N441 Care Plan

Lakeview College of Nursing

Alfonso Crane

Demographics (3 points)

Date of Admission 01/22/2023	**Client Initials** B.M.	**Age** 68	**Gender** Female
Race/Ethnicity Caucasian	**Occupation** Retired – Social Worker	**Marital Status** Married	**Allergies** Penicillin – rash Strawberry extract – unknown
Code Status Full Code	**Height** 167.6 cm	**Weight** 119.3 kg	

Medical History (5 Points)

Past Medical History: A-fib, arthritis, brain aneurysm, carcinoma, chronic pain, clotting disorder, CHF, fibromyalgia, hyperlipidemia, HTN, lymphedema, shoulder dislocation, sleep apnea

Past Surgical History: Breast surgery (bilateral mastectomy), shoulder surgery, hysteroscopy, cardiac catheterization.

Family History: Mother – Lung CA | Father – Stroke

Social History (tobacco/alcohol/drugs including frequency, quantity and duration of use): The patient reports that they quit smoking 24 years ago. 25 pack/year smoking history | Reports current alcohol use – socially | Reports no current or past drug use.

Assistive Devices: Glasses, walker

Living Situation: Lives with husband

Education Level: College degree

Admission Assessment

Chief Complaint (2 points): Fall and shortness of breath

History of Present Illness – OLD CARTS (10 points): B.M. is a 68-year-old female with a past medical history of A-fib, currently on Eliquis, morbid obesity with underlying sleep apnea

and noncompliance with medication and CPAP at home, past aneurysm repair many years ago, and a history of breast cancer and status post-mastectomy. The patient presented to the hospital complaining of shortness of breath and a nonproductive dry cough. The patient was lethargic and unable to provide information; the husband provided most information at the bedside. The patient stopped smoking 24 years ago. B.M. is noncompliant with medications and CPAP at home. The patient was noted to have swelling of both lower extremities, left greater than right, with cellulitis of the lower extremities.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): COPD exacerbation

Secondary Diagnosis (if applicable): Acute bronchitis

Pathophysiology of the Disease, APA format (20 points): Pathophysiology of primary diagnosis can be found on page 4 of Care Plan.

Pathophysiology References (2) (APA):

Capriotti, T. (2020). *Davis Advantage for pathophysiology: Introductory concepts and clinical perspectives* (2nd ed.). F.A. Davis.

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

OSF Database. (2023).

Pathophysiology of Chronic Obstructive Pulmonary Disease (COPD)

COPD encompasses emphysema and chronic bronchitis (Capriotti, 2020). This disease generally affects middle to older adults. COPD obstructs the airflow, and its chronic inflammation damages tissues (Capriotti, 2020). Scar tissue in the airways results in narrowing and limited airflow. The scar tissue in the parenchyma decreases elastic recoil or compliance and causes pulmonary hypertension (Capriotti, 2020). Emphysema and bronchitis, the two different disease processes linked to COPD, commonly coexist and show similar signs and symptoms in people with COPD (Capriotti, 2020).

Symptoms vary for each person, but common signs and symptoms of COPD reflect emphysema and chronic bronchitis (Hinkle & Cheever, 2022). Symptoms of COPD include dyspnea, barrel chest, and use of accessory muscles; these symptoms reflect emphysema (Hinkle & Cheever, 2022). Other signs and symptoms include cyanosis, hypoxia, and hypercapnia, all of which reflect patients with bronchitis (Hinkle & Cheever, 2022). The patient, B.M., presented to the hospital with shortness of breath and dyspnea.

Assessment and diagnostic findings of COPD start with a thorough health history from the patient. Pulmonary function studies are used to help confirm the diagnosis of COPD (Hinkle & Cheever, 2022). Pulmonary function studies also help determine the disease's severity and monitor the disease's progression (Hinkle & Cheever, 2022). Spirometry and ABGs also help diagnose COPD (Hinkle & Cheever, 2022). The patient, B.M., has recent ABGs drawn indicating CO2 retention, indicative of COPD.

There are multiple treatments and management options for COPD. Some treatment options include promoting smoking cessation, managing exacerbations, oxygen therapy, and breathing techniques such as diaphragmatic or abdominal breathing and pursed-lip breathing

(Hinkle & Cheever, 2022). The patient, B.M., was a former smoker who quit smoking 24 years ago. The patient is also managing exacerbations in the hospital with oxygen therapy. The patient is on 2L/min via a nasal cannula. Other treatment options include vaccinations such as pneumococcal and influenza, pulmonary rehabilitation, and medications such as bronchodilators, corticosteroids, antibiotics, mucolytics, and antitussives. During their time at the hospital, the patient received medications such as corticosteroids and antitussives for treating and managing their COPD.

