N321 Care Plan 1

Lakeview College of Nursing

Katie Finn

Demographics (3 points)

Date of Admission 02/12/2022	**Client Initials** RD	**Age** 68	**Gender** Male
Race/Ethnicity Caucasian	**Occupation** Retired	**Marital Status** Married	**Allergies** Dexamethasone – reaction not reported Cefdinir – hives
Code Status Full Code	**Height** 190 cm	**Weight** 128.1 kg	

Medical History (5 Points)

Past Medical History: Diabetes mellitus type 2 (DM2), atrial fibrillation (a-fib), deep vein thrombosis (DVT), pulmonary embolism (PE), chronic obstructive pulmonary disease (COPD), congestive heart failure (CHF), morbid obesity, hyperlipidemia, hypertension, neurofibromatosis, venous stasis, and restless leg syndrome. Client did not report dates for these medical diagnoses. Client did report diagnosis of depression (2018).

Past Surgical History: Tonsillectomy (2003), adenoidectomy (2003), spinal fusion (2003), pacemaker implant (2005), total right knee replacement (2017), cervical spine surgery (2019), and all top teeth removed for dentures (2019).

Family History: Father had cardiac disease and diabetes. Client did not state if either parent were alive or passed.

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

Assistive Devices: Client uses a walker or cane and top dentures.

Living Situation: Client lives in a house with wife (age unknown).

Education Level: Client has two bachelor's degrees.

Admission Assessment

Chief Complaint (2 points): Chest pain and shortness of breath

History of Present Illness – OLD CARTS (10 points): The client came to his primary care physician on Saturday, February 5, 2022, with complaints of shortness of breath and bilateral lower extremity edema. The client stated that his legs were sweating at times with the edema. The client stated that he had a productive cough producing phlegm, but he did not remember the color of the phlegm. The client stated that he was not experiencing any wheezing. The doctor found a wound on the left leg from the client's dog and his walker. The client did not report any alleviating or aggravating factors for his cough or edema. The client's primary care provider instructed the client to increase the dose of the client's furosemide to 120 mg/day. On Saturday, February 12, 2022, the client came to Sarah Bush Lincoln Hospital for complaints of continued shortness of breath with intermittent episodes of heart pain over the last two days. The client reported that the pain "feels like a twinge" above the pacemaker on the left side that "lasts a few minutes and then stops." The patient was admitted into the hospital due to his history of congestive heart failure.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Pneumonia of the right lung

Secondary Diagnosis (if applicable): Congestive heart failure exacerbation

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

Pneumonia develops when the lung tissue becomes inflamed from purulent, inflammatory cells and fibrin filling the alveolar spaces. The inflammation can be caused by an infection of bacteria or viruses, inhalation of chemicals, or contents from the oropharynx or stomach getting aspirated. There are four different types of pneumonia, but community-acquired pneumonia (CAP) will be discussed. CAP caused by infection is usually from Streptococcus pneumoniae and occurs while the patient is in the community (Capriotti, 2020).

S. pneumoniae or other pathogens will enter the lung tissues and cling to the tissue. The pathogen causes an inflammatory reaction that spreads to the rest of the respiratory tract and alveoli. Vasodilation occurs where the inflammation is while neutrophils go into the air spaces to phagocytize the pathogens to kill them. This reaction causes excess mucus from the goblet cells, mixing with the exudative edema and accumulating between the capillaries and alveoli. The mucus and exudative edema mix prevent gas exchange between the alveoli and capillaries, making crackles heard when auscultating with a stethoscope. Since the gas exchange is impaired, the patient becomes hypoxic and hypercapnic due to decreased oxygen and carbon dioxide exchange (Capriotti, 2020). The patient can have a fever with chills and pleuritic chest pain when coughing or deep breathing if a bacterial infection. They can also have bradycardia with a viral infection. It is common to have symptoms related to an upper respiratory tract infection with a headache, myalgia, low-grade fever, and pleuritic pain. There can be mucus sputum production and orthopnea. In severe cases, the patient may have signs related to hypoxemia, like flushed cheeks and lips with cyanotic nail beds (Hinkle et al., 2022).

