N321 Care Plan # 1

Lakeview College of Nursing

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Demographics (3 points)

Date of Admission	Patient Initials	Age	Gender
08/29/2021	M.E	70	Male
Race/Ethnicity	**Occupation**	**Marital Status**	**Allergies**
African American	Retired	Married	Lisinopril
Code Status	**Height**	**Weight**	
Ful code	5’9	186lbs	

Medical History (5 Points)

Past Medical History: Pleural Effusion, Benign Prostatic Hyperplasia, Hyperkalemia, Congestive heart failure (CHF)

Past Surgical History: None

Family History: None

Social History (tobacco/alcohol/drugs): Smoked and drank alcohol most of his life. Started smoking and drinking at 18, stopped smoking and drinking alcohol 5 years ago.

Assistive Devices: Glasses, uses walker to ambulate

Living Situation: Lives with wife

Education Level: High School Graduate

Admission Assessment

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

History of present Illness (10 points): On August 29**,** M.E a 70-year-old male with a past medical history of Pleural Effusion, Benign Prostatic Hyperplasia, Hyperkalemia and Chronic Obstructive Pulmonary Disease. Patient came the emergency department with complains of worsening shortness of breath. Patient stated to have used inhalers at home without significant relieve. Patient was unable to walk due to dyspnea, he went to convenient care but could not get oxygen on arrival. Patient denies associated fever, malaise, chills, nausea, vomiting, diarrhea,

anxiety**,** constipation, rash, or difficulties hearing. Patient stated having similar hospitalization last month due to COPD**.**

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Chronic Obstructive Pulmonary Disease (COPD).

Secondary Diagnosis (if applicable): N/A

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

Chronic obstructive pulmonary disease (COPD) is a combination of chronic bronchitis emphysema and hyperactive airway disease. Chronic bronchitis is characterized by hypersecretions of mucus in the large and small airways, cyanosis, and hypoxia (Capriotti, 2020) Excessive mucus creates obstacle to inspiratory airflow that prevents optimal oxygenation. Emphysema is characterized by overdistension of alveoli with trapped air which further creates obstruction to the expiratory, and high residue volume of carbon dioxide in the lung (Capriotti, 2020). Airways are also hyper reactive to irritants which make episodes of bronchoconstriction common in COPD.

Signs and symptoms of COPD include dyspnea which usually the first sign and symptom and as the disease progresses Dyspnea worsens (Capriotti, 2020). Productive cough, hypoxia, cyanosis, wheezing, fatigue are the classic signs of COPD. Over time Hypoxia stimulates pulmonary arterial vasoconstriction and signs and symptoms of right sided heart failure such as ascites, Jugular venous distension, ankle edema develops (Capriotti, 2020). The patient came into the emergency department complaining of shortness of breath, fatigue and chest pain which these symptoms are consistent with a diagnosis of COPD.

Upon arrival, the patient said he has had difficulties breathing for the past two day before almost falling when he tried walking to the bathroom. He was noted to have labored breathing and consistent coughing. Upon auscultation of lung sounds, wheezing on exhalation was confirmed and his oxygen saturation was below normal which is consistent with his diagnoses of COPD. In addition to COPD patient has a prior history of CHF which is the underlying condition of her shortness of breath and the fact he smoked cigarette in the past and continues to drink alcohol occasionally puts him at higher risk for complications.

The physician ordered chest x-ray, CT chest/abdomen/ pelvic contrast to confirm diagnoses. He was given 3 liters of oxygen, Fluticasone (one puff), and Lidocaine patch to be on 12 hours and off 12 hours.

Pathophysiology References (2) (APA):

Capriotti, Theresa M. and Frizzell, Joan Parker, "*Pathophysiology: Introductory Concepts and Clinical Perspectives" (2020).*

Mayo Foundation for Medical Education and Research. (2020, April 15). *COPD*. Mayo Clinic. Retrieved September 12, 2021, from https://www.mayoclinic.org/diseases-conditions/copd/symptoms-causes/syc-20353679.

