

N431 Care Plan #2

Lakeview College of Nursing

Cecilia Duong

Demographics (3 points)

Date of Admission 11/05/2022	Client Initials K.K.	Age 72	Gender Male
Race/Ethnicity African American	Occupation Retired Welder	Marital Status Widowed	Allergies NKDA
Code Status DNR/DNI	Height 175.3 cm	Weight 66.2 kg	

Medical History (5 Points)

Past Medical History: Hypertension, atrial fibrillation, hyperlipidemia, chronic obstructive pulmonary disease (COPD)

Past Surgical History: Appendectomy (1995)

Family History: K.K.'s mother and brother had a history of diabetes. His father had a history of myocardial infarction. The patient reported no family history for his grandfather and grandmother on either the paternal or maternal side.

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

The patient denies past use of tobacco and recreational drugs. The patient is a casual drinker and drinks beer one to two times a month.

Assistive Devices: The patient does not use any assistive devices.

Living Situation: The patient lives at home by himself.

Education Level: The patient's highest level of education is a high school diploma.

Admission Assessment

Chief Complaint (2 points): Shortness of breath and cough.

History of Present Illness – OLD CARTS (10 points): The 72-year-old African American male patient presented to the emergency room on 11/05/2022 with complaints of shortness of breath and a cough. The patient states his activity levels have declined over the last several days

due to the worsening shortness of breath. The patient states he has generalized pain all over his body, which is dull. The patient says exertion aggravates the shortness of breath, and rest periods alleviate the shortness of breath. The patient mentions that using his PRN oxygen at 2L/min by nasal cannula helps alleviate the pain as well.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): COPD exacerbation

Secondary Diagnosis (if applicable): N/A

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

Chronic obstructive pulmonary disease (COPD) exacerbation is the patient's primary diagnosis (Capriotti & Frizzell, 2020). A prevalent and curable illness called COPD is tissue loss and a growing airflow restriction (Capriotti & Frizzell, 2020). It links to structural lung abnormalities resulting from chronic inflammation brought on by long-term exposure to harmful particles or gases, most frequently cigarette smoke (Capriotti & Frizzell, 2020). Airway constriction and reduced lung recoil are effects of chronic inflammation. Coughing, dyspnea, and sputum production are common signs of the condition (Capriotti & Frizzell, 2020). Symptoms might vary from asymptomatic to respiratory failure (Capriotti & Frizzell, 2020). Long-term exposure to hazardous chemicals or particles is the leading cause of COPD (Capriotti & Frizzell, 2020). The most frequent cause of COPD in the globe is cigarette smoking. Other factors include exposure to secondhand smoke, the environment, or the workplace (Capriotti & Frizzell, 2020).

COPD is an inflammatory disease that affects the pulmonary vasculature, lung parenchyma, and airways (Capriotti & Frizzell, 2020). Protease-antiprotease imbalances and oxidative stress play a role in the process (Capriotti & Frizzell, 2020). *Emphysema* is the name

given to one of the structural alterations associated with COPD, in which the lungs' gas-exchanging surfaces, known as alveoli, are destroyed, causing obstructive physiology (Capriotti & Frizzell, 2020). Emphysema results from an inflammatory reaction to an irritant (such as smoking) (Capriotti & Frizzell, 2020). The recruitment of neutrophils and macrophages results in the release of many inflammatory mediators (Capriotti & Frizzell, 2020). Oxidants and excessive proteases destroy the air sacs (Capriotti & Frizzell, 2020). Airways collapse during expiration due to the lack of elastic recoil caused by the protease-mediated degradation of elastin (Capriotti & Frizzell, 2020). The inflammatory response and airway blockage reduce the forced expiratory volume, while airflow restriction and decreased gas exchange are causes of tissue damage (Capriotti & Frizzell, 2020). Imaging examinations frequently reveal hyperinflation of the lungs, which results from air getting trapped when the airways collapse during exhalation (Capriotti & Frizzell, 2020). Increased carbon dioxide (CO₂) levels cause the inability to exhale adequately (Capriotti & Frizzell, 2020). A common symptom of illness progression is impaired gas exchange, resulting in decreased ventilation or an increase in physiologic dead space, causing CO₂ retention (Capriotti & Frizzell, 2020). Hypoxemia-induced diffuse vasoconstriction may lead to pulmonary hypertension (Capriotti & Frizzell, 2020). COPD acute exacerbations are frequent and typically triggered by bacterial or viral pneumonia and environmental irritants (Capriotti & Frizzell, 2020). Increased inflammation and air embolism frequently necessitate corticosteroid and bronchodilator therapy (Capriotti & Frizzell, 2020).

The symptoms of COPD often appear in maturity, frequently in the winter (Hinkle et al., 2022). Patients typically complain of persistent, chronic dyspnea, a productive cough, and sputum production (Hinkle et al., 2022). Additionally, patients may have wheezing and chest tightness (Hinkle et al., 2022). Although smoking history is present in most cases, many people

lack it (Hinkle et al., 2022). Patients with a confirmed diagnosis of COPD may also exhibit muscular atrophy, auxiliary respiratory muscle use, more prolonged expiration, wheezing, pursed lip breathing, and an enlarged anterior-posterior chest wall diameter (barrel chest) (Hinkle et al., 2022). The blood pressure and respirations of a person with COPD exacerbation may increase (Hinkle et al., 2022). K.K. was evaluated by the student at 0900, with the following vital signs: 88 beats per minute for the pulse, 152/68 for blood pressure, 24 breaths per minute for respiration, 36.5 degrees Celsius for temperature, and 98% oxygen on 2L through a nasal cannula. The patient had 68 beats per minute of pulse, 132/62 mmHg of blood pressure, 24 breaths per minute of respiration, a temperature of 36.8 degrees Celsius, and 97% oxygen on 2L via nasal cannula during the student's second evaluation at 1100. During this clinical change, the patient's systolic and diastolic blood pressure dropped from 152/68 mmHg to 132/62 mmHg. At the same time, his breathing rate stayed at 24 breaths per minute, indicating the patient was hypertensive and tachypneic.

Spirometry, a six-minute walk test, blood work, and radiographic imaging all help to confirm the diagnosis (Hinkle et al., 2022). An inhaled bronchodilator is given both before and after spirometry tests are completed (Hinkle et al., 2022). A six-minute walk test evaluates a patient's submaximal functional capacity (Hinkle et al., 2022). To check for infections, anemia, and polycythemia during laboratory testing, a complete blood count (CBC) is frequently necessary (Hinkle et al., 2022). During this hospital visit, K.K. underwent an arterial blood gas, CBC, and chemistry lab test. A chest x-ray and computed tomography (CT) are two diagnostic procedures that medical professionals might utilize (Hinkle et al., 2022). On chest x-rays, the patient's diaphragm is flat, and the anterior-posterior diameter may be larger (Hinkle et al., 2022). Patients with bronchiectasis, cancer patients, or those contemplating surgical operations

may find CT imaging helpful (Hinkle et al., 2022). During this hospital visit, K.K. underwent diagnostic procedures like electrocardiography and a chest x-ray with one view.