Patients with pneumonia will have a complete blood cell count (CBC) with differential to show a bacterial or viral infection. The patient will have decreased blood oxygenation due to the fluid

accumulation in the lungs impairing gas exchange. Chest x-rays are the first step in diagnosing pneumonia because they show fluid accumulation in the lungs. If there is a suspected pleural effusion, an ultrasound and thoracocentesis can be used to detect one. Lastly, a sputum culture would be utilized to determine the organism causing the disease and its sensitivity to different antibiotics (Capriotti, 2020).

Once the pathogen and sensitivity of the pathogen are identified, the patient will be prescribed the appropriate antibiotics or medication to treat pneumonia. Otherwise, the patient will need rest and hydration. It is also vital to help manage any other complications from the illness. The provider may also prescribe oxygen therapy to help increase the blood oxygenation saturation to prevent or treat hypoxia (Hinkle et al., 2020).

This patient had crackles and low oxygen saturation on room air during today's assessment. The patient had a chest x-ray that showed a patch of scarring in the lungs, and the computerized tomography (CT) angiography chest pulmonary with contrast image found a patch in the lung where there was pneumonitis in the middle right lobe of his lung. The finding in the CT points towards a diagnosis of pneumonia. The patient’s CBC with differential showed elevated neutrophils and eosinophils, indicating an infection.

Pathophysiology References (2) (APA):

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

Hinkle, J. L., Cheever, K. H., Overbaugh, K. (2022). *Brunner & Suddarth's textbook of Medical-surgical nursing* [eBook edition] (15th ed.). Wolters Kluwer. https://fadavisreader.vitalsource.com/#/books/9781975186722/

Laboratory Data (15 points)

CBC Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format. *Some of these labs were not completed this hospital stay or not completed on that day.

Lab	Normal Range	Admission Value	Today's Value	Reason for Abnormal Value
RBC	4.28-5.56 x 10^6/mcL	3.95 x 10^6/ mcL	3.65 x 10^6 / mcL	RBCs are decreased due to dilution effect from excess fluid retention in the patient (Van Leeuwen & Bladh, 2019).
Hgb	13.0-17.0 g/dL	11.7 g/dL	10.5 g/dL	Hgb is decreased due to dilution effect from excess fluid retention in the patient and is corresponding to the decreased RBCs (Van Leeuwen & Bladh, 2019).
Hct	38.1% - 48.9%	34.6%	32.3%	Hct is decreased due to dilution effect from excess fluid retention in the patient and corresponds to the decreased RBCs (Van Leeuwen & Bladh, 2019).
Platelets	149-393 K/mcL	181 K/mcL	156 K/mcL	Values are within the the normal range.
WBC	4.0-11.7 K/mcL	7.7 K/mcL	6.3 K/mcL	Values are within the normal range.
Neutrophils	40.0% - 60.0%	76.0%	68.1%	Neutrophils are elevated due to pneumonia infection and inflammation from COPD, DM2, and hypertension in the patient Van Leeuwen & Bladh, 2019).
Lymphocytes	12% - 44%	15.1%	1.2%	Lymphocytes are decreased due to the patient having pneumonia (Van Leeuwen & Bladh, 2019).
Monocytes	2.0%-8.0%	6.7%	0.6%	The monocyte value is low due to the infection in the right lung that has caused the body the inability to keep up with WBC demand to fight the infection (Van Leeuwen & Bladh, 2019).
Eosinophils	0% - 0.5%	1.9%	0.2%	Eosinophils are increased in response to the inflammation caused by the pneumonia in the right lung (Van Leeuwen & Bladh, 2019).
Bands	*N/A	*N/A	*N/A	Not completed during this hospital stay.

Chemistry Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format. *Some of these labs were not completed this hospital stay or not completed on that day.

