minutes before or a meal mixed in apple juice or applesauce. Ensure the continuity of gastric acid suppression during transition from oral to I.V. prantoprazole (or vice versa) because even a brief interruption of effective	Pregabalin therapy should be stopped gradually over at least 1 week to decrease risk of seizure activity and avoid unpleasant symptoms such as diarrhea, headache, insomnia, and nausea. Monitor patient closely for evidence of suicidal behavior or thinking,	Monitor patients with renal impairment closely because risk of adverse reactions is greater in these patients, as well as the elderly and are at risk for hyperkalemia. Monitor patient with hepatic impairment, especially if patient has ascites and cirrhosis, because drug	Don't crush timed-release or controlled-released aspirin tablets unless directed. Use an immediate-release aspirin in situations where a rapid onset of action is required such as in the acute treatment of myocardial infarction or before percutaneous coronary intervention.

		suppression can lead to serious complications.	especially when therapy starts or dosage changes.	can cause sudden alterations in fluid and electrolyte imbalances which may cause coma or worsening hepatic encephalopathy.	
Key Nursing Assessment(s)/ Lab(s) Prior to Administration	Monitor patient for signs and symptoms of intracranial hypertension, such as blurred vision, diplopia, headache, and vision loss.	Expect to monitor PT or INR during therapy if patient takes an oral anticoagulant. Monitor patient's urine output because drug can cause acute interstitial nephritis.	Suicidal assessment Watch closely for hypersensitivity (dyspnea, facial swelling, rash, red sin, urticaria, wheezing)	Evaluate patient's serum potassium levels and renal function, BUN, and GFR. Assess blood pressure and presence and degree of edema.	Check to see if patient had any aspirin and if she has then to make sure she does not exceed maximum daily dose.
Client Teaching needs (2)	Instruct patient not to take doxycycline just before bed because it may not dissolve properly when she's in a recumbent position. Urge patient to report bloody, watery stools immediately to provider, even up to 2 months after drug therapy.	Instruct patient to swallow drug whole and not to chew or crush them. Advise patient to notify provider if she notices she is experiencing a decrease in the amount of urine voided or there is blood in urine.	Warn against stopping pregabalin abruptly. When pregabalin is no longer needed, the dosage should be tapered down. Instruct patient to notify provider if she has changes in vision or unexplained muscle pain, tenderness, or weakness.	Teach patient who takes spironolactone for hypertension how to measure her blood pressure and to report pressure greater than 140/90. Warn patient to avoid performing hazardous activities, such as driving, until adverse effects of drugs are known.	Instruct patient to stop taking aspirin and notify provider if any symptoms of stomach or intestinal bleeding occurs such as bloody or tarry stools, or coughing blood. Consult provider before taking aspirin with any prescription drug for blood disorder,

					diabetes, gout, or arthritis.

Medications Reference (1) (APA):

Jones & Bartlett Learning. (2020). Nurse's drug handbook (19th ed.). Jones & Bartlett Learning.

Assessment

Physical Exam (18 points)

GENERAL (1 point): **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	 Alert Oriented to time, place, person, and situation Slight distress Appropriately dressed
INTEGUMENTARY (2 points): **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☐** **Type:**	 Normal skin color, no signs of cyanosis Slightly dry but normal Warm Normal turgor 2+ No rashes No bruises Tender area on coccyx, small pressure sore Braden score, 20 No drains
HEENT (1 point): **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	 Head and neck are symmetrical, trachea is midline Ears were free of discharge Septum is midline, turbinates were dry and pink bilaterally Teeth are within normal limits .
CARDIOVASCULAR (2 points): **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** **Peripheral Pulses:** **Capillary refill:** **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☒ N ☐**	. S1 and S2 were present No murmurs Pulses are 2+ throughout bilaterally. Capillary refill less than 3 seconds in fingers and toes.

