

N431 CARE PLAN #1

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N431: Adult Health II

Dean Brittany Lawson

10/16/2024

Demographics

Date of Admission 10/11/2024	Client Initials G.H	Age 62	Biological Gender Male
Race/Ethnicity Caucasian	Occupation Retired- former mechanic	Marital Status Divorced	Allergies - <u>Acetylcysteine</u> = HTN, dyspnea, tachycardia - <u>Ibuprofen</u> = SOB - <u>Strawberry</u> = nausea, vomiting, angioedema
Code Status Full Code	Height 5'8" (172.7cm)	Weight 115.3kg (253.7lbs)	

Medical History

Past Medical History: Bronchitis, Back pain, Migraines, Depression, Obstructive sleep apnea, Non-sustained ventricular tachycardia, Hyperlipidemia, Bipolar affect, Chronic Obstructive Pulmonary Disease, Hypertension, Type II Diabetes, Chronic respiratory failure, Obesity, Coronary Artery Disease, Bile duct injury, Closed left ankle fracture, Disorder of refraction and accommodation, Pneumonia, Sepsis

Past Surgical History: Unspecified surgery to correct eye muscles, Unspecified spine surgery, Cardiac catheterization x2, Colonoscopy x3, Laparoscopic cholecystectomy, Endoscopic retrograde cholangiopancreatography x3, Umbilical hernia repair, Bilateral strabismus surgery, Loop recorder removal, Left ankle fracture repair, Esophagogastroduodenoscopy

Family History: Mother has history of hypertension, type II diabetes, and unspecified cancer; sister has history of heart disease and pacemaker; maternal cousin has history of colon cancer.

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

Client was a former cigarette smoker from 1972-2022. Smoked 0.5 packs a day for 50.2 years for total pack year history of 25.1. Client denies alcohol or any other drug use.

Education: This client stated to have graduated high school.

Living Situation: This client lives alone in an apartment in Champaign with his dog “Bianca”.

Assistive devices: This client uses oxygen with a nasal cannula at home and wears a CPAP at night. He says he occasionally uses a wheelchair or a power scooter when he runs errands like grocery shopping.

Admission History

Chief Complaint: Client presented to the Emergency Department with complaints of severe shortness of breath stating, “ I could not catch my breath no matter what”.

History of Present Illness (HPI)– OLD CARTS

This client presented to the Emergency Department (ED) via ambulance on 10/11/2024 with complaints of severe shortness of breath. The client stated that his symptoms began “early that evening” on 10/11/2024 and that his shortness of breath persisted into the night. Client described his discomfort as feeling “tight in the chest” and that he was “unable to catch a breath”. His shortness of breath was accompanied by a persistent and productive cough as well as “whole body chills on and off”. The client stated that his symptoms “got worse every time I tried to lay down”. Client stated that he administered himself two “DuoNeb” and one albuterol treatment at home, but that they did not provide any relief. Client then called for Emergency Medical Services (EMS) and they also provided two “DuoNeb” treatments enroute to the ED with no relief of symptoms. The client stated to have been treated for pneumonia several times before. This client was recently admitted to the hospital 9/5-9/7/2024 with pneumonia and sepsis and had been discharged with Augmentin and steroids to finish taking at home. He was then seen again on 10/4/2024 with complaints of a continued cough and shortness of breath and was therefore given doxycycline to begin taking. At his follow-up appointment on 10/7/2024 he stated to still have little relief of symptoms and was then prescribed prednisone. Client stated that

his condition continued to deteriorate until he called for EMS on 10/11/2024 and that he had been compliant with taking his doxycycline and tapering his prednisone medications.

Admission Diagnosis

Primary Diagnosis: Bacterial Hospital Acquired Pneumonia of both lungs

Secondary Diagnosis (if applicable): COPD exacerbation

Pathophysiology

This client was admitted to the ED with complaints of shortness of breath and was subsequently diagnosed with hospital-acquired pneumonia. Pneumonia is a lower respiratory tract infection that infects millions of people a year; in fact, pneumonia and the flu are the most common causes of death from infectious diseases in the United States (Hinkle et al., 2021). Simply put, pneumonia is inflammation of the lungs (Capriotti, 2020). This occurs when a person inhales droplets containing bacteria, a virus, or other pathogens, which then adhere to the epithelium of the lungs (Capriotti, 2020). When the pathogens infiltrate the lung tissues this causes an inflammatory reaction and the alveolar air spaces become filled with purulent and inflammatory cells (Capriotti, 2020). The inflammatory response also causes excessive stimulation of respiratory goblet cells which secrete mucus (Capriotti, 2020). All of this combined makes it more difficult for sufficient gas exchange to occur (Capriotti, 2020). Pneumonia is most commonly caused by bacteria such as *Streptococcus pneumoniae* and *Staphylococcus*, but it can also be caused by viruses, fungi, inhalation of chemicals, or aspiration of substances from the oropharynx or stomach (Capriotti, 2020). Oftentimes, an infection with a virus like influenza creates an increased risk for pneumonia as a secondary infection as viruses like the flu affect the lungs' immune defenses and make them more vulnerable to bacterial

infections (Capriotti, 2020). Other conditions that put an individual at higher risk of developing pneumonia are immunosuppressed clients like those with cancer and individuals with chronic respiratory conditions like chronic obstructive pulmonary disease (COPD) (Capriotti, 2020). This client has a history of COPD and chronic respiratory failure which put him at an increased risk for infections like pneumonia.

There are also several different ways that pneumonia can be categorized based upon where the bacterial or viral infection was acquired such as community-acquired, healthcare-associated, hospital-acquired, and ventilator-associated pneumonias (Capriotti, 2020). This client was specifically diagnosed with hospital-acquired pneumonia, which is defined as pneumonia that developed 48 hours or more after admission to a hospital and did not appear to be incubating at the time of admission (Hinkle et al., 2021). It is unclear why exactly this client was diagnosed with hospital-acquired pneumonia specifically, as it was clear that he had symptoms of pneumonia upon arrival to the ED, however, it could be related to his previous hospitalization in which he had pneumonia in September of this year.

Signs and symptoms of pneumonia can vary depending on the causative agent (Hinkle et al., 2021). Typically, however, clinical manifestations of pneumonia include chills, fever, pleuritic pain, coughing, shortness of breath, crackles upon auscultation, tachypnea, and tachycardia (Hinkle et al., 2021). Other signs of pneumonia can include headaches, purulent sputum, orthopnea, pale nail beds, poor appetite, and use of accessory muscles when breathing (Hinkle et al., 2021). This client complained of chills, a cough, shortness of breath, chest tightness, and orthopnea. Upon examination he was also found to have a slow capillary refill time, was tachypneic at times, coughing up thick, yellow sputum, and rales could be heard upon auscultation.