Lab	Normal Range	Admission Value	Today's Value	Reason For Abnormal
Na-	136-145 mmol/L	140 mmol/L	139 mmol/L	Values are within the normal range.
K+	3.5-5.1 mmol/L	4.3 mmol/L	4.5 mmol/L	Values are within the normal range.
Cl-	98-107 mmol/L	99 mmol/L	95 mmol/L	The Cl- is low because of dilutional effect from fluid buildup related to the patient's CHF (Van Leeuwen & Bladh, 2019).
CO2	21-31 mmol/L	31 mmol/L	38 mmol/L	The CO2 is elevated due to the patient's decreased ability to expel CO2 related to his COPD (Van Leeuwen & Bladh, 2019).
Glucose	74-109 mg/dL	210 mg/dL	138 mg/dL	The glucose is elevated due to glucose intolerance related to the patient's DM2 (Van Leeuwen & Bladh, 2019).
BUN	7-25 mg/dL	24 mg/dL	31 mg/dL	BUN is elevated due to decreased renal excretion related to DM2 in the patient (Van Leeuwen & Bladh, 2019).
Creatinine	0.70-1.30 mg/dL	0.72 mg/dL	0.82 mg/dL	Values are within the normal range.
Albumin	3.5-5.2 g/dL	4.3 g/dL	*N/A	Values are within the normal range.
Calcium	8.6-10.3 mg/dL	9.5 mg/dL	8.9 mg/dL	Values are within the normal range.
Mag	1.6-2.2 mg/dL	*N/A	*N/A	*N/A
Phosphate	2.5-4.5 mg/dL	*N/A	*N/A	*N/A
Bilirubin	0.3-1.0 mg/dL	0.6 mg/dL	*N/A	Values are within the normal range.
Alk Phos	34-104 units/L	83 units/L	*N/A	Values are within the normal range.
AST	13-39 units/L	14 units/L	*N/A	Values are within the normal range.
ALT	7-52 units/L	14 units/L	*N/A	Values are within the normal range.

Amylase	100-300 units/L	*N/A	*N/A	*N/A
Lipase	0-60 units/L	*N/A	*N/A	*N/A
Lactic Acid	3-23 mg/dL	*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. *Some of these labs were not completed this hospital stay or not completed on that day.

Lab Test	Normal Range	Value on Admission	Today's Value	Reason for Abnormal
INR	≤ 1.1	*N/A	*N/A	*N/A
PT	11-13.5 seconds	*N/A	*N/A	*N/A
PTT	60-70 seconds	*N/A	*N/A	*N/A
D-Dimer	< 250 ng/mL	*N/A	*N/A	*N/A
BNP	< 100 pg/mL	*N/A	*N/A	*N/A
HDL	23-92 mg/dL	40 mg/dL	*N/A	Values are within the normal range.
LDL	< 100 mg/dL	53 mg/dL	*N/A	Values are within the normal range.
Cholesterol	< 199 mg/dL	128 mg/dL	*N/A	Values are within the normal range.
Triglycerides	0-149 mg/dL	179 mg/dL	*N/A	Values are within the normal range.
Hgb A1c	≤ 6.4%	7.6%	*N/A	Hgb A1c is elevated due to the patient's elevated glucose levels related to the patient's DM2 (Van Leeuwen & Bladh, 2019).
TSH	0.45-5.33 mIU/mL	2.61 mIU/ mL	*N/A	Values are within the normal range.

Urinalysis Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format. *None of these tests were completed this hospital stay.

Lab Test	Normal Range	Value on	Today's Value	Reason for Abnormal

		Admission		
Color & Clarity	*N/A	*N/A	*N/A	*N/A
pH	*N/A	*N/A	*N/A	*N/A
Specific Gravity	*N/A	*N/A	*N/A	*N/A
Glucose	*N/A	*N/A	*N/A	*N/A
Protein	*N/A	*N/A	*N/A	*N/A
Ketones	*N/A	*N/A	*N/A	*N/A
WBC	*N/A	*N/A	*N/A	*N/A
RBC	*N/A	*N/A	*N/A	*N/A
Leukoesterase	*N/A	*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. *None of these cultures were completed this hospital stay.

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

Lab Correlations Reference (1) (APA):

Van Leeuwen, A. M., & Bladh, M. L. (2019). *Davis's comprehensive handbook of laboratory & diagnostic tests with nursing implication* (8th ed.). F. A. Davis Company.

Diagnostic Imaging

All Other Diagnostic Tests (5 points):

1. **2/12/2022 Chest x-ray:** The x-ray found the client's heart is mildly enlarged, diffuse mild interstitial thickening of the heart, no pneumothorax or pleural effusion, and the patent's left-sided pacing device.
2. **2/12/2022 Computerized tomography angiography chest pulmonary with contrast:** The imaging found the lungs negative for focal consolidation, pleural effusion, or a pneumothorax. The trachea was midline and central airway patent. There was a patchy area of pneumonitis or scarring present in the right middle lobe of the lung. The heart size was normal and negative for dilated pulmonary arteries.
3. **2/12/2022 Ultrasonogram venous duplex lower extremity bilaterally:** The imaging found a normal flow and compressibility in the common femoral vein, saphenofemoral junction, femoral vein, popliteal vein, and post tibial vein. There was no intraluminal filling defect.