Controlling symptoms, enhancing the quality of life, and lowering mortality are the main targets of treatment (Hinkle et al., 2022). The non-pharmacological strategy involves lung rehabilitation and smoking cessation (Hinkle et al., 2022). Bronchodilators, corticosteroids, and antibiotics can treat mild instances outside the hospital, and inpatient management treats moderate and severe cases (Hinkle et al., 2022). Surgery such as a bullectomy, a lung volume reduction procedure, or a lung transplant may be necessary in severe cases (Hinkle et al., 2022). K.K. has been given antibiotics to treat this condition and is tolerating the medication well. The patient's treatment plan includes continuous home oxygen therapy at 2L via nasal cannula, a tapering dose of prednisone, and five days of oral azithromycin.

Pathophysiology References (2) (APA):

Capriotti, T. & Frizzell, J.P. (2020). *Pathophysiology: Introductory concepts and clinical perspectives*. (2nd ed.). F.A. Davis Company.

Hinkle, J. L., Cheever, K. H., & Overbaugh, K. (2022). *Brunner & Suddarth's textbook of medical-surgical nursing* (15th ed.). Wolters Kluwer.

Laboratory Data (15 points)

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

Lab	Normal Range	Admission Value	Today's Value	Reason for Abnormal Value
RBC	3.80-5.41	N/A	N/A	N/A

Hgb	11.3-15.2	13.6	N/A	N/A
Hct	33.2-45.3	N/A	N/A	N/A
Platelets	149-393	N/A	N/A	N/A
WBC	4.0-11.7	9.4	N/A	N/A
Neutrophils	45.3-79.0	N/A	N/A	N/A
Lymphocytes	11.8-45.9	N/A	N/A	N/A
Monocytes	4.4-12.0	N/A	N/A	N/A
Eosinophils	0.0-6.3	N/A	N/A	N/A
Bands	0.0-6.0	N/A	N/A	N/A

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

Lab	Normal Range	Admission Value	Today's Value	Reason For Abnormal
Na-	136-145	124	N/A	Hypercapnia results indicate water retention due to other comorbidities (Pagana et al., 2020). Hyponatremia is a common factor during acute exacerbations due to the patient's use of bronchodilators, steroids, malnutrition, and inadequate intake (Pagana et al., 2020).
K+	3.5-5.1	2.8	N/A	Hypokalemia in COPD patients can indicate respiratory acidosis (Pagana et al., 2020). An imbalance of potassium can cause respiratory muscle weakness and impair airway function (Pagana et al., 2020).
Cl-	98-107	N/A	N/A	N/A
CO2	21-31	N/A	N/A	N/A
Glucose	74-109	94	N/A	N/A

BUN	7-25	24	N/A	N/A
Creatinine	0.70-1.30	2.8	N/A	Increased creatinine levels indicate that the kidneys are not functioning correctly due to dehydration and breathing complications (Pagana et al., 2020).
Albumin	3.5-5.2	N/A	N/A	N/A
Calcium	8.6-10.3	N/A	N/A	N/A
Mag	1.6-2.4	N/A	N/A	N/A
Phosphate	2.5-4.5	N/A	N/A	N/A
Bilirubin	0.3-1.0	N/A	N/A	N/A
Alk Phos	34-104	N/A	N/A	N/A
AST	13-39	N/A	N/A	N/A
ALT	7-52	N/A	N/A	N/A
Amylase	30-110	N/A	N/A	N/A
Lipase	11-82	N/A	N/A	N/A
Lactic Acid	0.5-2.0	N/A	N/A	N/A
Troponin	0.000-0.030	N/A	N/A	N/A
CK-MB	0.60-6.30	N/A	N/A	N/A
Total CK	30-223	N/A	N/A	N/A

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

Lab Test	Normal Range	Value on Admission	Today's Value	Reason for Abnormal
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INR	0.86-1.14	N/A	N/A	N/A
PT	11.9-15.0	N/A	N/A	N/A
PTT	22.6-35.3	N/A	N/A	N/A
D-Dimer	0.00-0.62	N/A	N/A	N/A
BNP	0-100	N/A	N/A	N/A
HDL	<60	N/A	N/A	N/A
LDL	<100	N/A	N/A	N/A
Cholesterol	<200	N/A	N/A	N/A
Triglycerides	<150	N/A	N/A	N/A
Hgb A1c	4-5.6%	N/A	N/A	N/A
TSH	0.4-5.0	N/A	N/A	N/A

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

Lab Test	Normal Range	Value on Admission	Today's Value	Reason for Abnormal
Color & Clarity	Yellow/Clear	N/A	N/A	N/A
pH	5.0-8.0	N/A	N/A	N/A
Specific Gravity	1.005-1.034	N/A	N/A	N/A
Glucose	Low-Normal	N/A	N/A	N/A
Protein	Low-Negative	N/A	N/A	N/A
Ketones	Low-Negative	N/A	N/A	N/A
WBC	< or = 5	N/A	N/A	N/A
RBC	0-3	N/A	N/A	N/A
Leukoesterase	Low-Negative	N/A	N/A	N/A

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

Test	Normal Range	Value on Admission	Today's Value	Explanation of Findings
pH	7.35-7.45	7.25	N/A	Lower pH values signify that the blood is more acidic, which causes the brain regions that control respiration to produce faster and deeper breathing (Pagana et al., 2020). Due to the patient's COPD diagnosis, the body will attempt to raise the pH level by making the patient breathe more deeply and quickly (Pagana et al., 2020).
PaO2	80-100	91	N/A	N/A
PaCO2	33-45	84	N/A	High PaCO2 values signify a diminished capacity to exhale carbon dioxide adequately (Pagana et al., 2020). Since the patient has a COPD exacerbation and a low pH level, breathing more quickly and deeply will result in more carbon dioxide inhaled and less CO2 expelled (Pagana et al., 2020).
HCO3	21-28	24	N/A	N/A
SaO2	95-100	N/A	N/A	N/A

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

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

	Negative			
Sputum Culture	Positive or Negative	N/A	N/A	N/A
Stool Culture	Positive or Negative	N/A	N/A	N/A

Lab Correlations Reference (1) (APA):

Pagana, K. D., Pagana, T. J., & Pagana, T. N. (2020). *Mosby's diagnostic and laboratory test reference* (15th ed.). Mosby.