Typically, a chest x-ray is the primary way to diagnose pneumonia but a CT can be done as well for better visualization (Capriotti, 2020). From there, a sputum culture is typically obtained to identify the causative pathogen and a CBC with differential will be done as well (Capriotti, 2020). This client had both a chest x-ray and CT done to diagnose his pneumonia. Finally, treatment of pneumonia also depends on whether it is bacterial or viral, but generally, antibiotics are administered (if bacterial), and clients are often given supplemental oxygen (Capriotti, 2020). IV fluids may also be prescribed to keep the client hydrated and help to thin secretions (Capriotti, 2020) Analgesics, antipyretics, steroids, and bronchodilators are also typically used to treat pneumonia (Capriotti, 2020). This client was being treated with several different medications including antibiotics cefepime and doxycycline, steroids like methylprednisolone and budesonide, bronchodilators such as albuterol, and pain medications such as hydrocodone and acetaminophen.

Pathophysiology References (2) (APA):

- Capriotti, T. (2020). Chapter 20: Respiratory inflammation and infection. In *Davis Advantage for pathophysiology: Introductory concepts and clinical perspectives* (2nd ed., pp. 471-490). F.A. Davis.
- Hinkle, J. L., Cheever, K. H., & Overbaugh, K. J. (2021). Chapter 19: Management of patient with chest and lower respiratory tract disorders. In *Brunner & Suddarth's textbook of medical-surgical nursing* (15th ed., pp. 531-545). Wolters Kluwer.

Laboratory/Diagnostic Data

Lab Name	Admission Value	Today's Value	Normal Range	Reasons for Abnormal
Glucose	180 mg/dL	117 mg/dL	74- 100 mg/dL	Diabetes mellitus, acute stress, and certain

			(Carle Foundation Hospital, n.d.)	medications can cause increases in blood glucose level (Pagana et al., 2023, p. 453). This client has type II diabetes, is experiencing stress from his pneumonia infection, and is also taking steroid medications which can increase blood sugar levels.
Calcium	8.7 mg/dL	8.2 mg/dL	8.9- 10.6 mg/dL (Carle Foundation Hospital, n.d.)	Low calcium levels can be caused by things such as malabsorption, poor dietary intake, diuretic use, osteomalacia and vitamin D deficiency (Pagana et al., 2023 p. 181). Considering this client's long past history of smoking he is likely deficient in vitamin D and he is also taking furosemide which can lower calcium levels.
WBC	11.87 <i>10³/uL</i>	10.77 <i>10³/uL</i>	4.00-11.00 <i>10³/uL</i> (Carle Foundation Hospital, n.d.)	Infection, stress, and inflammation can cause an increase in white blood cell count (Pagana et al., 2023, p. 949). This client has pneumonia, which is an inflammatory lung infection. Since starting his antibiotics though, his WBC count is trending down indicating that the medication has been effective thus far in helping to eliminate the infection.
MCHC	30.8 g/dL	31.3 g/dL	32.0- 36.0 g/dL	The mean corpuscular hemoglobin concentration measures the average concentration of hemoglobin in a single red

			(Carle Foundation Hospital, n.d.)	blood cell (Pagana et al., 2023, p. 753). A common cause of decreased MCHC is iron deficiency anemia which can be caused by chronic diseases and inflammation as this interferes with iron absorption in the body (Pagana et al., 2023, pp.753-754). This client has COPD which means his lungs struggle with chronic inflammation and this could be affecting his body's ability to use iron and make hemoglobin.
RDW-SD	46.4 fL	46.9 fL	36.7- 46.1 fL (Carle Foundation Hospital, n.d.)	Red blood cell distribution width is an indication of how much RBCs vary in size; An increase in RDW can indicate different types of anemias such as iron deficiency anemia, hemolytic anemia, and sickle cell disease (Pagana et al., pp. 753-754). As mentioned previously, this client has a history of smoking and COPD that has likely caused some mild iron deficiency anemia which is affecting his red blood cell production.
Absolute Neutrophils	8.68 $10^3/uL$	7.31 $10^3/uL$	1.60-7.70 $10^3/uL$ (Carle	Acute infections and inflammatory disorders can cause an increase in neutrophils (Pagana et al., 2023, p. 950). This client currently has pneumonia which would cause in increase in neutrophils, but since starting his course of antibiotics his neutrophil levels are

			(Carle Foundation Hospital, n.d.)	recently began using 4L of supplemental oxygen via nasal cannula compared to his baseline of 2L and this could be contributing to his increase in pO ₂ .
Lactate	2.19 mmol/L	N/A	0.50-2.00 mmol/L (Carle Foundation Hospital, n.d.)	Increases in lactate levels can be due to things such as carbon monoxide poisoning, sepsis, liver disease, diabetes mellitus, and tissue ischemia (Pagana et al., 2023, p. 546). This client has type II diabetes and also likely has poor tissue perfusion due to his COPD and chronic respiratory failure and all of this could contribute to his increase in lactate level.
HCO₃	28.1 mmol/L	N/A	21.5-25.5 mmol/L (Carle Foundation Hospital, n.d.)	Bicarbonate levels can be increased due to metabolic alkalosis, conditions like COPD, and medications such as loop diuretics and steroids (Pagana et al., 2023, p. 104). This client has COPD and therefore his kidneys are likely trying to compensate for retained CO ₂ in the lungs by reabsorbing more HCO ₃ . He is also taking furosemide and other steroids which could be contributing to his increased bicarbonate level.
CO₂	29.0 mmol/L	34.0 mmol/L	22.0-29.0 mmol/L	Things such as emphysema, metabolic alkalosis, loop diuretics and steroids can cause increases in CO ₂ levels

			(Carle Foundation Hospital, n.d.)	(Pagana et al., 2023, p. 188). This client is in metabolic alkalosis according to his pH lab, he has COPD which is a combination of chronic bronchitis and emphysema, and he is also taking furosemide and several steroid medications all of which could have contributed to his increase in CO2 level since admission to the hospital.
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Diagnostic Test & Purpose	Clients Signs and Symptoms	Results
<p>This client had a chest x-ray done in the ED to visualize his thoracic cavity to be able to diagnose a lung or heart problem. An x-ray uses radiation to create images of the body's bones and it can show bone fractures and soft tissue swelling (Pagana et al., 2023).</p>	<p>This client presented to the ED with severe shortness of breath and a thick cough. This would lead the providers to think he has a respiratory infection and an x-ray can help show if there is an infection or problem with the lungs.</p>	<p>The results of the x-ray showed that the client's lungs were a normal volume, but that there were patchy areas of grey called "opacities" on the left lung. The x-ray also showed a possible pleural effusion, but it could not be confirmed.</p>
<p>This client also had computed tomography (CT) done in the ED because the x-ray alone could not show for sure if this client had a pleural effusion or not. A CT is a type of x-ray that can be used with or without contrast and it involves taking several tomographic x-rays of an area in multiple layers which results in a 3D image; hence, these images are more detailed than a regular x-ray (Pagana et al., 2023).</p>	<p>Again, this client presented to the ED with severe shortness of breath and obvious difficulty breathing with a cough. This eludes to a respiratory infection and because the x-ray was not able to confirm if he had a pleural effusion a more detailed image using a CT was needed.</p>	<p>The results showed that the outside layer of the lungs was chronically thickened with scar tissue, especially along the left lower lobe. The CT was able to show that there was no definite fluid in the lungs and therefore a pleural effusion was ruled out. It did however reveal some dense spots on the</p>

		lungs known as “infiltrates” which is diagnostic of a lung infection.
This client has an electrocardiograph (ECG) done while at the ED to assess for a potential heart attack and/or abnormal heart rhythms. An ECG is a graphic representation of the electrical impulses of the heart and can show irregular electrical activity occurring in the cardiac cycle (Pagana et al., 2023).	This client’s main complaint was severe shortness of breath, but he also stated that his shortness of breath felt like a tightness in his chest. This would prompt the nurses to perform an ECG just in case to assess the functioning of the heart and make sure this client was not also having any abnormal heart rhythms.	The ECG showed that this client was in normal sinus rhythm.