Laboratory Data (15 points)

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

Lab	Normal Range	Admission Value	Today's Value	Reason for Abnormal Value
RBC	**4.20-5.40**	**4.69**	**n/a**	
Hgb	**12.0-16.0**	**13.1**	**n/a**	
Hct	**37.0-47.9**	**41**	**n/a**	
Platelets	**150-400**	**321**	**n/a**	
WBC	**4.3-11.0**	**6.41**	**n/a**	
Neutrophils	**37.0-85.0**	**45**	**n/a**	
Lymphocytes	**20.0-45.0**	**12.6**	**n/a**	
Monocytes	**0.0-15.0**	**13.6**	**n/a**	
Eosinophils	**0.0-6.0**	**1.4**	**n/a**	
Bands	**0.0-4.0**	**n/a**	**n/a**	

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

Lab	Normal Range	Admission Value	Today's Value	Reason For Abnormal
Na-	**135-145**	**130**	**N/A**	
K+	**3.5-5.2**	**5.3**	**N/A**	**Pt takes Lasix which may cause electrolyte imbalance.**
Cl-	**98-107**	84	**N/A**	
CO2	**22-29**	**40**	**N/A**	**Patient is retaining more CO2 due to labored breathing**
Glucose	**74-100**	**95**	**N/A**	
BUN	**8-26**	**11**	**N/A**	
Creatinine	**0.70-1.50**	**0.84**	**N/A**	
Albumin			**N/A**	

Calcium	**8.6-10.2**	**9.6**	**N/A**	
Mag	**1.6-2.6**	**1.9**	**N/a**	
Phosphate			**N/A**	
Bilirubin			**N/A**	
Alk Phos			**N/A**	
AST	**5-34**	**22**	**N/A**	
ALT	**0-55**	**23**	**N/a**	
Amylase	**23-85**		**N/a**	
Lipase	**0-160**		**N/a**	
Lactic Acid	**0.50-2.20**		**N/A**	

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

Lab Test	Normal Range	Value on Admission	Today's Value	Reason for Abnormal
INR	**0.8-1.2**	**N/A**	**N/A**	
PT	**10-14 sec**	**N/A**	**N/A**	
PTT	**30-45 sec**	**N/A**	**N/A**	
D-Dimer	**100.0-399.0**	**N/A**	**N/A**	
BNP	**15.00-99.90**	**N/A**	**N/A**	
HDL	**<200**	**N/A**	**N/A**	
LDL	**>60**	**N/A**	**N/A**	
Cholesterol	**<200**	**N/A**	**N/A**	

Triglycerides	**<140**	**N/A**	**N/A**	
Hgb A1c	**<6.5**	**N/A**	**N/A**	
TSH	**<0.4-4.0**	**N/A**	**N/A**	

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

Lab Test	Normal Range	Value on Admission	Today's Value	Reason for Abnormal
Color & Clarity		**N/A**	**N/A**	
pH		**N/A**	**N/A**	
Specific Gravity		**N/A**	**N/A**	
Glucose		**N/A**	**N/A**	
Protein		**N/A**	**N/A**	
Ketones		**N/a**	**N/A**	
WBC		**N/A**	**N/A**	
RBC		**N/a**	**N/A**	
Leukoesterase		**N/A**	**N/a**	

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

Test	Normal Range	Value on Admission	Today's Value	Explanation of Findings
Urine Culture		**N/A**		**No labs drawn**
Blood Culture		**N/A**		
Sputum Culture		**N/A**		

Stool Culture		**N/A**		

Lab Correlations Reference (1) (APA):

Diagnostic Imaging

All Other Diagnostic Tests (5 points): Chest X ray, CT chest, abdomen, pelvis with contrast.

Diagnostic Test Correlation (5 points):

Chest X ray**:** Findings revealed minimal blunting of the right costophrenic corresponding with a known small right pleural effusion. No Pneumothorax was identified, stable cardiac mediastinal.

CT Chest/ abdomen/Pelvis with contrast: Axial images obtained through chest, abdomen, and pelvis with contrast. Source data formatted in axial coronal and sagittal planes. Results reveal no change in size or morphology of previously reported 1.8cm subpleural nodule in the right upper lobe, no additional satellite nodules were identified. Also, small to moderate volume right pleural effusion and suggestion of locutions near the major fissures.