Diagnostic Imaging

All Other Diagnostic Tests (5 points):

Electrocardiography (EKG): 11/05/2022

The patient arrived at the emergency department, and per protocol, an EKG was necessary due to the patient’s chief complaint of shortness of breath and cough. The results indicated atrial fibrillation at a rate of 88 beats per minute.

X-Ray Chest One View: 11/05/2022

The interpreting radiologist indicated that the patient had a COPD exacerbation. The radiologist’s impression stated that the findings were consistent with chronic bronchitis and no acute findings.

Diagnostic Test Correlation (5 points):

Electrocardiography (EKG): 11/05/2022

Shortness of breath and a history of atrial fibrillation was the primary indications for this diagnostic procedure. The doctor prescribed this test per the emergency room's protocol to record the heart's electrical activity and look for heart issues related to the patient's primary complaint

(Hinkle et al., 2022). EKG assists in assessing the performance of the heart (Hinkle et al., 2022).

To record the heart's electrical impulses, measure the heartbeat's rhythm, and evaluate the strength and timing of the electrical impulses, electrodes attach through lead cables to EKG equipment (Hinkle et al., 2022).

X-Ray Chest One View: 11/05/2022

Coughing, shortness of breath, and a history of COPD were indications for this diagnostic procedure. Examining the lung cavity's cardiac, respiratory, and skeletal components with a chest x-ray looks for any possible disease or infection (Hinkle et al., 2022). X-rays exclude lung infections and cancer, which may not reveal illnesses connected to valvular heart disease and pulmonary arterial hypertension (Hinkle et al., 2022).

Diagnostic Test Reference (1) (APA):

Hinkle, J. L., Cheever, K. H., & Overbaugh, K. (2022). *Brunner & Suddarth's textbook of medical-surgical nursing* (15th ed.). Wolters Kluwer.

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

Home Medications (5 required)

Generic/Brand	lisinopril/ Prinivil	amiodarone hydrochlori de/ Cordarone	acetylsalicyl ic acid/ Aspirin	atorvastatin calcium/ Lipitor	metoprolol tartrate/ Lopressor
Dose	40 mg	200 mg	81 mg	40 mg	50 mg
Frequency	Daily	Daily	Daily	Daily HS	BID

Route	PO	PO	PO	PO	PO
Classification	Pharmacologic class: Angiotensin-converting enzyme (ACE) inhibitor Therapeutic class: Antihypertensive	Pharmacologic class: Benzofuran derivative Therapeutic class: Class III antiarrhythmic	Pharmacologic class: Salicylate Therapeutic class: NSAID (anti-inflammatory, antiplatelet, antipyretic, nonopioid analgesic)	Pharmacologic class: HMG-CoA reductase inhibitor Therapeutic class: Antihyperlipidemic	Pharmacologic class: Beta ₁ -adrenergic blocker Therapeutic class: Antianginal, antihypertensive
Mechanism of Action	It may reduce blood pressure by inhibiting the conversion of angiotensin I to angiotensin II (Jones & Bartlett Learning, 2021). Angiotensin II is a potent vasoconstrictor that stimulates the adrenal cortex to secrete aldosterone (Jones & Bartlett Learning, 2021).	Acts on cardiac cell membranes, prolonging repolarization and the refractory period and raising ventricular threshold (Jones & Bartlett Learning, 2021). This medication relaxes vascular smooth muscles, mainly in coronary circulation, and improves myocardial blood flow (Jones & Bartlett Learning, 2021).	Aspirin blocks the activity of cyclooxygenase, the enzyme needed for prostaglandin synthesis (Jones & Bartlett Learning, 2021). Prostaglandins, essential mediators in the inflammatory response, cause local vasodilation with swelling and pain (Jones & Bartlett Learning, 2021).	Reduces plasma cholesterol and lipoprotein levels by inhibiting HMG-CoA reductase and cholesterol synthesis in the liver and by increasing the number of LDL receptors on liver cells to enhance LDL uptake and breakdown (Jones & Bartlett Learning, 2021).	Inhibits stimulation of beta ₁ -receptor sites, located mainly in the heart, resulting in decreased cardiac excitability, cardiac output, and myocardial oxygen demand (Jones & Bartlett Learning, 2021). Metoprolol also helps reduce blood pressure by decreasing renal release of renin (Jones & Bartlett Learning, 2021).

					Learning, 2021).
Reason Client Taking	To treat hypertension .	To manage atrial fibrillation.	To relieve mild to moderate pain from inflammation.	To treat high cholesterol.	To manage hypertension.
Contraindications (2)	- Hypersensitivity to lisinopril, other ACE inhibitors, or their components (Jones & Bartlett Learning, 2021). - Concurrent aliskiren use in patients with diabetes (Jones & Bartlett Learning, 2021).	- Bradycardia that causes syncope and cardiogenic shock (Jones & Bartlett Learning, 2021). - Hypersensitivity to amiodarone or its components, SA node dysfunction, second- and third-degree AV block (Jones & Bartlett Learning, 2021).	- Active bleeding or coagulation disorders (Jones & Bartlett Learning, 2021). - Hypersensitivity to aspirin, aspirin products, and other NSAIDs (Jones & Bartlett Learning, 2021).	- Active hepatic disease (Jones & Bartlett Learning, 2021). - Hypersensitivity to atorvastatin or its components (Jones & Bartlett Learning, 2021).	- Hypersensitivity to metoprolol, other beta blockers, or their components (Jones & Bartlett Learning, 2021). - Cardiogenic shock, heart block greater than first degree, overt cardiac failure, and sinus bradycardia (Jones & Bartlett Learning, 2021).
Side Effects/Adverse Reactions (2)	Arrhythmias , chest pain, fluid overload, and acute renal failure. (Jones & Bartlett Learning, 2021).	Arrhythmias , cardiac arrest, heart failure, hypotension , and acute renal failure (Jones & Bartlett Learning, 2021).	Bronchospasm, diarrhea, heart burn, confusion, and nausea (Jones & Bartlett Learning, 2021).	Arrhythmias, orthostatic hypotension, and hepatic failure (Jones & Bartlett Learning, 2021).	Anxiety, confusion, arrhythmias chest pain, shortness of breath, and dyspnea (Jones & Bartlett Learning, 2021).