Diagnostic Test Reference (1) (APA):

Carle Foundation Hospital (n.d.). *Normal lab values reference ranges*. Epic Systems.

Pagana, K. D., Pagana, T. J., & Pagana, T. N. (2023). *Mosby’s Diagnostic and Laboratory Test Reference* (16th ed.). Elsevier.

Active Orders

Active Orders	Rationale
Contact & Droplet Precautions	This client should be on droplet precautions because of his diagnosis of pneumonia which is spread via droplets in the air. He is also on contact precautions as an added measure as some strains of pneumonia can be very contagious so extra care should be taken not to come in contact with contaminated bodily fluids.
Regular Diet	This client does not have a history of renal disease or heart failure and therefore can eat a regular diet. Though, because he has COPD it is best that he consumes small frequent meals that are high in protein due to the extra energy his body spends on respiratory efforts.
Monitor apnea symptoms and notify	This client has a history of obstructive sleep

hospitalist of worsening trends	apnea which can cause hypoxia. Therefore, the nurse should pay close attention to his breathing efforts and encourage the use of his CPAP to help prevent further respiratory deterioration.
Track intake & output	It is important to track both intake and output to ensure that clients are receiving enough fluid intake to stay hydrated and it is also important to know output so that kidney function can be monitored closely. Poor output is an important clinical sign of deterioration in a client.
Obtain vital signs every 4 hours	Vital signs should be routinely obtained so that providers can assess how vitals are trending and catch when a client's condition may be worsening.
Perform blood glucose checks before meals, at bedtime, and at 0300.	This client has type II diabetes so it is very important to check his blood sugar routinely to ensure blood sugar levels are within the normal range and allow providers to calculate how much insulin should be provided via sliding scale.
Apply bilateral compression stockings	Because this client is spending the majority of his time lying in bed, while at the hospital it is important to wear compression stockings to help promote blood flow back to the heart and prevent potential blood clots from forming in the legs.
Inspect skin for pressure injuries within 24 hours of admission	It is important to perform a thorough skin assessment for each client upon admission to the hospital so that any pressure injuries can be noted and cared for appropriately with the correct dressing and initiating protocols on how frequently to turn the client.
Ambulate client with assistance	To promote mobility and good blood flow this client should be encouraged to ambulate in the room with assistance (to prevent falls) whenever possible.
Notify physician for SBP <90 or >180; HR <50 or >120; RR <10 or >30; Temp <97.0 or >100.4	It is important to notify the physician of severely abnormal vital signs such as these as they likely indicate a serious problem in the client that requires immediate intervention.
Maintain continuous pulse oximetry	This client was diagnosed with pneumonia and has a history of COPD and chronic respiratory failure so it is important to constantly monitor his oxygen saturation as

he has the potential to quickly desaturate and become hypoxic.
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Medications

Home Medications (Must List ALL)

Brand/Generic	Tylenol with Codeine (acetaminophen-codeine)	AccuNeb (albuterol sulfate)	Brovana (arformoterol)	Flonase (fluticasone propionate)	Lasix (furosemide)	Lantus Solostar pen (insulin glargine)
Classification	Pharmacological class: Non-salicylate para-aminophenol derivative and opioid Therapeutic Class: antipyretic, nonopioid analgesic and antitussive opioid analgesic (Jones & Bartlett Learning, 2023).	Pharmacological class: Adrenergic Therapeutic class: Bronchodilator (Jones & Bartlett Learning, 2023)	Pharmacological class: Long-acting beta agonist Therapeutic Class: Bronchodilator (U.S. National Library of Medicine, 2023)	Pharmacological class: Corticosteroid Therapeutic Class: Anti-asthmatic, anti-inflammatory (Jones & Bartlett Learning, 2023).	Pharmacological class: Loop diuretic Therapeutic Class: Antihypertensive; diuretic (Jones & Bartlett Learning, 2023).	Pharmacological class: Synthetic human insulin Therapeutic Class: Antidiabetic (U.S. National Library of Medicine, 2022b)
Reason Client Taking	As needed for moderate to severe pain. (Jones & Bartlett Learning, 2023).	To treat bronchospasm and open up constricted airways related to pneumonia and COPD (Jones & Bartlett Learning, 2023).	To help control symptoms of COPD like chest tightness and wheezing (U.S. National Library of Medicine, 2023)	To manage symptoms of nasal congestion (Jones & Bartlett Learning, 2023).	To help reduce edema and lower blood pressure related to chronic hypertension (Jones & Bartlett Learning, 2023).	Blood sugar control for type II diabetes (U.S. National Library of Medicine, 2022b).
List two teaching needs for the medication pertinent to the client	-Stand up slowly to avoid orthostatic hypotension as this medication combined with diuretics can cause hypotension. -Increase fluid and fiber intake to help avoid constipation caused by opioid analgesics (Jones & Bartlett Learning, 2023).	-Wash the mouthpiece of the nebulizer at least once a week with warm water and let air dry. -Do not exceed the prescribed dose or frequency, instead if doses feel less effective contact the provider immediately.	-Take this medication at the same times every day and space doses out by about 12 hours. -Do not use to medication to treat sudden attacks of COPD (U.S. National Library of Medicine, 2023)	-Shake the container well before each use and only do two sprays in each nostril. -To administer the medication properly, first blow your nose and then close one nostril at a time and tilt your head slightly forward and breathe in deeply while administering the spray.	-Take this medication at the same time every day and several hours before bed. -Increase dietary intake of potassium or take a potassium supplement to decrease risk of hypokalemia (Jones & Bartlett Learning, 2023).	-Blood sugar level should be monitored prior to administration of this medication; check with provider for what blood sugar level should be above prior to administration. -Rotate injection sites to maintain skin integrity (U.S. National Library of Medicine, 2022b).
Key nursing assessment(s) prior to administration	The nurse should assess the client's respiratory rate prior to administration to	The nurse should assess the client's blood pressure prior to administration	The nurse should assess the client's heart rate and look for any tremors prior to	The nurse should assess for necessity of the medication by listening to the client to see	The nurse should assess this client's blood pressure prior to administration	The nurse must assess the client's blood glucose level prior to administration