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 (OSF Database, 2023)	Admission Value	Today's Value	Reason for Abnormal Value
RBC (x 10^6)	3.5-5.2	4.09	3.85	This value is within normal limits.
Hgb (g/dL)	11-16.8	12	11.3	This value is within normal limits.
Hct	34%-47%	37.4%	34.8%	This value is within normal limits.
Platelets	140,000-400,000	220,000	222,000	This value is within normal limits.
WBC (cells/mcL)	4,000-11,000	7,300	8,600	This value is within normal limits.
Neutrophils	40%-80%	72.9%	85.1%	This can be a reflection of systemic inflammation, linked to the patient's diagnosis of COPD (Hinkle & Cheever, 2022).
Lymphocytes	20%-40%	11.4%	6%	Low lymphocyte count can be a reflection of the patient's COPD, which measures the percentage of WBCs in the body (Hinkle & Cheever, 2022).
Monocytes	2%-10%	12%	8.9%	This value is within normal limits.
Eosinophils	0%-8%	2.4%	0%	This value is within normal limits.
Bands	0%-10%	N/A	N/A	There was no lab value on the date of assessment: 01/24/2023.

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

Lab	Normal Range (OSF Database, 2023)	Admission Value	Today's Value	Reason For Abnormal
Na- (mmol/L)	135-145	143	139	This value is within normal limits.
K+ (mmol/L)	3.5-5	3.5	3.0	Decreased potassium can be found in patients undergoing diuretic therapy (Hinkle & Cheever, 2022). B.M. is receiving furosemide.
Cl- (mmol/L)	98-107	104	102	This value is within normal limits.

CO2 (mmol/L)	23-30	29	27	This value is within normal limits.
Glucose (mg/dL)	74-106	103	188	Acute exacerbations of COPD can demonstrate increased levels of glucose Hinkle & Cheever, 2022).
BUN (mg/dL)	10-20	10	15	This value is within normal limits.
Creatinine (mg/dL)	0.5-1.02	0.79	0.72	This value is within normal limits.
Albumin	3.5-5.7	3.7	3.3	Malnutrition can cause a decrease in albumin (Hinkle & Cheever, 2022). The patient discloses that they have not had much to eat prior to hospitalization.
Calcium (mg/dL)	8.8-10.6	10.1	9.4	This value is within normal limits.
Mag (mg/dL)	1.6-2.6	2.4	N/A	There was no lab value on the date of assessment: 01/24/2023.
Phosphate (mg/dL)	2.2-4.5	N/A	N/A	There was no lab value on the date of assessment: 01/24/2023.
Bilirubin (mg/dL)	0.2-1.6	0.7	0.5	This value is within normal limits.
Alk Phos (U/L)	40-150	76	58	This value is within normal limits.
AST (U/L)	5-34	16	12	This value is within normal limits.
ALT (U/L)	0-55	7	6	This value is within normal limits.
Amylase (U/L)	25-125	N/A	N/A	There was no lab value on the date of assessment: 01/24/2023.
Lipase (U/L)	<140	N/A	N/A	There was no lab value on the date of assessment: 01/24/2023.
Lactic Acid (mmol/L)	Venous: 0.5-1.7 Arterial: 0.36-1.25	N/A	N/A	There was no lab value on the date of assessment: 01/24/2023.
Troponin (ng/mL)	0-0.12	N/A	N/A	There was no lab value on the date of assessment: 01/24/2023.
CK-MB (U/L)	5-25	N/A	N/A	There was no lab value on the date of assessment: 01/24/2023.
Total CK (U/L)	22-198	N/A	N/A	There was no lab value on the date of assessment: 01/24/2023.

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

Lab Test	Normal Range (OSF Database, 2023)	Value on Admission	Today's Value	Reason for Abnormal
INR	0.9-1.1	N/A	N/A	There was no lab value on the date of assessment: 01/24/2023.
PT	11.7-13.8	N/A	N/A	There was no lab value on the date of assessment: 01/24/2023.
PTT	25-36	N/A	N/A	There was no lab value on the date of assessment: 01/24/2023.
D-Dimer	0-662	1,538	N/A	There was no lab value on the date of assessment: 01/24/2023.
BNP	<100	N/A	N/A	There was no lab value on the date of assessment: 01/24/2023.
HDL	<60	N/A	N/A	There was no lab value on the date of assessment: 01/24/2023.
LDL	>70	N/A	N/A	There was no lab value on the date of assessment: 01/24/2023.
Cholesterol	125-200	N/A	N/A	There was no lab value on the date of assessment: 01/24/2023.
Triglycerides	<150	N/A	N/A	There was no lab value on the date of assessment: 01/24/2023.
Hgb A1c	>5.7	N/A	N/A	There was no lab value on the date of assessment: 01/24/2023.
TSH	0.35-4.94	N/A	N/A	There was no lab value on the date of assessment: 01/24/2023.