<p>Nursing Considerations (2)</p>	<ul style="list-style-type: none"> - Use lisinopril cautiously in patients with fluid volume deficit, heart failure, impaired renal function, or sodium depletion (Jones & Bartlett Learning, 2021). - Monitor the patient’s serum creatinine, as ordered, because changes in renal function can occur with lisinopril use. If renal function decreases, alert the prescriber and expect the drug to be withheld or discontinued (Jones & Bartlett Learning, 2021). 	<ul style="list-style-type: none"> - Monitor vital signs and oxygen levels often during and after giving amiodarone. Keep emergency equipment and drugs nearby (Jones & Bartlett Learning, 2021). - Monitor liver enzymes, as ordered. If elevations become persistent and significant, notify the prescriber and expect maintenance dosage to be reduced or the drug discontinued (Jones & Bartlett Learning, 2021). 	<ul style="list-style-type: none"> - Ask the patient about tinnitus (Jones & Bartlett Learning, 2021). This reaction usually occurs when the blood aspirin level reaches or exceeds the maximum dosage for therapeutic effect (Jones & Bartlett Learning, 2021). - Use caution with co-administration with other anticoagulant medications because it can increase the risk of bleeding (Jones & Bartlett Learning, 2021). 	<ul style="list-style-type: none"> - Use atorvastatin cautiously in patients who consume substantial quantities of alcohol or have a history of liver disease because atorvastatin use increases the risk of liver dysfunction (Jones & Bartlett Learning, 2021). - Expect to measure lipid levels two to four weeks after therapy starts, adjust dosage as directed, and repeat periodically until lipid levels are within the desired range (Jones & Bartlett Learning, 2021). 	<ul style="list-style-type: none"> - Use cautiously in angina or hypertension patients with congestive heart failure because beta-blockers such as metoprolol can further depress myocardial contractility, worsening heart failure (Jones & Bartlett Learning, 2021). - Assess ECG of patients who take metoprolol because they may be at risk for AV block (Jones & Bartlett Learning, 2021).
<p>Key Nursing Assessment(s)/Lab(s) Prior to</p>	<ul style="list-style-type: none"> - Assess blood pressure 	<ul style="list-style-type: none"> - Monitor blood pressure and 	<ul style="list-style-type: none"> - Assess blood pressure 	<ul style="list-style-type: none"> - Before administration, liver function 	<ul style="list-style-type: none"> - Before starting therapy for

<p>Administration</p>	<p>before administration and notify the prescriber if the patient has a persistent, nonproductive cough (Jones & Bartlett Learning, 2021). - Monitor the patient's serum creatinine, potassium, and blood glucose levels (Jones & Bartlett Learning, 2021).</p>	<p>apical pulse prior to administration. Cardiac monitoring should also be used on patients (Jones & Bartlett Learning, 2021). - Monitor liver function and thyroid function, and pulmonary function assessments (Jones & Bartlett Learning, 2021).</p>	<p>periodically and compare it to average values (Jones & Bartlett Learning, 2021). - Monitor INR, PT, and platelet count for antiplatelet effects in cardiac patients (Jones & Bartlett Learning, 2021).</p>	<p>tests, serum cholesterol, and triglycerides must be performed (Jones & Bartlett Learning, 2021).</p>	<p>heart failure, expect to give an ACE inhibitor, digoxin, and a diuretic to stabilize the patient (Jones & Bartlett Learning, 2021). - Monitor the patient's ECG, blood glucose, blood pressure, and heart rate before giving the medication (Jones & Bartlett Learning, 2021).</p>
<p>Client Teaching Needs (2)</p>	<p>- Explain that lisinopril helps to control, but does not cure, hypertension and that patient may need lifelong therapy (Jones & Bartlett Learning, 2021).</p>	<p>- Instruct patient to take oral drugs consistently regarding meals (Jones & Bartlett Learning, 2021). - Instruct the patient to report abnormal bleeding or</p>	<p>- Instruct patient to take aspirin with food or after meals because it may cause GI upset if taken on an empty stomach (Jones & Bartlett Learning, 2021). - Advise</p>	<p>- Advise the patient to notify the prescriber immediately if he develops unexplained muscle pain, tenderness, or weakness, especially if accompanied by fatigue or fever (Jones & Bartlett Learning,</p>	<p>- Caution patient not to stop the drug abruptly (Jones & Bartlett Learning, 2021). - Advise patient to notify prescriber if pulse rate falls below 60</p>

	- Teach the patient how to check their blood pressure at home and the parameters of when to take or withhold this medication (Jones & Bartlett Learning, 2021).	bruising and to report cough, dark urine, dyspnea, wheezing, and sudden change in the rapidity of the pulse (Jones & Bartlett Learning, 2021).	patient to avoid alcohol while taking aspirin to decrease the risk of ulcers (Jones & Bartlett Learning, 2021).	2021). - Instruct the patient to take the drug simultaneously daily to maintain its effects (Jones & Bartlett Learning, 2021).	beats/minute or is significantly lower than usual (Jones & Bartlett Learning, 2021).
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Hospital Medications (5 required)

Brand/Generic	ipratropium bromide / DuoNeb	potassium chloride/ Klotrix	azithromycin/ Zithromax	levofloxacin/ Levaquin	acetaminophen/ Tylenol
Dose	1 Nebule	40 mEq	500 mg	750 mg	650 mg
Frequency	Q4H PRN	Once	Daily	Daily	Q6H PRN
Route	Inhaled	IV	PO	IV	PO
Classification	Pharmacologic class: Anticholinergic Therapeutic class: Bronchodilator	Pharmacologic class: Electrolyte cation Therapeutic class: Electrolyte replacement	Pharmacologic class: Macrolide Therapeutic class: Antibiotic	Pharmacologic class: Fluoroquinolone Therapeutic class: Antibiotic	Pharmacologic class: Nonsalicylate, para-aminophenol derivative Therapeutic class: Antipyretic, nonopioid analgesic
Mechanism of Action	After acetylcholine is released	Acts as the major cation in	Binds to a ribosomal subunit of	Interferes with bacterial cell replication by	Inhibits the enzyme cyclooxygen