	avoid respiratory depression as well as note urinary output prior to administration as this drug can cause urinary retention (Jones & Bartlett Learning, 2023).	as this medication can increase blood pressure and the nurse should assess for signs of pulmonary edema as this is an adverse effect of the medication (Jones & Bartlett Learning, 2023).	administration as this medication can cause tachycardia and shaking (U.S. National Library of Medicine, 2023).	if they are congested. The nurse should also assess the client's eyes prior to administration as long term use of this medication can result in cataracts or glaucoma.	and assess for its effectiveness by tracking urine output. The nurse should also monitor electrolyte levels and assess for signs of hypokalemia.	and look for signs of hypoglycemia such as shaking, pallor, and changes in level of consciousness (U.S. National Library of Medicine, 2022b).
Brand/Generic	Deltason (prednisone)	Daliresp (roflumilast)	Zocor (simvastatin)	Saline Mist (0.65% sodium chloride)		
Classification	Pharmacological class: Glucocorticoid Therapeutic Class: Immunosuppressant (Jones & Bartlett Learning, 2023).	Pharmacological class: Selective phosphodiesterase 4 inhibitor Therapeutic Class: Antipulmonic obstructive agent (Jones & Bartlett Learning, 2023).	Pharmacological class: HMG-CoA reductase inhibitor Therapeutic Class: Antilipemic	Pharmacological class: Electrolyte Therapeutic Class: Nasal lubricant (Drugs.com, 2024)		
Reason Client Taking	To treat acute inflammation of the lungs related to pneumonia (Jones & Bartlett Learning, 2023).	To reduce inflammation and lower the risk of COPD exacerbations (Jones & Bartlett Learning, 2023).	To help treat his hyperlipidemia and reduce the risk of adverse cardiovascular events (Jones & Bartlett Learning, 2023).	To help treat occasional nasal dryness and congestion (Drugs.com, 2024).		
List two teaching needs for the medication pertinent to the client	-Can take this medication with food or milk to help reduce GI upset and it is best to take in the morning -Check blood sugar levels frequently as this medication can cause hyperglycemia (Jones & Bartlett Learning, 2023).	-This client has a history of depression and this medication can worsen depression and increase suicidal thinking; therefore, this client should be told this information and encouraged to reach out to his provider if he notices an increase in these symptoms. -This is not a rescue medication and should not be used to relieve acute	-Take this medication in the evening. -Avoid grapefruit juice as it can cause drug toxicity (Jones & Bartlett Learning, 2023).	-Only use 1 spray in each nostril up to 2 times a day (Drugs.com, 2024). -To instill the medication plug one nostril at a time and tilt the head forward slightly and breathe in while pressing down on the saline mist.		

		bronchospasm (Jones & Bartlett Learning, 2023).				
Key nursing assessment(s) prior to administration	The nurse should monitor the client's weight and assess for edema has this medication can cause fluid retention. Also monitor for signs of infection as long term use of steroids can cause immunosuppression (Jones & Bartlett Learning, 2023).	The nurse should assess for changes in mood or affect as this medication can increase depression symptoms. The nurse should also monitor kidney labs prior to administration as this medication can have adverse effects on the renal system (Jones & Bartlett Learning, 2023).	This medication can cause rhabdomyolysis so the nurse should assess for signs and symptoms such as muscle pain, weakness, and dark urine (Jones & Bartlett Learning, 2023).	The nurse should assess for the need for the medication by inspecting the nares prior to administration.		

Hospital Medications (Must List ALL)

Brand/Generic	Tylenol (acetaminophen)	Compazine (prochlorperazine)	Tessalon (benzonatate)	Pulmicort (budesonide)	Tums (calcium carbonate)	Coreg (carvedilol)
Classification	Pharmacologic: Non-salicylate para-aminophenol derivative Therapeutic: antipyretic, nonopioid analgesic. (Jones & Bartlett Learning, 2023).	Pharmacological class: Piperazine phenothiazine Therapeutic Class: Antiemetic	Pharmacological class: Antitussive Therapeutic Class: Antitussive (Cleveland Clinic, 2024a)	Pharmacological class: Corticosteroid Therapeutic class: Anti-asthmatic, anti-inflammatory (Jones & Bartlett Learning, 2023)	Pharmacological class: Calcium salts Therapeutic Class: Antacid, calcium replacement (Jones & Bartlett Learning, 2023).	Pharmacological class: Non-selective beta blocker and alpha-1 blocker Therapeutic Class: Antihypertensive, heart failure treatment adjunct (Jones & Bartlett Learning, 2023).
Reason Client Taking	For mild pain and if he spikes a fever.	For occasional nausea and vomiting (Jones & Bartlett Learning, 2023).	Taken as needed to help alleviate his cough (Cleveland Clinic, 2024a).	To help reduce inflammation related to pneumonia and COPD (Jones & Bartlett Learning, 2023).	To reduce symptoms of occasional reflux. (Jones & Bartlett Learning, 2023).	To help lower blood pressure (Jones & Bartlett Learning, 2023).
List two teaching needs for the medication pertinent to the client	-Do not drink alcohol while taking this medication -Notify the provider if there are signs of hepatotoxicity such as bleeding, easy bruising, or overall malaise	-Stand up slowly to avoid dizziness related to orthostatic hypotension -Avoid excess sun exposure and wear sunscreen when taking this medication (Jones &	-This medication can cause drowsiness so do not drive or perform other tasks that require mental alertness after taking this medication. -Do not break or	-Rinse out the mouth with water after each use of this medication to prevent thrush. -This is not a rescue medication and should not be used for acute bronchospasms	-Tablets should be taken 1 to 2 hours after meals. -Tablets should be taken separately from other medications as they can affect the absorption of other meds	-Warn client that this medication can cause dizziness and light headedness so change positions slowly. -Frequently monitor blood sugar because this drug can