Diagnostic Test Correlation (5 points):

1. Client had a chest x-ray to look at the heart and lungs for fluid accumulation (Capriotti, 2020).
2. The client had a CT angiography chest pulmonary with contrast due to the client's enlarged heart and crackles in the right lung when auscultated. This imaging allows for a more detailed picture of the patient's heart and lungs unlike the chest x-ray (Capriotti, 2020).
3. The US venous duplex of the lower extremities was used because of the client's edema in the lower extremities bilaterally and the client has a history of a DVT. This test uses Dopplar and ultrasound waves to see the blood flow in the vessels (Capriotti, 2020)

Diagnostic Test Reference (1) (APA):

Capriotti, T. M. (2020). *Davis advantage for pathophysiology: Introductory concepts and clinical perspectives* [eBook edition] (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	Eliquis/Apixaban	Cardizem/Diltiazem hydrochloride	Pravachol/ Pravastatin sodium	Coreg/Carvedilol	Atrovent/ Ipratropium-albuterol
Dose	5 mg	360 mg	40 mg	12.5 mg	3 mL
Frequency	Twice a day	Once a day	Once a day	Twice a day	Four times a day
Route	Oral	Oral	Oral	Oral	Inhaled
Classification	Factor Xa inhibitor / anticoagulant (Jones & Bartlett Learning, 2021)	Calcium channel blocker/antianginal, antiarrhythmic, antihypertensive (Jones & Bartlett Learning 2021)	HMG-CoA reductase inhibitor / antilipemic (Jones & Bartlett Learning 2021)	Nonselective beta blocker and alpha-1 blocker /antihypertensive, heart failure treatment adjunct (Jones & Bartlett Learning 2021)	Anticholinergic/ bronchodilator (Jones & Bartlett Learning 2021)
Mechanism of Action	It prevents thrombi from developing by inhibiting factor Xa to inhibit platelet aggregation induced by thrombin (Jones & Bartlett Learning 2021).	It stops calcium from going through the calcium channels in coronary and vascular smooth muscle membranes. This inhibits smooth muscle contractions, decreases heart muscle demand for oxygen, reduces peripheral vascular resistance and systolic and diastolic blood pressure, slows AV conduction time, prolongs AV refraction time, and prevents tachycardias (Jones & Bartlett Learning 2021).	It blocks HMG-CoA reductase enzyme in the liver to prevent HMG-CoA from being converted to mevalonate which inhibits cholesterol synthesis in the liver. Liver then breaks down LDL cholesterol more (Jones & Bartlett Learning 2021).	This drug creates vasodilation to reduce cardiac output and tachycardia. It also reduces blood pressure and cardiac workload by decreasing peripheral vascular resistance (Jones & Bartlett Learning 2021).	The medication stops acetylcholine from attaching to receptors on smooth-muscle cell membranes. This relaxes the smooth muscles causing bronchodilation (Jones & Bartlett Learning 2021).
Reason Client Taking	This client has a history of DVT and PE, so it prevents another one of the two from forming.	This client has a diagnosis of hypertension and a-fib, so this drug is to help control his hypertension and	The client has a diagnosis of hyperlipidemia, and this medication helps treat those	This client has been diagnosed with hypertension and congestive heart failure. This medication is	The client has COPD and this medication is used to provide maintenance treatment for bronchospasms