	<p>from cholinergic fibers, ipratropium prevents it from attaching to muscarinic receptors on membranes of smooth-muscle cells (Jones & Bartlett Learning, 2021). By blocking acetylcholine's effects in bronchi and bronchioles, ipratropium relaxes smooth muscles and causes bronchodilation (Jones & Bartlett Learning, 2021).</p>	<p>intracellular fluid, activating many enzymatic reactions essential for physiologic processes, including nerve impulse transmission and cardiac and skeletal muscle contraction (Jones & Bartlett Learning, 2021).</p>	<p>susceptible bacteria, blocking peptide translocation and inhibiting RNA-dependent protein synthesis (Jones & Bartlett Learning, 2021). Drug concentrates in phagocytes, macrophages, and fibroblasts, which release it slowly and may help move it to infection sites (Jones & Bartlett Learning, 2021).</p>	<p>inhibiting the enzyme DNA gyrase, which is essential for repair and replication of bacterial DNA (Jones & Bartlett Learning, 2021).</p>	<p>ase, blocking prostaglandin production and interfering with pain impulse generation in the peripheral nervous system (Jones & Bartlett Learning, 2021). Acetaminophen also acts directly on temperature-regulating center in the hypothalamus by inhibiting synthesis of prostaglandin E₂ (Jones & Bartlett Learning, 2021).</p>
Reason Client Taking	To manage shortness of breath and wheezing.	To treat hypokalemia.	To kill certain bacteria and reduce inflammation in the lungs.	To decrease COPD exacerbation and manage thyroid hormone levels.	To relieve mild to moderate pain and fever.
Contraindications (2)	- Hypersensitivity to atropine (Jones & Bartlett Learning,	- Acute dehydration, Addison's disease, concurrent use with amiloride or	- History or cholestatic jaundice or hepatic dysfunction associated	- Hypersensitivity to levofloxacin, other fluoroquinolones, or their	- Hypersensitivity to acetaminophen or its components (Jones &

	2021). - Hypersensitivity to ipratropium bromide and its components (Jones & Bartlett Learning, 2021).	triamterene, or potassium-sparing diuretics (Jones & Bartlett Learning, 2021). - Hyperkalemia and hypersensitivity to potassium salts or their components (Jones & Bartlett Learning, 2021).	with prior use of azithromycin (Jones & Bartlett Learning, 2021). - Hypersensitivity to azithromycin, erythromycin, ketolide antibiotics, and other macrolide antibiotics or their components (Jones & Bartlett Learning, 2021).	components (Jones & Bartlett Learning, 2021). - History of myasthenia gravis (Jones & Bartlett Learning, 2021).	Bartlett Learning, 2021). - Severe hepatic impairment and severe active liver disease (Jones & Bartlett Learning, 2021).
Side Effects/Adverse Reactions (2)	Atrial fibrillation, dizziness, bradycardia, constipation, and bronchospasm (Jones & Bartlett Learning, 2021).	Arrhythmias, asystole, blood stools, pulmonary edema, dyspnea, and pruritus (Jones & Bartlett Learning, 2021).	Arrhythmias, chest pain, seizures, anxiety, and fatigue (Jones & Bartlett Learning, 2021).	Increased intracranial pressure, seizures, hypoglycemia, and diarrhea (Jones & Bartlett Learning, 2021).	Hypotension, agitation, abdominal pain, diarrhea, hepatotoxicity, and wheezing (Jones & Bartlett Learning, 2021).
Nursing Considerations (2)	- When using a nebulizer, apply a mouthpiece to prevent the drug from leaking	- Infuse potassium slowly at a controlled rate using a calibrated infusion device to	- Monitor elderly patients closely for arrhythmias because they are more susceptible	- Use levofloxacin cautiously in patients with renal insufficiency. Monitor renal function as	- Use acetaminophen cautiously in patients with hepatic impairment, active

	<p>out around the mask and causing blurred vision or eye pain (Jones & Bartlett Learning, 2021). - Use ipratropium cautiously in patients with angle-closure glaucoma, benign prostatic hyperplasia, or bladder neck obstruction and patients with hepatic or renal dysfunction (Jones & Bartlett Learning, 2021).</p>	<p>avoid phlebitis and decrease the risk of adverse cardiac reactions (Jones & Bartlett Learning, 2021). - Regularly assess the patient for signs of hypokalemia, such as arrhythmias, fatigue, and weakness (Jones & Bartlett Learning, 2021).</p>	<p>to drug effects on the QT interval (Jones & Bartlett Learning, 2021). - Use azithromycin cautiously in patients with hepatic dysfunction not associated with prior use of azithromycin or renal dysfunction (Jones & Bartlett Learning, 2021).</p>	<p>appropriate during treatment (Jones & Bartlett Learning, 2021). - Monitor the patient's bowel elimination. If diarrhea develops, obtain a stool culture to check for pseudomonas colitis (Jones & Bartlett Learning, 2021).</p>	<p>hepatic disease, alcoholism, chronic malnutrition, severe hypovolemia, or severe renal impairment (Jones & Bartlett Learning, 2021). - Monitor renal function in a patient on long-term therapy. Remember that blood or albumin in the urine may indicate nephritis and that decreased urine output may indicate renal failure (Jones & Bartlett Learning, 2021).</p>
<p>Key Nursing Assessment(s)/Lab(s) Prior to Administration</p>	<p>- Monitor for allergic reactions, tightness in the throat and chest, wheezing, cough, or skin</p>	<p>- Monitor serum potassium levels before and during the administration of IV potassium</p>	<p>- Obtain culture and sensitivity test results, if possible, before starting therapy (Jones &</p>	<p>- Expect to obtain culture and sensitivity tests before levofloxacin treatment begins. - Assess heart rate, ECG, and</p>	<p>- Monitor liver function test results, including AST, ALT, bilirubin, and creatinine</p>

	<p>reactions (Jones & Bartlett Learning, 2021). - Monitor respiratory rate, oxygen saturation, and lung sounds before administration (Jones & Bartlett Learning, 2021).</p>	<p>(Jones & Bartlett Learning, 2021). - Monitor serum creatinine level and urine output because the adequate renal function is needed for potassium supplementation (Jones & Bartlett Learning, 2021).</p>	<p>Bartlett Learning, 2021). - Assess the patient for anaphylaxis and infection through vital signs, wound appearance, sputum, urine, stool, and WBC count (Jones & Bartlett Learning, 2021).</p>	<p>heart sounds, especially during exercise, and report any rhythm disturbances or symptoms of increased arrhythmias, including palpitations, chest discomfort, and shortness of breath (Jones & Bartlett Learning, 2021).</p>	<p>levels, because acetaminophen may cause hepatotoxicity (Jones & Bartlett Learning, 2021). - Assess for an allergy to acetaminophen, assess for pain by having the patient rate on a numeric scale, and assess temperature if given as an antipyretic (Jones & Bartlett Learning, 2021).</p>
<p>Client Teaching Needs (2)</p>	<p>- Teach the patient to use an inhaler or nasal spray. Teach them to shake the inhaler well at each use (Jones & Bartlett Learning, 2021). - Instruct patient to</p>	<p>- Inform the patient that potassium is part of a regular diet and that most meats, seafood, fruits, and vegetables contain sufficient potassium to meet the</p>	<p>- Tell the patient to immediately report signs and symptoms of allergic reactions such as rash, itching, hives, chest tightness, and trouble breathing (Jones &</p>	<p>- Advise the patient to increase fluid intake during therapy to prevent crystalluria (Jones & Bartlett Learning, 2021). - Advise patient to notify prescriber</p>	<p>- Caution patients not to exceed recommended dosage or take other drugs containing acetaminophen simultaneously because of the risk of liver damage</p>