Diagnostic Test Reference (1) (APA):

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

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

Home Medications (5 required)

Brand/Generic	**Acetaminophen/ Tylenol**	**Albuterol/ Ipratropium/ Ipratropium bromide and albuterol sulfate.**	**Furosemide/ Lasix**	**Aspirin /Bayer**	**Azithromycin/ Zithromax**
Dose	325mg	90mcg	20mg	81mg	250mg
Frequency	Every 4hrs	2 puff prn every 4hrs	2x daily	1 daily	2 daily
Route	oral	oral	oral	oral	oral
Classification	Non-Opioid analgesic	Bronchodilator	Anti Hypertensive Diuretic	NSAID	Antibiotic
Mechanism of Action	Blocks prostaglandin production and interferes	Reduces bronchospasm through two different mechanisms	Inhibits sodium and water reabsorb in the loop	Blocks the activity of cyclooxygenase, the enzyme	Binds to a ribosomal unit of susceptible bacteria,

	with pain impulse generation in the central nervous system.	that will produce greater bronchodilation effects.	of Henle and increases urine formation.	needed for prostaglandin synthesis. Anti-inflammatory	blocking peptide translocation and inhibiting RNA-dependent protein.
Reason Client Taking	To relieve pain	Treatment for COPD.	Treatment of hypertension	To relieve pain from inflammation	To treat acute bacterial exacerbation of COPD including bronchitis.
Contraindications (2)	Severe hepatic impairment, hypersensitivity to acetaminophen	In patients with a history of hypersensitivity to any of its components, or to atropine and its derivates.	Anuria, hypersensitivity to furosemide or its components	Active bleeding & hypersensitivity	History of Jaundice or hepatic dysfunction, hypersensitivity to azithromycin.
Side Effects/Adverse Reactions (2)	Hypertension, anxiety, fatigue, hypotension	Headache Runny nose Sore throat	Weakness Tachycardia	confusion & depression	Agitation, aggressiveness, fatigue, anxiety
Nursing Considerations (2)	Use acetaminophen cautiously in patient with liver impairment, alcoholism, severe renal impairment, chronic malnutrition.	Do not get into eyes, can cause enlarged pupils, blurry vision, and eye pain. Monitor for allergic reactions, hives, rash, swelling of face, eyelids, lips, throat or trouble swallowing.	Use furosemide cautiously with hepatic cirrhosis especially those with a history of electrolyte imbalances because it may lead to hepatic coma. Administer drug slowly I.V. over 1	Do not crush timed-release tablet & ask about tinnitus	Monitor elderly patients close for arrhythmias because they are more susceptible to drug effects on QT interval.

			to 2 minutes to prevent ototoxicity.		

Hospital Medications (5 required)

Brand/Generic	**Carvedilol / COREG**	**Pantoprazole/ Protonix**	**Lidocaine hydrochloride**	**Fluticasone furoate**	**Tiotropium bromide/Spiriva**
Dose	12.5mg	40mg	1 patch	1 puff	2 sprays
Frequency	2x	Daily	On 12hrs Off 12hrs	daily	daily
Route	oral	oral	Transdermal patch	oral	inhalation
Classification	Beta blocker or	Proton pump inhibitor	Antiarrhythmic	Anti-inflammatory	Anticholinergic

Mechanism of Action	Reduce cardiac output and tachycardia, causes vasodilation, and decreases peripheral vascular resistance, which reduce BP and cardiac workload.	Interfere with gastric acid secretion by inhibiting the hydrogen-potassium-adenosine triphosphate	Combines with fast sodium channels in myocardial cells which inhibits sodium influx cells and decreases ventricular depolarization.	Inhibits cells in the inflammation response of asthma such as basophils, eosinophils, lymphocytes macrophages.	Prevents acetylcholine from attaching to muscarinic receptors on membranes of smooth muscles. Tiotropium relaxes smooth muscles and causes bronchodilation.
Reason Client Taking	To control HTN	Client may use this medicine to treat cough	To provide pain relief	To prevent asthma attacks.	To provide maintenance treatment of bronchospasm associated with COPD.
Contraindications (2)	Asthma & cardiogenic chock.	Concurrent therapy with Rilpivirine containing product & hypersensitivity to pantoprazole	Hypersensitivity to lidocaine, Adams-stroke syndrome.	Hypersensitivity to fluticasone propionate	Hypersensitivity to atropine or its derivatives.
Side Effects/Adverse Reactions (2)	Hypotension & hyperkalemia	Confusion & fatigue	Tachycardia, cardiac arrest, nausea, vomiting.	Anxiety, depression, insomnia, fatigue.	Chest pain, angine, hypertension, depression, insomnia.
Nursing Considerations (2)	Monitor BP & monitor serum potassium.	Do not give 4 weeks within helicobacter pylori test & give delayed-release oral 30 min	Use caution in patient with severe hepatic or renal disease because accumulation of lidocaine may lead to	Administer fast acting inhaled bronchodilator as ordered if Bronchospasm occurs immediately	Tiotropium should never be used to relieve acute bronchospasm

		before meal.	toxicity.	after fluticasone. Expect to stop Fluticasone and start another drug therapy.	