	(Jones & Bartlett Learning, 2023).	Bartlett Learning, 2023).	chew the capsule (Cleveland Clinic, 2024a)	(Jones & Bartlett Learning, 2023).	(Jones & Bartlett Learning, 2023).	both cause hyperglycemia and mask symptoms of hypoglycemia (Jones & Bartlett Learning, 2023).
Key nursing assessment(s) prior to administration	The nurse should assess the client's liver labs prior to administration to look for signs of hepatotoxicity and be sure not to exceed the max dose of 3g in 24 hours (Jones & Bartlett Learning, 2023).	The nurse should assess blood pressure prior to administration as this medication can cause hypotension (Jones & Bartlett Learning, 2023).	The nurse should assess for side effects such as changes in level of consciousness, confusion, or hallucinations prior to administering the next dose of this medication (Cleveland Clinic, 2024a).	The nurse should monitor the client's blood pressure and blood sugar prior to administration as this drug can cause hypertension and hyperglycemia (Jones & Bartlett Learning, 2023).	The nurse should monitor serum calcium levels in the client and look for signs of toxicity such as altered mental status, constipation, and arrhythmias (Jones & Bartlett Learning, 2023).	The nurse should assess the client's blood pressure prior to administration especially since he is also taking and diuretic as the combined effects of these drugs can cause hypotension (Jones & Bartlett Learning, 2023).
Brand/Generic	Maxipime (cefepime)	Insta-Glucose (40% dextrose oral gel)	Acticlate (doxycycline hyclate)	Lovenox (enoxaparin)	Mucinex (guaifenesin)	Norco (hydrocodone-acetaminophen)
Classification	Pharmacological class: 4 th generation cephalosporin Therapeutic Class: Antibiotic	Pharmacological class: Antihypoglycemic Therapeutic Class: Glucose elevating agent (Mayo Clinic, 2024)	Pharmacological class: Tetracycline Therapeutic Class: Antibiotic (Jones & Bartlett Learning, 2023).	Pharmacologic: low molecular weight heparin Therapeutic: anticoagulant (Jones & Bartlett Learning, 2023).	Pharmacological class: Expectorant Therapeutic Class: Expectorant (U.S. National Library of Medicine, 2022a)	Pharmacologic: opioid and non-salicylate, para-aminophenol derivative combination Therapeutic: opioid analgesic and antipyretic non-opioid analgesic combination (Jones & Bartlett Learning, 2023).
Reason Client Taking	To treat his pneumonia caused by a bacterium (Jones & Bartlett Learning, 2023).	In case of hypoglycemic emergency for blood sugar less than 60 (Mayo Clinic, 2024).	To treat his pneumonia caused by bacteria (Jones & Bartlett Learning, 2023).	Prophylaxis to avoid blood clots such as a DVT due to immobility during his hospital stay (Jones & Bartlett Learning, 2023).	To help thin and loosen mucus production related to pneumonia infection (U.S. National Library of Medicine, 2022a).	As needed for severe pain (Jones & Bartlett Learning, 2023).
List two teaching needs for the medication pertinent to the client	-Immediately report severe diarrhea to the provider even if it occurs as late as 2 months after the last dose was taken as this medication increases the risk of C.diff.	-This medication is used in emergency situations only. -To use this medication twist the top off and squeeze the entire contents into the mouth and swallow	-Do not take this medication right before bed as laying down after taking it can cause burning in the throat and ulcerations; it is also helpful to drink plenty of fluids with this	-Notify the provider right away if unusual bleeding or bruising is noticed. -If administering the medication to self be sure to pinch up on a fatty area of the abdomen, do not	-Increase intake of fluids to assist the medication in thinning mucus. -This medication is often found in combination with other medications such as	-Do not take this medication alongside alcohol or other medications that contain an opioid as this can greatly increase the risk of respiratory depression. -Drink plenty of

	- Notify the provider immediately if signs of infection are noticed such as a fever or cough as this medication can result in super infections due to good bacteria also being killed off (Jones & Bartlett Learning, 2023).	(Mayo Clinic, 2024).	medication to avoid stomach upset. -Avoid sun exposure and UV light as much as possible while taking this medication and be sure to use sunscreen.	expel the air bubble from the syringe, and be sure to rotate injection sites (Jones & Bartlett Learning, 2023).	antitussives and antihistamines when sold over the counter so be sure to read labels carefully to avoid double dosing medications (U.S. National Library of Medicine, 2022a).	fluids and consume more fiber to help avoid constipation caused by opioids (Jones & Bartlett Learning, 2023).
Key nursing assessment(s) prior to administration	The nurse should assess BUN and creatinine levels prior to administration as this medication can cause nephrotoxicity and the nurse should also closely monitor bowel movements watching for severe diarrhea because this medication can result in a C.diff infection (Jones & Bartlett Learning, 2023).	The nurse should assess the client's blood sugar and assess ability of the client to swallow before giving this medication (Mayo Clinic, 2024).	The nurse should assess liver labs prior to administration as this medication is hepatotoxic and the nurse should frequently assess the client's mouth for signs of oral candidiasis (Jones & Bartlett Learning, 2023).	The nurse should monitor the client's platelet count and know that the provider should be notified if platelets fall below 100,000mm ³ and the nurse should assess for abnormal bleeding like melena or petechiae (Jones & Bartlett Learning, 2023).	The nurse should perform a gastrointestinal assessment prior to administering the next dose of this medication because its known side effects include nausea, vomiting, and diarrhea (U.S. National Library of Medicine, 2022a).	The nurse should perform a thorough respiratory assessment prior to administration to as this medication poses an increased risk for respiratory depression in clients with pulmonary disorders such as COPD (Jones & Bartlett Learning, 2023).
Brand/Generic	Senokot (sennosides)	Humalog (insulin lispro)	Combivent (ipratropium albuterol)	Circadin (melatonin)	Solu-Medrol (methylprednisolone sodium succinate)	Zofran (ondansetron)
Classification	Pharmacological class: Senna glycoside Therapeutic Class: Laxative (U.S. National Library of Medicine, 2024b)	Pharmacological class: Human insulin analog Therapeutic Class: Antidiabetic (U.S. National Library of Medicine, 2021)	Pharmacological class: Anticholinergic, adrenergic Therapeutic Class: Bronchodilator (Jones & Bartlett Learning, 2023).	Pharmacological class: Endogenous hormone Therapeutic Class: Sleep aid (U.S. National Library of Medicine, 2024a)	Pharmacological class: Glucocorticoid Therapeutic class: Corticosteroid (Jones & Bartlett Learning, 2023)	Pharmacologic: Selective serotonin receptor antagonist Therapeutic: Antiemetic (Jones & Bartlett Learning, 2023).
Reason Client Taking	To avoid constipation caused by opioid medications he is taking and lack of mobility (U.S. National Library of Medicine, 2024b).	To control blood sugar levels related to his type II diabetes (U.S. National Library of Medicine, 2021).	Maintenance treatment for COPD to help sustain bronchodilation (Jones & Bartlett Learning, 2023).	For sleep disturbances and insomnia related to his hospital stay.	To treat inflammation related to his pneumonia (Jones & Bartlett Learning, 2023).	To prevent nausea and vomiting (Jones & Bartlett Learning, 2023).
List two	-Take this	-Blood sugar	-Rinse mouth	-This	-Notify provider	-Notify the