	rinse mouth after each nebulizer or inhaler treatment to help minimize throat dryness and irritation (Jones & Bartlett Learning, 2021).	recommended daily intake (Jones & Bartlett Learning, 2021). - Advise patient to watch stools for changes in color and consistency and to notify prescriber if they become black tarry, or red (Jones & Bartlett Learning, 2021).	Bartlett Learning, 2021). - Warn the patient that abdominal pain and loose, watery stools may occur. If diarrhea persists or becomes severe, urge them to contact the prescriber and replace fluids (Jones & Bartlett Learning, 2021).	about severe diarrhea, even if it is more than two months after drug therapy ends (Jones & Bartlett Learning, 2021).	(Jones & Bartlett Learning, 2021). - Teach the patient to recognize signs of hepatotoxicity, such as bleeding, easy bruising, and malaise, which commonly occurs with chronic overdose (Jones & Bartlett Learning, 2021).
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Medications Reference (1) (APA):

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

Assessment

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

<p>GENERAL: Alertness: Orientation: Distress: Overall appearance:</p>	<p>Alertness: The patient was A&O x 4 Orientation: The patient was alert and oriented and was able to verify name, DOB, and location (hospital) Distress: The patient is not visibly distressed; he was calm and cooperative. Overall appearance: The patient was well-</p>
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<p>INTEGUMENTARY: Skin color: Character: Temperature: Turgor: Rashes: Bruises: Wounds: Braden Score: 19; No risk Drains present: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type:</p>	<p>groomed and had a clean look. Skin color: Color was usual for ethnicity Character: The patient’s skin was intact Temperature: Warm to the touch Turgor: Loose and elastic Rashes: None present Bruises: None present Wounds: None present Braden Score: 19, No risk for pressure ulcers</p>
<p>HEENT: Head/Neck: Ears: Eyes: Nose: Teeth:</p>	<p>Head/Neck: Trachea is midline, oral mucosa is moist and intact. Uvula is midline, no tonsil enlargement noted. Tongue is pink with no lesions. Ears: Symmetrical, tympanic membrane is pink and grey bilaterally Eyes: PERRLA patient’s pupils constricted normally, EOM was normal. Sclera appears white with no inflammation or drainage bilaterally. Nose: Septum is midline, no sign of bleeding or mucus. Teeth: No cavity present. Teeth was intact and had a yellow tint</p>
<p>CARDIOVASCULAR: Heart sounds: S1, S2, S3, S4, murmur etc. Cardiac rhythm (if applicable): Peripheral Pulses: Capillary refill: Neck Vein Distention: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Edema Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Location of Edema:</p>	<p>Heart sounds: Strong. Regular S1, S2 sounds present Cardiac rhythm: Atrial fibrillation Peripheral Pulses: Radial and pedal pulses are 3+ bilaterally and were noted at 88 and 68 beats per minute. Capillary Refill: Normal, fingertips blanched white in less than 3 seconds</p>
<p>RESPIRATORY: Accessory muscle use: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Breath Sounds: Location, character</p>	<p>Accessory Muscle: Accessory muscle was not used during respiration Breath Sounds: Diminished breath sounds throughout all lobes anteriorly and posteriorly. Location: Diminished breath sounds in all lobes bilaterally anteriorly and posteriorly. Character: Soft, low-pitched bronchial breath sounds</p>

	<p>Respiratory Rate: 24 and 24 per minute. Respirations are regular in rhythm, even, and appeared unlabored, the patient was 98% and 97% on oxygen 2L via nasal cannula.</p>
<p>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 <input type="checkbox"/> N <input checked="" type="checkbox"/> Nasogastric: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Size: Feeding tubes/PEG tube Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type:</p>	<p>Diet at home: Regular diet Current Diet: Regular diet Height: 175.3 cm Weight: 66.2 kg Auscultation Bowel sounds: Active bowel sounds in all 4 quadrants Last BM: 11/06/2022 Palpation: Pain, Mass etc.: Abdomen is soft to touch, tender to palpitation Inspection: Distention: Non-distended Incisions: N/A Scars: N/A Drains: N/A Wounds: N/A Feeding Tubes/PEG Tube: N/A</p>
<p>GENITOURINARY: Color: Character: Quantity of urine: 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: Catheter: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type: Size:</p>	<p>Color: Straw, Yellow Character: Clear Quantity of urine: 1750 mL Inspection of genitals: Clean and intact, no lesions present</p>
<p>MUSCULOSKELETAL: Neurovascular status: ROM: Supportive devices: Strength: ADL Assistance: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Fall Risk: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Fall Score: 24, Low risk Activity/Mobility Status: Independent (up ad lib) <input checked="" type="checkbox"/> Needs assistance with equipment <input type="checkbox"/></p>	<p>Neurovascular status: Radial and pedal pulse are 3+ bilaterally. Skin is warm to touch in upper and lower extremities. The patient’s skin color is normal for ethnicity. ROM: Upper extremities are equal in strength; lower extremities are equal in strength. Supportive devices: None reported. Strength: Lower extremities are equal in strength, upper extremities are equal in strength bilaterally</p>

<p>Needs support to stand and walk <input type="checkbox"/></p>	<p>ADL Assistance: None reported</p>
<p>NEUROLOGICAL: MAEW: Y <input type="checkbox"/> N <input checked="" 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: Mental Status: Speech: Sensory: LOC:</p>	<p>MAEW: Upper extremities are equal in strength bilaterally; lower extremities are equal in strength bilaterally. PERLA: Pupils constrict normally Strength Equal: Yes, upper extremities are equal in strength bilaterally; lower extremities are equal in strength bilaterally. Orientation: A & O x 4 Patient was alert and orientated. Patient was able to verify her name, DOB, and location (hospital). Mental Status: Alert and Oriented Speech: Clear Sensory: Intact LOC: Patient was alert and oriented</p>
<p>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):</p>	<p>Coping methods: The patient watches TV and utilizes sleep as coping mechanisms. Developmental level: The patient has an appropriate developmental level for his age. Religion and what it means to patient: The patient did not report having a religious preference. Personal/Family Data: The patient lives at home alone.</p>

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

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0700	88 beats per minute	152/68 mmHg	24 respirations per minute	36.5 degrees Celsius (Oral)	98% on oxygen 2L via nasal cannula
1100	68 beats per minute	138/62 mmHg	24 respirations per minute	36.8 degrees Celsius (Oral)	97% on oxygen 2L via nasal cannula