		treat a-fib.	elevated lipid levels.	used to help control hypertension and as an adjunct to treat mild to severe heart failure.	related to COPD.
Contraindications (2)	1. Active pathological bleeding 2. Severe hypersensitivity to apixaban or its components (Jones & Bartlett Learning 2021)	1. Pulmonary edema 2. Within a few hours of IV beta-blocker therapy (Jones & Bartlett Learning 2021)	1. Active hepatic disease 2. Persistent elevated liver enzymes (Jones & Bartlett Learning 2021)	1. Sick sinus syndrome unless a pacemaker is in place 2. Decompensated heart failure that requires IV inotropics (Jones & Bartlett Learning 2021)	1. Hypersensitivity to atropine and its components 2. Hypersensitivity to ipratropium bromide and its components (Jones & Bartlett Learning 2021)
Side Effects/Adverse Reactions (2)	1. Epistaxis 2. GI bleeding or hemorrhage (Jones & Bartlett Learning 2021)	1. Atrial flutter 2. Acute renal failure (Jones & Bartlett Learning 2021)	1. Hepatic failure 2. Angioedema (Jones & Bartlett Learning 2021)	1. Angina 2. Hypoglycemia (Jones & Bartlett Learning 2021)	1. Atrial fibrillation 2. Supraventricular tachycardia (Jones & Bartlett Learning 2021)
Nursing Considerations (2)	1. The drug should not be given to a client with severe hepatic dysfunction. 2. If the client cannot swallow whole tablets, crush the tablet, and mix with apple juice, applesauce, or water to administer (Jones & Bartlett Learning 2021).	1. This drug should be used cautiously in clients with impaired liver or kidney function. 2. Assess the client for signs and symptoms of heart failure (Jones & Bartlett Learning 2021).	1. Use cautiously with elderly clients. 2. Give the drug 1 hour before or 2 hours after giving cholestyramine or colestipol (Jones & Bartlett Learning 2021).	1. Monitor the client's blood glucose levels due to medication possibly altering levels. 2. Know if the client has heart failure and expect to give digoxin, a diuretic, and an ACE inhibitor if so (Jones & Bartlett Learning 2021).	1. Use cautiously in clients with hepatic or renal dysfunction. 2. When nebulizing, apply a mouthpiece to prevent the drug from leaking out around the mask (Jones & Bartlett Learning 2021).

Hospital Medications (5 required)

Brand/ Generic	Detrol/ Tolterodine tartrate	Desvenlafaxine	Pravastatin	Cholecalciferol/ Vitamin D	Mirapex/ Pramipexole dihydrochloride
Dose	2 mg	300 mg	40 mg	3000 units	1.5 mg
Frequency	Twice a day	Once a day	Once a day	Twice a day	Three times a day
Route	Oral	Oral	Oral	Oral	Oral
Classification	Cholinergic receptor blocker/ antispasmodic (Jones & Bartlett Learning 2021)	Selective serotonin and norepinephrine reuptake inhibitor (SSNRI)/ antidepressant (Jones & Bartlett Learning 2021)	HMG-CoA reductase inhibitor/ antilipemic (Jones & Bartlett Learning 2021)	Cholecalciferol/ Vitamin (Al-Hashimi & Abraham, 2021)	Non-ergot dopamine agonist/ antiparkinsonian (Jones & Bartlett Learning 2021)
Mechanism of Action	"It exerts antimuscarinic and potent direct antispasmodic actions on smooth muscle in the bladder" (Jones & Bartlett Learning 2021, pp. 1084). This mechanism causes detrusor muscles to contract less and reduces urinary frequency and urgency (Jones & Bartlett Learning 2021).	The medication raises levels of norepinephrine and serotonin at the nerve synapses by inhibiting neuronal reuptake. This is done to elevate mood and reduce depression (Jones & Bartlett Learning 2021).	It blocks HMG-CoA reductase enzyme in the liver to prevent HMG-CoA being converted to mevalonate which inhibits cholesterol synthesis in the liver. The liver then breaks down LDL cholesterol more (Jones & Bartlett Learning 2021).	This vitamin goes through two hydroxylation processes to activate it. The processes occur in the liver and is used to decrease inflammation in DM2, regulate the renin-angiotensin system for hypertension, and cardiovascular disease (Al-Hashimi & Abraham, 2021).	The drug stimulates the dopamine receptors in the brain to ease the symptoms of Parkinson's disease (Jones & Bartlett Learning 2021).
Reason Client Taking	The client had been incontinent due to the diuretics being administered regularly, so this medication is being utilized to help treat the incontinence.	The client has a history of depression, and this medication is used to treat those symptoms.	The client has a diagnosis of hyperlipidemia, and this medication helps treat those elevated lipid levels.	The client has DM2, hypertension, and cardiovascular disease, so this vitamin helps lower inflammation to help treat those conditions.	The client has been diagnosed with restless leg syndrome. This drug is used to help treat those symptoms.