teaching needs for the medication pertinent to the client	medication with a full glass of water. -This medication takes about 8 hours to work so taking at bedtime is best (U.S. National Library of Medicine, 2024b).	level should be assessed prior to administering this medication. -Rotate injection sites to maintain skin integrity (U.S. National Library of Medicine, 2021).	out with water after each use to minimize throat dryness and irritation . -This is not a rescue medication and should not be used for acute bronchospasm (Jones & Bartlett Learning, 2023).	medication should be taken 30 minutes before bed. -Do not drive or perform tasks that require mental alertness after taking this medication (U.S. National Library of Medicine, 2024a).	immediately if dark tarry stools are noticed or other symptoms such as fainting, joint pain, or sudden weight gain. -Increase intake of calcium supplements and vitamin D to help avoid osteoporosis caused by this medication (Jones & Bartlett Learning, 2023).	provider immediately of symptoms such as a rash or sudden chest pain as this could be a sign of a hypersensitivity reaction. -Change positions slowly as this medication can cause hypotension and dizziness (Jones & Bartlett Learning, 2023).
Key nursing assessment(s) prior to administration	The nurse should monitor bowel movements prior to administration and withhold the medication if the client begins having very loose stools (U.S. National Library of Medicine, 2024b).	The nurse should assess blood glucose level prior to administering this medication and know that this medication should be given before meals via sliding scale (U.S. National Library of Medicine, 2021).	The nurse should assess heart rate and rhythm prior to administration as this medication can cause tachycardia and atrial fibrillation (Jones & Bartlett Learning, 2023).	The nurse should assess this client's blood pressure prior to administration of this medication as it can cause decreased blood pressure (U.S. National Library of Medicine, 2024a).	The nurse should closely monitor for signs of secondary infection such as fungal infections like thrush as this medication causes immunosuppression (Jones & Bartlett Learning, 2023).	The nurse should monitor the client's labs for any electrolyte imbalances prior to administration as this medication can cause prolonged QT intervals especially if the client is hypokalemic (Jones & Bartlett Learning, 2023).
Brand/Generic	OxyContin (oxycodone)	MiraLAX (polyethylene glycol)	Slow K (potassium chloride)			
Classification	Pharmacological class: Opioid Therapeutic Class: Opioid analgesic (Jones & Bartlett Learning, 2023).	Pharmacological class: Osmotic laxative Therapeutic Class: Laxative (Cleveland Clinic, 2024b)	Pharmacological class: Electrolyte cation Therapeutic Class: Electrolyte replacement (Jones & Bartlett Learning, 2023).			
Reason Client Taking	As needed for severe pain (Jones & Bartlett Learning, 2023).	To avoid constipation related to the use of opioid analgesics and immobility.	To replace potassium due to diuretic use (Jones & Bartlett Learning, 2023).			
List two teaching needs for the medication pertinent to the client	-Take this medication with food and try to take with the same amount of food each time to maintain a consistent blood	-Take this medication with a full glass of water. -Do not use more than once a week without consulting a	-Do not crush or chew this medication as it is intended to be an extended-release medication. -Instruct the			

	level. -Do not take this medication alongside alcohol or other opioids as it can cause severe respiratory depression (Jones & Bartlett Learning, 2023).	provider (Cleveland Clinic, 2024b).	client how to take his radial pulse and to assess for any irregularities or changes in overall rhythm (Jones & Bartlett Learning, 2023).			
Key nursing assessment(s) prior to administration	The nurse should perform a very thorough respiratory assessment prior to administration of this medication because typical therapeutic doses of this medication can cause more severe respiratory depression in clients with COPD (Jones & Bartlett Learning, 2023).	The nurse should monitor the client's bowel movements prior to giving this medication and hold the medication if the client has a suspected bowel obstruction or if stools start to become too loose (Cleveland Clinic, 2024b).	The nurse should frequently assess electrolyte labs before administering this medication to make sure that potassium levels are not already elevated as increased potassium levels can result in life threatening arrhythmias (Jones & Bartlett Learning, 2023).			

Prioritize Three Hospital Medications

Medications	Why this medication was chosen	List 2 side effects. These must correlate to your client
1. cefepime	This medication was chosen because this client's primary diagnosis is hospital-acquired bacterial pneumonia. Therefore, the client should be treated with an antibiotic to eliminate the bacterial infection in his lungs. The antibiotic cefepime was chosen over his other antibiotic doxycycline because cefepime was being given intravenously and doxycycline was being given orally. IV antibiotics directly enter the bloodstream and therefore can begin treating	<p>1. Because this is a very strong antibiotic this medication puts individuals at risk for C. diff associated diarrhea (Jones & Bartlett Learning, 2023). This client is also taking the antibiotic doxycycline so he is definitely at risk for C.diff. Careful monitoring of his stools should be done.</p> <p>2. This medication can also cause thrombocytopenia and because he is receiving enoxaparin as well this could make him a potential bleeding risk (Jones &</p>

	infections faster than oral antibiotics.	Bartlett Learning, 2023). The nurse should watch for unusual bleeding or bruising.
2. methylprednisolone sodium succinate	This medication was chosen because it is a very potent anti-inflammatory steroid that is very helpful in treating pneumonia by decreasing inflammation in the lungs and subsequently making respiratory efforts easier (Jones & Bartlett Learning, 2023). Steroids are commonly used to help treat pneumonia and this medication was chosen over the inhaled budesonide because budesonide is primarily an anti-asthmatic drug and methylprednisolone would likely be more effective in treating his acute diagnosis of pneumonia.	<p>1. This medication can cause hypokalemia (Jones & Bartlett Learning, 2023). Because this client is already taking a potassium wasting diuretic he is at increased risk for hypokalemia which can cause life threatening arrhythmias.</p> <p>2. This medication can also cause hyperglycemia (Jones & Bartlett Learning, 2023). This client is a type II diabetic so careful monitoring of his blood sugar levels should be done.</p>
3. ipratropium albuterol	This medication was chosen because it is a combination medication where ipratropium bromide and albuterol sulfate both work to relax the airway and prevent bronchospasm (Jones & Bartlett Learning, 2023). The combination of these two medications also helps create more sustained bronchodilation than just using albuterol sulfate alone (Jones & Bartlett Learning, 2023). Therefore, if only one inhaled bronchodilator could be chosen, then this medication would be extremely helpful in treating this client's COPD and would also assist his recovery from pneumonia.	<p>1. This medication can cause dizziness and weakness (Jones & Bartlett Learning, 2023). This client had stated that he becomes dizzy and light-headed after coughing and this medication could make these symptoms worse. Dizziness and weakness make this client a higher fall risk.</p> <p>2. This medication can also cause hypotension (Jones & Bartlett Learning, 2023). Because this client is also taking furosemide and carvedilol to help lower his blood pressure he is at an increased risk for hypotension which could lead to falls if he stands up too quickly.</p>

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Physical Exam

HIGHLIGHT ALL PERTINENT ABNORMAL FINDINGS

<p>GENERAL: Alertness: awake, alert Orientation: x4 Distress: mild Overall appearance: well-groomed, tired Infection Control precautions: droplet & contact Client Complaints or Concerns: “Respiratory therapy takes too long to get me treatments.”</p>	<p>Upon assessment this client was alert and oriented to person, place, time, and situation. Client was calm and cooperative. He appeared to be in mild distress after episodes of coughing as it could be seen that his respiratory efforts increased slightly. His overall appearance was well-groomed, but he appeared very tired. He is currently on contact and droplet precautions due to his diagnosis of pneumonia. Client made comment that he is unhappy with how long it takes respiratory therapy to come do his treatments and he feels that they should be done more frequently.</p>
<p>VITAL SIGNS: Temp: 98.0°F Resp rate: 18 bmp Pulse: 73 bmp B/P: 132/70 Oxygen: 96%</p>	<p>During shift, client’s vital signs were stable. Blood pressure was taken on right upper arm with client sitting and temperature was taken orally. Client became tachypneic at times, particularly after coughing fits. Client is currently receiving oxygen via nasal cannula at 4L and is</p>