Location of Edema:	Patient had edema in the right hand and slight edema in the left lower leg
RESPIRATORY (2 points): **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	. Breath sounds were regular, even and nonlabored bilaterally. No wheezes, crackles, or rhonchi.
GASTROINTESTINAL (2 points): **Diet at home:** **Current Diet** **Height:** **Weight:** **Auscultation Bowel sounds:** **Last BM:** **Palpation: Pain, Mass etc.:** **Inspection:** **Distention:** **Incisions:** **Scars:** **Drains:** **Wounds:** **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Size:** **Feeding tubes/PEG tube Y ☐ N ☒** **Type:**	. General diet at home Current cardiac diet 5'6" 360 lbs Bowel sounds are normoactive in all 4 quadrants Last BM, 9/15 No CVA tenderness No abnormalities were found upon inspection for distention, incisions, scars, drains, or wounds. No ostomy, nasogastric or feeding/PEG tubes.
GENITOURINARY (2 Points): **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☒ N ☐** **Type:** **Size:**	Patient was continent of urine Yellow Clear Patient had an external catheter and had 1000 ml urine output
MUSCULOSKELETAL (2 points): **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☒ N ☐** **Fall Risk: Y ☒ N☐** **Fall Score:** **Activity/Mobility Status:** **Independent (up ad lib)** ☐	. Normal ROM strength in left arm and legs Patient had limited ROM in right arm Uses walker Needs one assist with ADL but can feed herself with left arm Fall score 30

Needs assistance with equipment ☐ **x** **Needs support to stand and walk** ☐ **x**	
NEUROLOGICAL (2 points): **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐** **Strength Equal: Y ☐ N ☒ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	. Left arm strong, weak right arm Strong legs bilaterally Cognitive to space, time, and location Articulative speech Mature and cognitive Alert No facial neurological deficits
PSYCHOSOCIAL/CULTURAL (2 points): **Coping method(s):** **Developmental level:** **Religion & what it means to pt.:** **Personal/Family Data (Think about home environment, family structure, and available family support):**	. Patient talks to her mother on the phone throughout the day Mature Christian Patient lives at home with her mother and daughter and seems to have a strong support system as she was on the phone keeping family updated throughout the morning.

Vital Signs, 2 sets (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0730	107	133/67 Supine Left arm	16	97.5 Oral	92 Room Air
1030	97	101/54 Sitting Left arm	14	98.0 Oral	93 Room Air

Vital Sign Trends: Stable

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0900	Numeric	Right hand	10/10	Constant, aching	Elevated SM's hand on a pillow to help with edema
1030	Numeric	Right hand	7/10	Dull, aching	SM was given Tylenol for pain

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV:	20 gauge
Location of IV:	Right forearm
Date on IV:	9/14/21
Patency of IV:	Pain, tender, and swollen
Signs of erythema, drainage, etc.:	No signs of erythema or drainage
IV dressing assessment:	IV dressing clean and intact

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
90% of breakfast consumed Sips of water with medications	Emptied container at 1000 1000 mL measured output

Nursing Care

Summary of Care (2 points)

Overview of care: SM was admitted on 9/9 complaining of shortness of breath and chest pain. Patient is on 2L nasal cannula and is receiving Lasix drip.

Procedures/testing done: SM had lab work, chest x-ray, CT, ECG and a right cardiac catherization.

Complaints/Issues: SM complained of edema and pain in her right hand. Nurse reported that she previously had a couple of bad IVs' and put in an order for a PICC line placement.

Vital signs (stable/unstable): Stable vital signs

Tolerating diet, activity, etc.: SM is tolerating a cardiac diet and is ambulating with one assist.

Physician notifications: Physician noted that once swelling goes down, she will be able to be discharged.

Future plans for patient: Continue lifestyle modifications, medications, compliance, and follow up with cardiology and primary.

Discharge Planning (2 points)

Discharge location: Home

Home health needs (if applicable): Possibly oxygen

Equipment needs (if applicable): SM currently has a walker at home.

Follow up plan: SM will schedule a follow up appointment with a cardiologist and her primary.

Education needs: SM needs to be educated on how to manage fluid volume by facilitating positions that help with breathing such as sitting in a recliner or propping pillows to stay elevated. She also needs educated on lifestyle modifications such as diet

and exercise which plays an important role in increasing functional capacity and improving quality of life.