Vital Sign Trends:

The patient's vital sign trends show only minor variations between the vital signs recorded at 0700 and 1100. The patient's pulse (88 beats per minute), blood pressure (152/68 mmHg), respiration rate (24 breaths per minute), oral temperature (36.5 degrees Celsius), and oxygen saturation (98% on oxygen 2L through a nasal cannula) were all within normal ranges during the initial vital sign evaluation. At the patient's second evaluation at 1100, his vital signs were as follows: 68 beats per minute for his heartbeat, 36.8 degrees Celsius for his oral temperature, and 97% on 2L of oxygen administered through a nasal cannula. The patient had an elevated systolic blood pressure of 152 and a diastolic blood pressure of 68 mmHg at his first evaluation; these numbers dropped to 138 and 62 mmHg during the student's second evaluation. However, the patient was nonetheless hypertensive at both visits. During both assessments, the patient also showed an irregular respiratory rate of 24 breaths per minute. Due to the patient's primary diagnosis of COPD exacerbation, his increased respirations show he is tachypneic.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0700	Numeric	Generalized pain	6/10	Dull	The patient was given acetaminophen to relieve his pain.
1100	Numeric	Generalized pain	2/10	None reported	The patient stated he was in minimal pain; no intervention was needed.

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
<p>Size of IV: 20 Gauge Location of IV: Left AC Date on IV: 11/05/2022 Patency of IV: Patent, flushed with no difficulty. Signs of erythema, drainage, etc.: No complications, no signs of erythema or drainage. IV dressing assessment: No phlebitis or infiltration present. IV dressing was clean, dry, and intact, flushed with no difficulty, and there were no signs of redness or drainage around the site.</p> <p>Size of IV: 18 G Location of IV: Right hand Date on IV: 11/06/2022 Patency of IV: Patent, flushed with no difficulty. Signs of erythema, drainage, etc.: No complications, no signs of erythema or drainage. IV dressing assessment: No phlebitis or infiltration present. IV dressing was clean, dry, and intact, flushed with no difficulty, and there were no signs of redness or drainage around the site.</p>	<p>Both patient IVs are saline lock.</p>

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
<p>NS at 75 mL/hr x 4 hours – 300 mL</p> <p>Tea PO 240 mL with breakfast</p> <p>Apple juice 120 mL with breakfast</p> <p>Total: 660 mL</p>	<p>Urine 1750 mL total voided in 4 hours</p> <p>Total: 1750 mL</p>

Nursing Care

Summary of Care (2 points)

Overview of care:

During the clinical shift, this student also took his vital signs and pain level twice, administered his daily afternoon medications, encouraged bed rest, changed his soiled gown, and assisted him in ambulating to the restroom.

Procedures/testing done:

The patient did not leave the floor, and no procedures or tests were done during this clinical shift.

Complaints/Issues:

K.K. complained that ambulating for long periods made him tired and extremely short of breath, so he requested bed rest. The patient was alert and oriented, and the student checked on him frequently throughout the clinical shift.

Vital signs (stable/unstable):

K.K.'s vital signs remained stable during this clinical shift. Except for the changes in his blood pressure and respirations. The patient's systolic and diastolic blood pressures were 152/68 mmHg at 0700 and 138/62 mmHg at 1100. During this clinical shift, the patient's pulse, temperature, and oxygen levels remained normal. During the first pain assessment at 0700, the patient reported a pain level of 6/10 on a numeric scale and acetaminophen was administered for pain during this clinical shift. At 1100, the patient reported a pain level of 2/10 on a numeric scale and no interventions were needed at that time.

Tolerating diet, activity, etc.:

The patient is on a regular diet and showed no difficulties eating breakfast. K.K. tolerated activities well and showed equal strength in his lower and upper extremities when he ambulated to the restroom. The patient could ambulate to the bathroom alone during this clinical shift. K.K. complained of shortness of breath during ambulation and generalized pain during his physical assessment.

Physician notifications:

The physician was notified of the patient's blood pressure changes at 0700 (152/68 mmHg) and 1100 (138/62 mmHg). Also, the physician was notified of the patient's respirations rate of 24 breaths per minute.

Future plans for client:

The patient will continue to be monitored in the hospital until he feels strong enough to be on his own. The goal for the patient is to be on continuous oxygen therapy at home on 2L via nasal cannula. The patient will be discharged with a prednisone taper dose and five days of oral azithromycin. The goal for the patient is to ambulate for extended periods without feeling short of breath. Plans for this patient include increased fluid intake daily and sufficient rest periods throughout the day in between activities.

Discharge Planning (2 points)

Discharge location: The patient is being discharged to go back to his home.

Home health needs (if applicable): The patient requires a visiting nurse and a bath aide.

Equipment needs (if applicable): The patient does not require equipment needs.

Follow up plan: The patient will follow up with PCP in one week following discharge.

Education needs: The patient requires additional information regarding preventing and treating infections. Educating the patient to receive recommended vaccines is essential to managing COPD. Also, include information regarding bronchodilators and certain antibiotics to treat infections.

Nursing Diagnosis (15 points)

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

<p>Nursing Diagnosis</p> <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 	<p>Rationale</p> <ul style="list-style-type: none"> • Explain why the nursing diagnosis was chosen 	<p>Interventions (2 per dx)</p>	<p>Outcome Goal (1 per dx)</p>	<p>Evaluation</p> <ul style="list-style-type: none"> • How did the client/family respond to the nurse’s actions? • Client response, status of goals and outcomes, modifications to plan.
<p>1. Impaired gas exchange related to altered oxygen supply and bronchospasm as evidenced by abnormal ABG values and changes in vital signs (Vera, 2019).</p>	<p>The nursing diagnosis was chosen because the patient developed shortness of breath and cough, as indicated by the chief complaint and abnormal ABG values..</p>	<p>1. Provide an incentive spirometer to measure airflow obstruction (Vera, 2019). 2. Assess and record respiratory rate and depth. Note the use of accessory muscles, pursed-</p>	<p>1. The patient will demonstrate improved ventilation and adequate oxygenation of tissues by ABGs within the patient’s normal range and be free of symptoms of respiratory</p>	<p>- The patient responded well to the nurse’s actions because he reported no feelings of shortness of breath after ambulating and an improved cough. - Goal met: The patient reported a decrease in generalized weakness and maintained oxygen</p>