Delivery Method: nasal cannula	on continuous pulse oximetry .
PAIN ASSESSMENT: Time: 10:54 Scale: 3 on Numeric Rating Pain Scale Location: chest and back Severity: mild Characteristics: “achy” Interventions: repositioning, increase fluids	Client rated pain a 3 out of 10 stating that he felt “achy” in his chest and back. He reported that his pain level had decreased from earlier though after administration of pain medications. Client was encouraged to change positions in bed frequently and to drink more fluids to help loosen the mucus stuck in his chest.
IV ASSESSMENT: Size of IV: 20 G Location of IV: left lower forearm Date on IV: 10/12/24 Patency of IV: patent Signs of erythema, drainage, etc.: none IV dressing assessment: clean, dry, intact Fluid Type/Rate or Saline Lock: saline lock	This client had a 20 gauge IV in place on the lower left forearm that was inserted on 10/12/24. The IV was patent and the site showed no signs of redness, irritation, or infiltration. IV was secured with transparent dressing and tape that was clean, dry, and intact. Saline lock in place.
INTEGUMENTARY: Skin color: pale, appropriate for ethnicity Character: dry, intact Temperature: warm Turgor: no tenting Rashes: none Bruises: yes Wounds: no Braden Score: 23 Drains present: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type: N/A	The client’s skin was pale and appropriate for ethnicity. Skin was warm to the touch, dry, and intact with the exception of his IV in the left forearm. Skin turgor was good with no tenting. Normal quantity, distribution, and texture of hair for gender. There were no rashes or open lesions, but bruising was noted on the right forearm from previous blood draws. He also had a scab on his upper right shoulder but could not recall what caused it. Client also has small scars from laparoscopic cholecystectomy and umbilical hernia repair Nails were without clubbing or cyanosis, but capillary refill was longer than 3 seconds for fingers and toes bilaterally. This client moves and ambulates well and is at low risk for pressure injuries.
HEENT: Head/Neck: WDL Ears: WDL Eyes: WDL Nose: drainage, congestion Teeth: missing some teeth	Head: The head was symmetrical and normal in size and shape for this client’s age. Trachea was midline without deviation. The carotid pulse was palpable and 2+ and there was no lymphadenopathy noted. Eyes: The sclera of the eyes was white bilaterally with bilaterally clear corneas. The conjunctiva was pink and moist and there was no drainage from the eyes. PERRLA bilaterally. EOMS intact bilaterally. Client denies use of glasses. Ears: The ears had no visible deformities, lesions, or drainage and hearing was intact Nose: The septum of the nose was midline and mucous membranes were pink. There was

	<p>mild clear drainage present and client sounded congested. Sinuses nontender. Teeth: Oral mucosa was pink and moist. The tongue and uvula midline. Hard palate is intact. Dentition appeared somewhat unhealthy with a few missing teeth. Speech was normal.</p>
<p>CARDIOVASCULAR: Heart sounds: clear, regular S1, S2, S3, S4, murmur etc. Cardiac rhythm (if applicable): N/A Peripheral Pulses: +2 Capillary refill: >3 seconds Neck Vein Distention: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Edema Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Location of Edema: N/A</p>	<p>Client's S1 and S2 sounds were clear with an overall regular rate and rhythm. No signs of murmurs, gallops, or rubs and no S3 or S4 sounds present. The apical pulse was palpable at the 5th intercostal space and left midclavicular line. Client's peripheral pulses were even and 2+ throughout bilaterally. No edema or jugular vein distension was noted. Capillary refill was greater than 3 seconds bilaterally in fingers and toes.</p>
<p>RESPIRATORY: Accessory muscle use: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Breath Sounds: Location, character</p>	<p>Generally, this client had a normal rate and pattern of respirations. He became tachypneic at times and displayed labored breathing upon exertion and after coughing fits. During and shortly after coughing fits, accessory muscles by the neck were noted to be used. Lung sounds were diminished in all fields with occasional rales. Client was coughing up thick, yellow sputum and complained of dizziness after coughing. Client has barrel shaped chest and is on continuous pulse oximetry and using 4L nasal cannula. All of this is related to his diagnosis of pneumonia and COPD.</p>
<p>GASTROINTESTINAL: Diet at home: Regular Current Diet: Regular Is Client Tolerating Diet?-yes Height: 5'8" Weight: 254 lbs Auscultation Bowel sounds: WDL Last BM: 10/11/2024 Palpation: Pain, Mass etc.: none Inspection: WDL Distention: none Incisions: none Scars: yes Drains: none Wounds: none Ostomy: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Nasogastric: Y <input type="checkbox"/> N <input checked="" type="checkbox"/></p>	<p>This client eats a regular diet at home and is also ordered a regular diet while at the hospital. He has been eating well and finishing most of his meals. Bowel sounds were normoactive in all four quadrants. This client is obese and has a large, round abdomen, but it is nondistended. Abdomen was nontender and last bowel movement was on 10/11. Client has small scars from laparoscopic cholecystectomy and umbilical hernia repair, but otherwise no rashes, lesions, or bruising was noted.</p>

<p>Size: Feeding tubes/PEG tube Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type:</p>	
<p>GENITOURINARY: Color: yellow Character: clear Quantity of urine: 500mL Pain with urination: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Dialysis: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Inspection of genitals: WDL Catheter: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type: Size:</p>	<p>Client is continent and able to ambulate to bathroom. Client states he uses the urinal when he is feeling tired. 500mL of clear urine was found in urinal during shift. Client denies any pain with urination, difficulty starting stream, or urgency.</p>
<p>Intake (in mLs) Output (in mLs)</p>	<p>During shift a total of 400mL of water and coffee was consumed and 500mL of urine was found in the urinal. Client stated to have voided another time, but this was unmeasurable because he did used the bathroom independently.</p>
<p>MUSCULOSKELETAL: Neurovascular status: cap refill >3 seconds, COPD, HTN, DM, CAD ROM: Full Supportive devices: Occasional wheelchair or scooter Strength: strong ADL Assistance: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Fall Risk: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Fall Score: 10, moderate Activity/Mobility Status: mobile Activity Tolerance: low Independent (up ad lib): yes Needs assistance with equipment: no Needs support to stand and walk: no</p>	<p>All extremities have full range of motion. Hand grips were strong and equal bilaterally. Pedal pushes and pulls were also strong and equal bilaterally. Client is able to follow commands and move purposefully. Client does complain of fatigue and has low activity tolerance related to COPD. He has good mobility, but is fairly inactive due to getting short of breath so easily. Client states to occasionally use a wheelchair or power scooter to do errands like grocery shopping that require a lot of walking. He is able to ambulate independently and due to some of his medications is considered a moderate fall risk. This client has a history of COPD, hypertension, diabetes, coronary artery disease, and has a slow capillary refill time, all of which are affecting his neurovascular status negatively.</p>
<p>NEUROLOGICAL: MAEW: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> PERLA: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Strength Equal: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> if no - Legs <input type="checkbox"/> Arms <input type="checkbox"/> Both <input type="checkbox"/> Orientation: x4 Mental Status: awake, alert</p>	<p>Client is alert and oriented to person, place, time, and situation. He moves all of his extremities well and arms and legs are equal in strength bilaterally. PERLA is intact and no facial asymmetry was noted. Speech was clear and normal. Client has normal cognition and developmental level for age. Client denies any</p>

Speech: normal Sensory: WDL LOC: awake, alert	numbness or tingling in the hands and feet.
PSYCHOSOCIAL/CULTURAL: Coping method(s): acceptance, family, dog Developmental level: Generativity vs. Stagnation Religion & what it means to pt.: Christian Personal/Family Data (Think about home environment, family structure, and available family support): lives alone, dog, family nearby.	This client verbalized acceptance of his COPD and understands that it puts him at increased risk for illnesses like pneumonia. He did state however, "there isn't much I can do about it anyway", which shows he may not be interested in making lifestyle changes to improve his health. He also stated that he was very concerned about getting the flu or COVID this fall because "people can drop dead" from those infections. He did say he got his annual flu and COVID vaccinations though. When asked, the client stated he was Christian, but does not attend church. He lives alone and has a pet dog that he cherishes. He also stated that he is independent, but that he has a nephew and son nearby that help him occasionally. However, it appears he could use more help with tasks such as grocery shopping.