Medications Reference (1) (APA):

J., B. (2020). *2020 Nurse's drug handbook* (19th ed.). Burlington, MA, MA: Jones & Bartlett Learning.

Assessment

Physical Exam (18 points)

GENERAL (1 point): **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	Client appears alert and oriented to person, time, and place. Well groomed, no acute distress. He is a fluent English speaker.
INTEGUMENTARY (2 points): **Skin color:**	Black

Character: **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☒** **Type:**	Excessively dry but normal Warm Normal turgor 2+ No rashes No Bruises No wounds 19 Braden score No drains
HEENT (1 point): **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	Head and neck are symmetrical, trachea is midline, no deviation. Patients' ears were free of discharge, slightly visible cerumen. Patient did not corporate for PERRLA assessment. Cornea clear, no drainage. Septum is midline, turbinate is dry and pink bilaterally. Teeth were well maintained .
CARDIOVASCULAR (2 points): **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** **Peripheral Pulses:** **Capillary refill:** **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☐ N ☒** **Location of Edema:**	. S1 and S2 were present No murmurs Pulses are 2+ throughout bilaterally Capillary refill less 3 seconds in all extremities No visible edema
RESPIRATORY (2 points): **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	Severe respiratory distress, wheezing, use of accessory muscles, and lung sounds were diminished in the left lower lobe.
GASTROINTESTINAL (2 points): **Diet at home:** **Current Diet** **Height:** **Weight:** **Auscultation Bowel sounds:** **Last BM:** **Palpation: Pain, Mass etc.:** **Inspection:** **Distention:** **Incisions:** **Scars:** **Drains:**	General diet at home Cardiac diet. 5'9" 186 lbs. Normal bowel sounds No BM during my shift No CVA tenderness No abnormalities were found upon inspection for distention, incisions, scares, drains, or wounds.

Wounds: **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Size:** **Feeding tubes/PEG tube Y ☐ N ☒** **Type:**	
GENITOURINARY (2 Points): **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☐ N ☒** **Type:** **Size:**	Amber Clear, odorous Emptied Urinal at 1030, 200 mL
MUSCULOSKELETAL (2 points): **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☐ N ☒** **Fall Risk: Y ☐ N☒** **Fall Score:** **Activity/Mobility Status:** **Independent (up ad lib) ☐** **Needs assistance with equipment ☐** **Needs support to stand and walk☐**	. No walker or wheelchair Weak grip strength Morse Fall Score 30 Patient is a 1 assist
NEUROLOGICAL (2 points): **MAEW: Y ☐ N☒** **PERLA: Y ☐ N☒** **Strength Equal: Y ☐ N ☐ if no -** **Legs ☐ Arms ☐ Both ☒** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	 Was not able to perform PERLLA assessment Orient x4 Patients speaks fluent English No gross facial neurological deficits
PSYCHOSOCIAL/CULTURAL (2 points): **Coping method(s):** **Developmental level:** **Religion & what it means to pt.:** **Personal/Family Data (Think about home**	 Family friends Mature Patient lives at home by herself, gets helps with transportation and errands from family

environment, family structure, and available family support):	

Vital Signs, 2 sets (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0730	83	120/68 Supine Left arm	18	97.7 (oral)	92% (nasal canula)
0011	92	102/63 Supine Right arm	20	98.1(oral)	96% (nasal canula)

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0930	0-10	Lower back	04	Sharp pain	Administer pain medication
1130	0-10	n/a	n/a	n/a	Pt denies any pain at this time.

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: **Location of IV:** **Date on IV:** **Patency of IV:** **Signs of erythema, drainage, etc.:** **IV dressing assessment:**	Pt had no IV on. Pt was due for discharge.