		lip breathing, and inability to speak or converse (Vera, 2019).	distress (Vera, 2019).	saturation at 97%-98% on a 2L nasal cannula by the end of the clinical shift.
2. Ineffective breathing pattern related to ineffective inspiration and expiration occurring with chronic airflow constraints as evidenced by diminished lung sounds on auscultation on both lung fields and tachypnea (Vera, 2019).	The nursing diagnosis was chosen because the patient had irregular respirations, as indicated by the physical assessment, and a non-productive cough.	1. Auscultate breath sounds as indicated and elevate the client's head of the bed (Vera, 2019). 2. Promote deep breathing exercises such as diaphragmatic, yoga, and pursed-lip breathing (Vera, 2019).	1. The patient will demonstrate an improvement in breathing patterns and maintain a respiratory rate within normal limits (Vera, 2019).	- The patient responded well to the nurse's actions because he demonstrated good breathing exercises and improved his breathing. - Goal met: The patient reported being able to breathe normally and having little to no shortness of breath upon exertion by the end of the clinical shift.
3. Self-care deficit related to requesting visiting nurses and bath aides at the time of discharge as evidenced by discharge instructions by the provider (Vera, 2019).	The nursing diagnosis was chosen because the patient was originally independent at home. However, after the hospital visit, he requested a visiting nurse and a bath aide when discharged.	1. Encourage positive reinforcement for all attempted activities, not partial achievements (Vera, 2019). 2. Implement measures to promote independence, but intervene when the patient cannot function (Vera, 2019).	1. The patient will demonstrate independence in most activities attempted (Vera, 2019).	- The patient responded well to the nurse's actions because he demonstrated success during daily activities and could perform some self-care measures independently. - Goal met: The patient reported being able to independently participate in ADLs and needing minimal assistance by the end of the clinical shift.
4. Deficient knowledge related to lack of information and unfamiliarity with information	The nursing diagnosis was chosen because the patient was admitted to the	1. Encourage the client and caregivers to explore ways to control triggering factors in and	1. The patient will initiate necessary lifestyle changes, participate in	The patient responded well to the nurse's actions because he verbalized an understanding of

<p>resources as evidenced by the development of preventable complications and request for information (Vera, 2019).</p>	<p>ER due to a COPD exacerbation with reoccurring symptoms.</p>	<p>around the home setting (Vera, 2019). 2. Instruct and reinforce the rationale for pulmonary rehabilitation, such as breathing exercises, coughing effectively, and general conditioning exercises (Vera, 2019).</p>	<p>the treatment regimen, and verbalize understanding of the condition and treatment (Vera, 2019).</p>	<p>compliance with the treatment process and preventable strategies. - Goal met: The patient was able to identify necessary lifestyle modifications and correlate symptoms with causative factors by the end of the clinical shift.</p>
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Other References (APA):

Vera, M. (2019). *7 Chronic obstructive pulmonary disease (COPD) nursing care plans.*

Nurseslabs. <https://nurseslabs.com/chronic-obstructive-pulmonary-disease-copd-nursing-care-plans/6/>

Concept Map (20 Points):

Subjective Data

The patient states his activity levels have declined over the last several days due to the worsening shortness of breath. The patient states he has generalized pain all over his body, which is dull. The patient says exertion aggravates the shortness of breath, and rest periods alleviate the shortness of breath.

Pain:

0700 = 6/10 generalized pain acetaminophen administered

1100 = 2/10 generalized pain no intervention at this time

Nursing Diagnosis/Outcomes

Impaired gas exchange related to altered oxygen supply and bronchospasm as evidenced by abnormal ABG values and changes in vital signs (Vera, 2019).

Goal met: The patient will demonstrate improved ventilation and adequate oxygenation of tissues by ABGs within the patient's normal range and be free of symptoms of respiratory distress (Vera, 2019).

Ineffective breathing pattern related to ineffective inspiration and expiration occurring with chronic airflow constraints as evidenced by diminished lung sounds on auscultation on both lung fields and tachypnea (Vera, 2019).

Goal met: The patient will demonstrate an improvement in breathing patterns and maintain a respiratory rate within normal limits (Vera, 2019)

3. Self-care deficit related to requesting visiting nurses and bath aides at the time of discharge as evidenced by discharge instructions by the provider (Vera, 2019).

Goal met: The patient will demonstrate independence in most activities attempted (Vera, 2019).

Deficient knowledge related to lack of information and unfamiliarity with information resources as evidenced by the development of preventable complications and request for information (Vera, 2019).

Goal met: The patient will initiate necessary lifestyle changes, participate in the treatment regimen, and verbalize understanding of the condition and treatment (Vera, 2019).

Objective Data

Vital signs:

0700: P-88 bpm, BP-152/68 mmHg, R-24 bpm, T-36.5 degrees Celsius (oral), O2-98% on 2L of O2 via NC

1100: P-68 bpm, BP-138/62 mmHg, R-24 bpm, T-36.8 degrees Celsius (oral), O2-97% on 2L of O2 via NC

Lab results on admission:

Hgb = 13.6, WBC = 9.4, Na = 124, K = 2.8, Glucose = 94, BUN = 24, Creatinine = 2.8, ABGs = pH of 7.25; CO2 of 84; HCO3 of 24; PO2 of 91

Diagnostic test:

Chest X-ray 11/05/2022: Findings consistent with chronic bronchitis, no acute findings

EKG 11/05/2022: Findings show A fib at a rate of 88 bpm

I&O:

Input: NS at 75 mL/hr x 4 hours (300 mL), Tea PO 240 mL with breakfast, Apple juice 120 mL with breakfast

Output: Urine 1750 mL total voided in 4 hours

Client Information

The 72-year-old African American male presented to the emergency room on 11/05/2022 with complaints of shortness of breath and cough. The patient has a history of hypertension, atrial fibrillation, hyperlipidemia, and COPD. K.K.'s surgical history includes an appendectomy in 1995. The patient denies past use of tobacco and recreational drugs. The patient is a casual drinker and drinks beer one to two times a month.

Nursing Interventions

Diagnosis 1:

Provide an incentive spirometer to measure airflow obstruction (Vera, 2019).

Assess and record respiratory rate and depth. Note the use of accessory muscles, pursed-lip breathing, and inability to speak or converse (Vera, 2019).

Diagnosis 2:

Auscultate breath sounds as indicated and elevate the client's head of the bed (Vera, 2019).

Promote deep breathing exercises such as diaphragmatic, yoga, and pursed-lip breathing (Vera, 2019).

Diagnosis 3:

Encourage positive reinforcement for all attempted activities, not partial achievements (Vera, 2019).

Implement measures to promote independence, but intervene when the patient cannot function (Vera, 2019).

Diagnosis 4:

Encourage the client and caregivers to explore ways to control triggering factors in and around the home setting (Vera, 2019).

Construct and reinforce the rationale for pulmonary rehabilitation, such as breathing exercises, coughing effectively, and general conditioning exercises (Vera, 2019).