Discharge Planning

Discharge location: This client has plans to be discharged to his home possibly on Wednesday October 16th.

Home health needs: This client requires home oxygen via nasal cannula and stated that he could also use assistance with activities like going to the grocery store.

Equipment needs: This client requires home oxygen, he uses a CPAP at night, and also states to use a wheelchair or power scooter occasionally, but that he already owns this equipment.

Follow up plan: This client is being directed to continue all of his home medications and is being encouraged to make appointments with respiratory therapy for continuing evaluations of his condition.

Education needs: This client could use education on home oxygen safety such as posting no smoking signs around the house and to keep the oxygen away from heat sources. He could also benefit from education on the importance of CPAP compliance as he stated he does not always wear it every night. Furthermore, because he is taking several home medications, he should receive education on the proper way to take all of his medications. Lastly, he could use general education on the importance of routine physical activity and eating small frequent meals that are high in protein to help manage his COPD.

Nursing Process

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

Nursing Diagnosis <ul style="list-style-type: none"> • Include full nursing diagnosis with “related to” and “as evidenced by” components • Listed in order by priority – highest priority to lowest priority pertinent to this client 	Rationale <ul style="list-style-type: none"> • Explain why the nursing diagnosis was chosen 	Outcome Goal (1 per dx)	Interventions (2 per goal)	Evaluation of interventions
1. Impaired gas exchange related to chronic lung disease and active pneumonia infection as evidenced by need for supplemental oxygen, dyspnea, and	This nursing diagnosis was chosen and prioritized first because this client was showing signs of severe respiratory distress upon admission to the hospital. Because of his history of COPD and the	Client will maintain adequate ventilation back to baseline and have clear breath sounds upon auscultation by discharge (Phelps,	1. Maintain continuous pulse oximetry and coordinate with respiratory therapy for prompt treatments. 2. Change the client’s position every two hours to	The client tolerated both of these interventions very well. He had no issue keeping his continuous pulse oximeter on his finger and he was very compliant with nebulizer treatments from

<p>fatigue (Phelps, 2023).</p>	<p>inflammation of his lungs due to pneumonia he is not adequately exchanging oxygen and CO₂. This can lead to hypoxia and respiratory failure which is a major risk for mortality. Therefore, his gas exchange must be very closely monitored.</p>	<p>2023).</p>	<p>mobilize secretions and help clear airways (Phelps, 2023).</p>	<p>respiratory therapy. He was also very good about changing his positions independently and liked to sit up in his recliner.</p>
<p>2. Decreased activity tolerance related to imbalance between oxygen supply and demand as evidenced by exertional dyspnea and client stating that he tires very easily when doing activities (Phelps, 2023).</p>	<p>This diagnosis was chosen and prioritized second because decreased activity tolerance will greatly affect this client's overall health. It makes it more difficult for him to complete his activities of daily living and he stated he is inactive overall. Being inactive puts him at risk of muscle weakness, bone deterioration, and worsening symptoms of COPD.</p>	<p>Client will ambulate 50 feet and show minimal signs of dyspnea by time of discharge.</p>	<p>1. Gradually increase activities to meet client's ability (Phelps, 2023). 2. Teach the client exercises to increase strength and endurance such as aerobic exercise and pursed-lip breathing (Phelps, 2023).</p>	<p>This client tolerated these interventions okay. He stated that he had been told about pursed-lip breathing before, but has trouble remembering to do it at home when he is tired. He did say that he would like to start going on more walks at home though. Given the timeframe of clinical, the student was unable to gradually increase activities performed by the client, but if given the</p>

				chance would encourage the client to increase the number of times he ambulates around the room each day.
<p>3. Ineffective health maintenance behaviors related to low self-efficacy as evidenced by poor compliance with CPAP use and client stating that he cannot do much about his condition (Phelps, 2023).</p>	<p>This diagnosis was chosen and prioritized third because the client does not appear to be taking active steps to improve his health. He stated that he does not always use his CPAP and while he appeared to accept his COPD, he also mentioned that there is not much he can do to help the condition. Being non-compliant with his CPAP further exacerbates his COPD and chronic hypoxia and if the client does not believe that he can improve his health then this can lead to poor lifestyle choices like unhealthy diet and lack of exercise.</p>	<p>By discharge the client will express a desire to improve health behaviors and demonstrate ability to perform self-care activities such as by being compliant with his CPAP each night and choosing healthy foods (Phelps, 2023).</p>	<p>1. Correct any misconceptions about the clients disease and work to instill confidence in the client's ability to manage his condition (Phelps, 2023).</p> <p>2 Discuss with the client how to manage their health during illness and educate on the importance of following treatment plans (Phelps, 2023).</p>	<p>The client was open to conversation about managing his current illness and COPD. It was explained to the client that regular exercise and a healthy diet can improve symptoms of COPD and help reduce the risk of getting infections like pneumonia. He said that he knows this, but has trouble finding the motivation to make changes. It was also explained to the client why wearing his CPAP at night is so important and how that too can improve his overall activity intolerance. He was receptive to this information,</p>

				but said the CPAP was uncomfortable. He was then encouraged to talk with his provider to see if there were modifications that could be made to make his CPAP more comfortable.
<p>4. Risk for additional infection related to chronic lung disease as evidenced by previous lung infections, diabetes, and overall inactivity (Phelps, 2023).</p>	<p>This diagnosis was chosen and prioritized last because it is simply a future risk. This client has a history of COPD and chronic respiratory failure which means he is much more susceptible to getting respiratory infections. He currently has pneumonia and also had it in September of this year as well. He also has diabetes and leads an overall inactive lifestyle which again puts him at risk for developing infections more easily.</p>	<p>Client will state at least 3 risk factors and/or ways to reduce the risks for respiratory infections prior to discharge.</p>	<p>1. Reinforce teaching of good bronchial hygiene (Phelps, 2023). 2. Teach factors that increase risk for infection as well as ways to reduce infection risk (Phelps, 2023).</p>	<p>The client tolerated these interventions well. He was taught about deep breathing, the importance of changing positions, and drinking enough fluids to help thin secretions. The client was noted to have changed positions frequently throughout the shift and was noted to be drinking a fair amount of water. He was also able to state the importance of avoiding people who are known to be sick and he said he always gets his flu shot every year.</p>

Other References (APA):

Phelps, L. L. (2023). *Nursing diagnosis reference manual* (12th ed.). Wolters Kluwer.