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

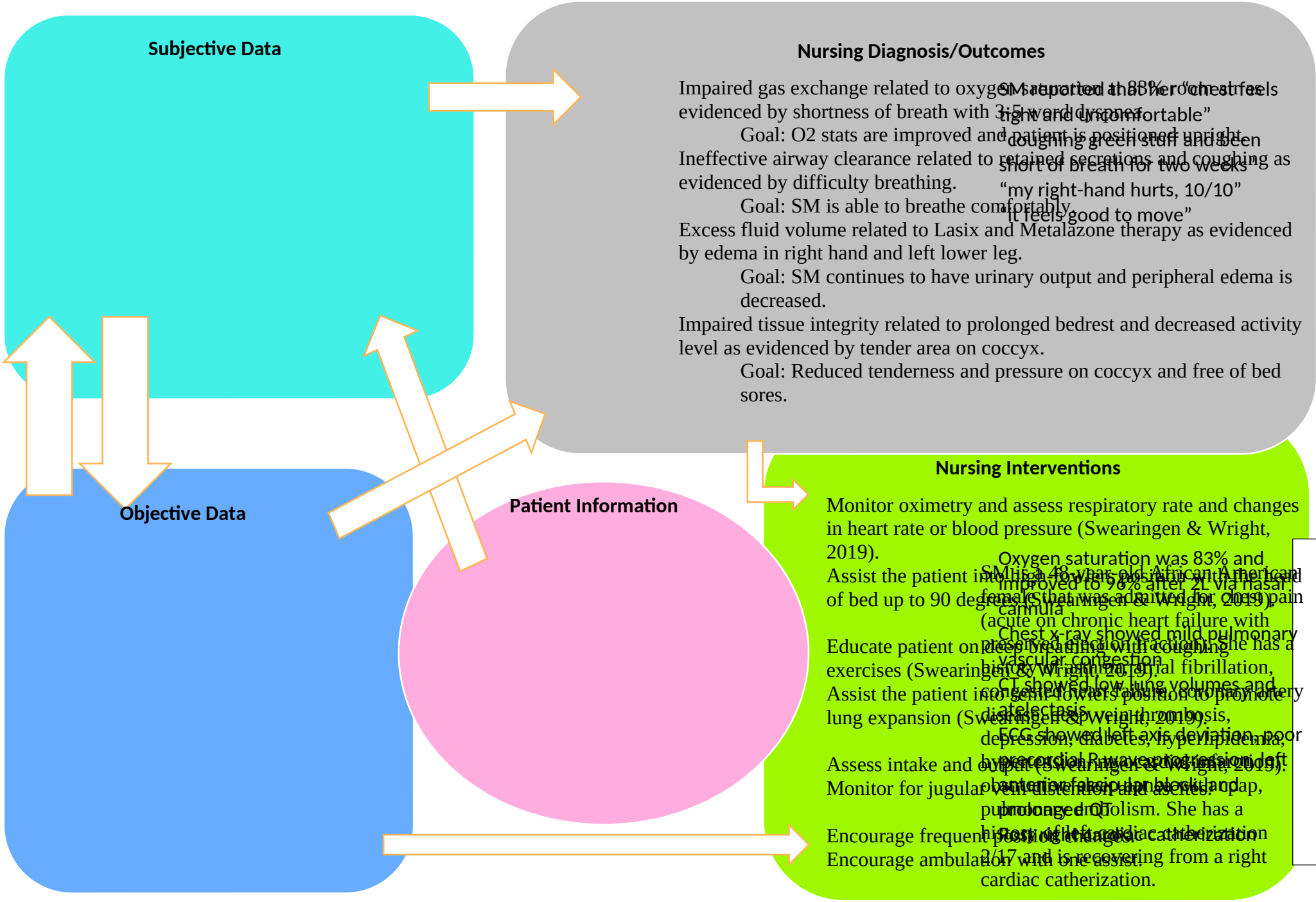
Nursing Diagnosis • Include full nursing diagnosis with "related to" and "as evidenced by" components	**Rational** • Explain why the nursing diagnosis was chosen	**Intervention (2 per dx)**	**Evaluation** • How did the patient/ family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Impaired gas exchange related to oxygen saturation at 83% room air as evidenced by shortness of breath with 3-5 word dyspnea.	SM complained of shortness of breath and her oxygen saturation was 83%.	1. Monitor oximetry and assess respiratory rate and changes in heart rate or blood pressure (Swearingen & Wright, 2019). 2. Assist the patient into high-fowlers position with the head of bed up to 90 degrees (Swearingen & Wright, 2019).	Patient was placed on 2 L via nasal cannula which improved her oxygen saturation to 96% and was positioned in high fowlers.
2. Ineffective airway clearance related to retained secretions and coughing as evidenced by difficulty breathing.	SM complained of coughing greenish phlegm.	1. Educate patient on deep breathing with coughing exercises (Swearingen & Wright, 2019).	Assisted SM in high fowlers position and propped pillows behind her.