Contraindications (2)	1. Urine retention 2. Gastric retention (Jones & Bartlett Learning 2021)	1. Use of a MAO inhibitor within 14 days 2. Hypersensitivity to desvenlafaxine (Jones & Bartlett Learning 2021)	1. Active hepatic disease 2. Persistent elevated liver enzymes (Jones & Bartlett Learning 2021)	1. High phosphate blood levels 2. High calcium blood levels (Al-Hashimi & Abraham, 2021)	1. Hypersensitivity to pramipexole or its components 2. Low blood pressure (Jones & Bartlett Learning 2021)
Side Effects/ Adverse Reactions (2)	1. Chest pain 2. Angioedema (Jones & Bartlett Learning 2021)	1. Cerebral ischemia 2. Arrhythmias (Jones & Bartlett Learning 2021)	1. Hepatic failure 2. Angioedema (Jones & Bartlett Learning 2021)	1. Hypercalcemia 2. Hypercalciuria (Al-Hashimi & Abraham, 2021)	1. Cardiac failure 2. Inappropriate antidiuretic hormone secretion (Jones & Bartlett Learning 2021)
Nursing Considerations (2)	1. Monitor clients for abdominal bloating or distention. 2. This drug may cause blurred vision, dizziness, and drowsiness. If those occur, instill fall precautions for the client (Jones & Bartlett Learning 2021).	1. This medication should not be given to clients with bradycardia. 2. Use cautiously in clients with medical conditions that can woresen by an increased heart rate (Jones & Bartlett Learning 2021).	1. Use cautiously with elderly clients. 2. Give the drug 1 hour before or 2 hours after giving cholestyramine or colestipol (Jones & Bartlett Learning 2021).	1. Perform a follow-up and assess the client for compliance and therapeutic effectiveness. 2. Monitor levels of BUN to creatinine ratio (Al-Hashimi & Abraham, 2021).	1. Monitor the patient for postural deformity 2. Use the drug with caution with patients who hallucinate, have hypotension, or retinal problems (Jones & Bartlett Learning 2021).

Medications Reference (1) (APA):

Jones & Bartlett Learning. (2021). *2021 nurse's drug handbook* (20th ed.). Jones & Bartlett Learning.

Nazik Al-Hashimi, & Abraham, S. (2021). Cholecalciferol. *StatPearls Publishing*. https://www.ncbi.nlm.nih.gov/books/NBK549768/#article-19447.s7

Assessment

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

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	The patient is alert and oriented to self, place, time, and situation (A&O x4). The patient is calm and did not appear distressed. Overall appearance is groomed, clean, and healthy.
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☒** **Type: N/A**	The patient's skin color is normal for ethnicity. Skin is warm, dry, and intact with elastic turgor. There is a bruise about 3 cm in diameter on the patient's lower left bicep. There is another wound about 3-4 cm in diameter on the patient's lower left shin with an adhesive bandage covering it. No other rashes, bruises, or wounds found. The Braden score is 19 indicating no risk of pressure ulcers and no drains present.
HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	Patient's head is normocephalic with the trachea midline. Ears are symmetrical with no visible drainage or cerumen. Patient did have some difficulty hearing softer talking but is responsive to sounds. Patient wears glasses and the pupils are 2 mm when exhibiting PERRLA. Eyes display full extraocular movements and are symmetrical with no drainage or inflammation. Conjunctiva is pink and moist. Nose is midline with no deviated septum and patent nares with some translucent mucus. Patient has full upper dentures but were left at home. Patient's tongue and buccal mucosa is moist, pink, and has no lesions. Tonsils and uvula are absent due to previous tonsillectomy (2003) and adenoidectomy (2003).
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 ☐**	S1 and S2 heart sounds were audible with no S3/ S4 or murmurs sounds. Cardiac rhythm is regular and steady. Left radial pulse is palpable at a +3 strength with the right radial pulse palpable at +1 strength. Capillary refill is >3 seconds on hands bilaterally. Pedal pulses are palpable bilaterally at +1 strength. Patient exhibits +2 pitting edema bilaterally in both feet. No jugular vein distention observed.