Intake and Output (2 points)

Intake (in mL)	**Output (in mL)**
10% breakfast consumed 240ml of water 120ml of coffee 180ml of protein shake	Emptied urinal at 1030am 200ml urine output No Bowel movement during my shift.

Nursing Care

Summary of Care (2 points)

Overview of care: Patient was admitted on 08/29/2021, complaining of shortness of breath and chest pain. Patient is on 3 liters oxygen (24 hours), has no IV fluids**.**

Procedures/testing done: Patient had Chest X ray and CT chest, abdomen, pelvis with contrast.

Complaints/Issues: Patients is short of breath and does not feel comfortable using CPAP.

Vital signs (stable/unstable): Systolic blood pressure dropped from 120 to 102. Other vital signs are stable

Tolerating diet, activity, etc.: Patient did not have appetite for food this morning. He ate few bites and drank all his drinks.

Physician notifications: Patients showed no further signs of unusual distress. Discharge notes from Physician.

Future plans for patient: Order CPAP machine to use at home**.**

Discharge Planning (2 points)

Discharge location: Discharge home

Home health needs (if applicable): N/A Patient is normally on 3 liters of oxygen at home.

Equipment needs (if applicable): CPAP machine ordered. Patient already has oxygen equipment at home.

Follow up plan: Patient needs to contact primary care provider if they notice any unusual symptoms and if his oxygen saturation goes below 90 on 3 liters of Oxygen.

Education needs: Patient need to be educated on deep breathing and relaxation technic and on how to use and clean a CPAP machine.

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

Nursing Diagnosis • Include full nursing diagnosis with "related to" and "as evidenced by" components	**Rational** • Explain why the nursing diagnosis was chosen	**Intervention (2 per dx)**	**Evaluation** • How did the patient/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Ineffective airway clearance related to COPD as evidenced by wheezing and diminished lung sounds in the left lower lobe**.**	Patient was diagnosed with COPD and is usually on 3 liters of oxygen at home.	**1.** Position the patient upright (fowlers, semi fowlers, or high fowlers). 2. Monitor pulse oximetry readings to keep SpO2 levels between 88-92%.	Tried to position the patient in a high-fowlers position but he requested to lower the head of the bed, he felt most comfortable at 30 degrees.
2. Ineffective	This diagnosis	**1.** Teach deep	Patient was not willing to

breathing pattern as evidenced by non - productive cough	was chosen because client has labored breathing when talking and shortness of breath	breathing exercises and relaxation techniques. **2.**Assess patients' respiratory status every 2 to 4 hours and notify any abnormal finding	do breathing exercise**.**
3. Imbalanced Nutrition "I do have appetite, I'm just really tired".	Patient's breakfast arrived and did not want to eat, he verbalized that she was just tired.	**1.** Refer the patient to dietitian. **2**. Offer protein drink	Patient ate few bites and food and preferred and drank all protein drinks

Other References (APA):

Phelps, L. L., & Ralph, S. S. (2018). *Sparks & Taylor's nursing diagnosis pocket guide*. Wolters Kluwer.

Concept Map (20 Points):

Subjective Data

Patient said he had trouble breathing / shortness of breath prior to admission. He also stated that he felt tired.

Patient said, "I'm just really tired".

Nursing Diagnosis/Outcomes

Ineffective airway clearance related to COPD as evidenced by wheezing and nished lung sounds in the left lower lobe.
Goal: Patient is positioned upright and O2 stats improved.
Ineffective breathing pattern as evidenced by non -productive cough.
Goal: Client's respiration pattern will be effective Without causing fatigue.
Imbalanced Nutrition as evidenced by patient stating that "I have no appetite, I'm just really tired".
Goal: Have patients eat some food and drink a protein shake (Ensure).

Objective Data

Weight: 186lbs
Vitals:
B/P: 120/68
Heart Rate: 83
Respirations: 18
Temperature: 97.7 F
O2: 98 on 3liters Oxygen (Canula)
Pain: 0/10

Urine output at 200 mL

Patient Information

70-year-old African American male
Admitted on 08/29/2021
Diagnoses: COPD
Allergies : Lisonopril
Full code

Nursing Interventions

1. Position the patient upright (fowlers, semi fowlers, or high fowlers).

. Monitor pulse oximetry readings to keep SpO2 evels between 88-92%.