		2. Assist the patient into semi-fowlers position to promote lung expansion (Swearingen & Wright, 2019).	
3. Excess fluid volume related to Lasix and Metalazone therapy as evidenced by edema in right hand and left lower leg.	SM complained of pain and edema in her right hand and had slight edema on her left lower leg.	1. Assess intake and output (Swearingen & Wright, 2019). **2.** Monitor for jugular vein distention and ascites.	Assessed output, recorded urine at 1000 and measured at 1000 mL. (SM reported that she had sips of water with her morning medication and that was it).
4. Impaired tissue integrity related to prolonged bedrest and decreased activity level as evidenced by tender area on coccyx.	SM had a small tender area on coccyx.	1. Encourage frequent position changes. 2. Encourage ambulation with one assist.	Assisted SM with ambulation to the bathroom and positioned her into the recliner instead of the bed.

Other References (APA):

Swearingen, P., & Wright, J. (2019). *All-in-one nursing care planning resource: medical-surgical, pediatric, maternity, and psychiatric-mental health*. (5th ed.). Elsevier.

Concept Map (20 Points):


Subjective Data
SM reported that her "chest feels tight and uncomfortable"
coughing green stuff and been short of breath for two weeks"
"my right-hand hurts, 10/10"
it feels good to move"
Objective Data
SM is a 48 year old African American female that was admitted for chest pain (acute on chronic heart failure with preserved ejection fraction). She has a history of atrial fibrillation, congestive heart failure, coronary artery disease, vein thrombosis, depression, diabetes, hyperlipidemia, pulmonary embolism. She has a history of left cardiac catherization 2/17 and is recovering from a right cardiac catherization.
Oxygen saturation was 83% and improved to 98% after 2L via nasal cannula
Chest x-ray showed mild pulmonary vascular congestion
CT showed low lung volumes and atelectasis
ECG showed left axis deviation, poor precordial R wave progression, left anterior fascicular block and prolonged QT
Patient Information
Nursing Diagnosis/Outcomes
Impaired gas exchange related to oxygen saturation at 83% on room air as evidenced by shortness of breath with 3-5 word dyspnea
Goal: O2 stats are improved and patient is positioned upright.
Ineffective airway clearance related to retained secretions and coughing as evidenced by difficulty breathing.
Goal: SM is able to breathe comfortably.
Excess fluid volume related to Lasix and Metalazone therapy as evidenced by edema in right hand and left lower leg.
Goal: SM continues to have urinary output and peripheral edema is decreased.
Impaired tissue integrity related to prolonged bedrest and decreased activity level as evidenced by tender area on coccyx.
Goal: Reduced tenderness and pressure on coccyx and free of bed sores.
Nursing Interventions
Monitor oximetry and assess respiratory rate and changes in heart rate or blood pressure (Swearingen & Wright, 2019).
Assist the patient into a low Fowler's position with the head of bed up to 90 degrees (Swearingen & Wright, 2019).
Educate patient on deep breathing with coughing exercises (Swearingen & Wright, 2019).
Assist the patient into semi-Fowler's position to promote lung expansion (Swearingen & Wright, 2019).
Assess intake and output (Swearingen & Wright, 2019).
Monitor for jugular vein distention and ascites.
Encourage frequent position changes.
Encourage ambulation with one assist.