Location of Edema: Feet bilaterally	
RESPIRATORY: **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	Crackles were audible during inhalation in the posterior, middle lobe of the right lung. Patient was in semi-Fowler's position when respiration rate was assessed and was measured at 18 and 20 respirations per minute. Breathes are regular and even with no accessory muscles used. No chest deformities noted, and patient denies difficulty breathing. Patient does have productive cough with no mucus or sputum production.
GASTROINTESTINAL: **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: N/A** **Feeding tubes/PEG tube Y ☐ N ☒** **Type: N/A**	Patient has regular diet at home but is on a heart healthy diet currently. Patient's height is 190 cm and weight 128.1 kg with a BMI of 35.5 which puts the patient in the obese category. When auscultated, clicks and gurgles were heard at a rate of 5-30 per minute in all four abdominal quadrants. Patient denies vomiting and diarrhea nor pain with bowel movements. The last bowel movement was the day before (2/13/22). Abdomen is nontender, soft, and not distended when palpated. There are no drains, incisions, or wounds on the abdomen. Patient does not have any ostomies, nasogastric or feeding tubes.
GENITOURINARY: **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☐ N ☒** **Type: N/A** **Size: N/A**	Patient reports urine as yellow, clear, and with no odor. Patient had one incontinent void this shift. Patient reports "I feel like I need to go all the time" due to the diuretic medication. Patient does deny any pain when urinating. Genitals were not inspected. Patient does not have any catheters and is not on dialysis.
MUSCULOSKELETAL: **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☒ N ☐** **Fall Risk: Y ☒ N☐**	Neurovascular status is intact, and patient is in control of his senses. Patient does not report any paresthesia or paralysis nor displays pallor. The patient has full range of motion with 5/5 strength in upper extremities bilaterally. Patient has 3/5 strength in lower extremities bilaterally. Patient's Morse Fall score is 60 which puts him as a high

Fall Score: 60 **Activity/Mobility Status:** **Independent (up ad lib)** ☐ **Needs assistance with equipment** ☒ **Needs support to stand and walk** ☐	fall risk. Patient uses gait belt and walker to ambulate and requires one assistant. Patient does not need help with ADLs.
NEUROLOGICAL: **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐** **Strength Equal: Y ☒ N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	Patient has some weakness in the lower limbs bilaterally; scored as 3/5 strength but equal in strength. Upper extremities are full strength as 5/5 strength. Eyes exhibit PERRLA signs and articulates well. Patient is A&O x4 as discussed before. Patient is also alert to his surroundings and calm. Patient can sense touch all over each extremity. Patient is focused on getting rest to rid his body of the infection and excess fluid. Patient is also positive about his condition improving and energetic when conversing with others.
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's wife and daughter has been regularly visiting him in the hospital after work. The patient's son is keeping in contact over phone calls and text messages. Patient states that he is Christian but is "not heavily religious". Developmental level is appropriate for age and patient has two different bachelor's degrees.

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

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0830	80 bpm right hand pulse oximeter	111/70 left arm	18 respirations/ min	36.5 ˚C tympanic	99% on 5L O2 via nasal cannula
1121	85 bpm right hand pulse oximeter	106/52 left arm	20 respirations/ min	36.8 ˚C tympanic	81% room air

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0830	Numeric	Left lower shin	8/10	Shooting	Pain medication
1121	Numeric	None	0/10	None	None needed

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: 20 gauge **Location of IV:** Right antecubital fossa **Date on IV:** 2/12/2022 **Patency of IV:** Line is open with no blockages. **Signs of erythema, drainage, etc.:** No signs of erythema or drainage. **IV dressing assessment:** Dressing is clean, dry, and intact.	The client has a 20 gauge IV with a saline lock in the right antecubital fossa. The IV has a date of 2/12/2022 for when it was placed. There are no signs of erythema or drainage around the IV site and the IV is patent with no signs of blockages. The IV dressing is clean, dry, and intact.

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
400 mL of water 4 mL furosemide IV push 7 mL 0.9% saline IV flush Total of 211 mL intake of fluid	Incontinent of urine x1 voids

Nursing Care

Summary of Care (2 points)

Overview of care: Patient received daily medications and insulin around 0930. Vitals were taken at 0830 and 1121. Patient had respiratory therapy around 1030 and physical therapy consult around 1130. Patient did have to have bed changed once due to incontinence and was given an absorbent brief. Patient did not need much extra care throughout the day except for those events listed above.

Procedures/testing done: Patient had respiratory therapy nebulizing treatment around 1030 but no other procedures or testing was done.

Complaints/Issues: Patient complained about urinary urgency from the diuretic medication.

Vital signs (stable/unstable): Vital signs are stable except for the oxygen saturation the second time due to the patient using room air instead of a nasal cannula. I did not notify the primary RN or anyone else of the oxygen since there was a nurse in the room at the time.

Tolerating diet, activity, etc.: Patient is tolerating diet and exercise.

Physician notifications: There are no physician notifications to note.

Future plans for client: Patient may require home health or home physical therapy upon discharge.

Discharge Planning (2 points)

Discharge location: Patient will be discharged to go home.

Home health needs (if applicable): Patient's home health needs are dependent on physical therapy/occupational therapy evaluation.

Equipment needs (if applicable): Patient needs oxygen at night and a walker to ambulate.

Follow up plan: Patient will need to make follow-up appointments with a cardiologist and his primary care physician.

Education needs: Patient needs education on heart healthy diet and lifestyle.

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

Nursing Diagnosis	Rationale	Interventions (2 per dx)	Outcome Goal (1 per dx)	Evaluation
1. Impaired gas exchange related to COPD and pneumonia as evidenced by 81% oxygen saturation with room air.	Diagnosis was chosen due to the client having low oxygen saturation when breathing in room air	**1.**Assess and record pulmonary status every 4 hours. **2.**Administer and monitor oxygen therapy as ordered. (Phelps, 2020).	**1.** The outcome goal is to raise the oxygen levels to at least 92%.	Patient agreed that oxygen therapy helped to breathe more easily. With oxygen therapy of 3L nasal cannula, O2 stat went up to 95%. Goal was met during this shift.
2. Excess fluid volume related to congestive heart failure as evidence by 2+ pitting pedal edema bilaterally.	Diagnosis was chosen due to fluid in the lungs and pedal pitting edema.	**1.** Administer diuretic medication as prescribed. **2.** Assess skin turgor for edema (Phelps, 2020).	**1.** The outcome goal is to decrease pedal edema.	Patient has been urinating more frequently and does have complaints of frequent urgency due to the diuretic medication. The edema had not gone down before the end of the shift. Goal was not met during this shift.
3. Urge urinary incontinence related to diuretic use and fluid excess as evidence by patient reporting feeling "the need to go all the time" and voiding in the bed.	Diagnosis was chosen due to the patient urinating in the bed and being incontinent before the hospital.	**1.** Administer tolterodine tartrate medication as prescribed. **2.** Discuss bladder training at the hospital with the patient	**1.** The outcome goal is for the patient to urinate in the toilet and not have an episode of incontinence.	Patient was receptive to receiving the medication in hopes to help stop the incontinence. Patient was open to the idea of bladder training while at the hospital, but there was no in-depth discussion about it. There was not another episode of incontinence after the first one during this shift. Goal was met during this shift.

		(Phelps, 2020).		

Other References (APA):

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

Concept Map (20 Points):

Subjective Data

Patient reported shortness of breath and a twinge-like pain above the pacemaker that occurred intermittently.

Objective Data

The low levels of rbcs, hgb, and hct point towards fluid accumulation from heart failure. The elevated neutrophils, lymphocytes, and the CT with contrast shows evidence of pneumonia in the right lung. The low blood oxygen saturation shows evidence of both pneumonia and fluid overload from the CHF.

Client Information

68-year-old male with a history of DM2, a-fib, DVT, PE, COPD, CHF, hyperlipidemia, and hypertension is admitted for pneumonia of the right lung and CHF exacerbation. Patient has a pacemaker in place since 2005.

Nursing Diagnosis/Outcomes

Impaired gas exchange related to COPD and pneumonia as evidenced by 81% oxygen saturation with room air.

The outcome goal is to raise the oxygen levels to at least 92%.

Excess fluid volume related to congestive heart failure as evidence by 2+ pitting pedal edema bilaterally.

The outcome goal is to decrease pedal edema.

Urge urinary incontinence related to diuretic use and fluid excess as evidence by patient reporting feeling "the need to go all the time" and voiding in the bed.

The outcome goal is for the patient to urinate in the toilet and not have an episode of incontinence.

Nursing Interventions

Nursing Diagnosis 1

Assess and record pulmonary status every 4 hours.

Administer and monitor oxygen therapy as ordered (Phelps, 2020).

Nursing Diagnosis 2

Administer diuretic medication as prescribed.

Assess skin turgor for edema (Phelps, 2020).

Nursing Diagnosis 3

Administer tolterodine tartrate medication as prescribed.

Discuss bladder training at the hospital with the patient (Phelps, 2020).