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	Colorless, Yellow	Clear, Yellow	N/A	There was no lab value on the date of assessment: 01/24/2023.
pH	5-9	6.5	N/A	There was no lab value on the date of assessment: 01/24/2023.
Specific Gravity	1-1.03	1.005	N/A	There was no lab value on the date of assessment: 01/24/2023.
Glucose	Neg	Negative	N/A	There was no lab value on the date of assessment: 01/24/2023.
Protein	Neg	Negative	N/A	There was no lab value on the date of assessment: 01/24/2023.

Ketones	Neg	Negative	N/A	There was no lab value on the date of assessment: 01/24/2023.
WBC	Neg, 0-5	Negative	N/A	There was no lab value on the date of assessment: 01/24/2023.
RBC	0-2	3-5	N/A	There was no lab value on the date of assessment: 01/24/2023.
Leukoesterase	Neg	N/A	N/A	There was no lab value on the date of assessment: 01/24/2023.

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

Test	**Normal Range** (OSF Database, 2023)	**Value on Admission**	**Today's Value**	**Explanation of Findings**
pH	7.35-7.45	7.3	N/A	Patients with COPD are in an acidotic state, making the pH levels in the blood acidic (Hinkle & Cheever, 2022).
PaO2	80-105	105	N/A	There was no lab value on the date of assessment: 01/24/2023.
PaCO2	35-45	67	N/A	Increased PaCO2 level can be seen in patients with COPD (Hinkle & Cheever, 2022).
HCO3	22-26	33.5	N/A	HCO3 is retained, and therefore increased, in patients with COPD to try to overcome acidosis (Hinkle & Cheever, 2022).
SaO2	**95-100**	97%	N/A	There was no lab value on the date of assessment: 01/24/2023.

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

Test	**Normal Range** (OSF Database, 2023)	**Value on Admission**	**Today's Value**	**Explanation of Findings**
Urine Culture	Neg:<10,000 Pos:>100,000	N/A	N/A	There was no lab value on the date of assessment: 01/24/2023.
Blood Culture	Negative	Negative	N/A	There was no lab value on the date of assessment: 01/24/2023.
Sputum Culture	Negative URT	N/A	N/A	There was no lab value on the date

				of assessment: 01/24/2023.
Stool Culture	Normal intestinal flora	N/A	N/A	There was no lab value on the date of assessment: 01/24/2023.

Lab Correlations Reference (1) (APA):

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

OSF Database. (2023).

Diagnostic Imaging

All Other Diagnostic Tests (5 points): See below.

Diagnostic Test Correlation (5 points): See below.

XR Chest Single View Portable (OSF Database, 2023).

What is a Chest XR?

- A chest radiograph, or chest x-ray, is a projection radiograph of the chest used to diagnose conditions affecting the heart (i.e., hypertension). A chest radiograph produces images of the heart, lungs, blood vessels, airways, and bones of your chest and spine (Holman et al., 2019).
    - A chest x-ray can show cardiomegaly (Holman et al., 2019).

Clinical Information: 68-year-old female with shortness of breath

Comparison: 08.01.2022

Findings: Cardiomegaly with mild pulmonary venous congestion. Lungs appear hyperinflated and ground glass-appearing. No pneumothorax or effusion is demonstrated. Bony thorax is unremarkable.

Impression: Both lungs appear more ground-glass-appearing compared to the 08/01/2022. This is consistent with underlying infiltrates. Cardiomegaly with mild pulmonary venous congestion.

These findings are consistent with pulmonary edema/CHF. No pneumothorax or significant effusion is demonstrated.

Diagnostic Test Reference (1) (APA):

OSF Database. (2023).

Holman, H. C., Williams, D., Sommer, S., Johnson, J., Ball, B. S., Wheless, L., Leehy, P., & Lemon, T. (2019). *RN adult medical surgical nursing: Review module* (11th ed.). Assessment Technologies Institute.

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

Home Medications (5 required) (OSF Database, 2023) (Jones & Bartlett Learning, 2021)

Brand/Generic	**B:** apixaban **G:** Eliquis	**B:** diphenhydramine **G:** Benadryl	**B:** escitalopram **G:** Lexapro	**B:** furosemide **G:** Lasix	**B:** levetiracetam **G:** Keppra
Dose	2.5 mg	25 mg	10 MG	20 mg	500 mg
Frequency	BID	PRN Q6 hours	Daily	Daily	BID
Route	PO	PO	PO	PO	PO
Classification	**Pharm:** Factor Xa inhibitor **Therapeutic:** Anticoagulant	**Pharm:** Antihistamine **Therapeutic:** Antianaphylactic adjunct, antidyskinetic, antiemetic, antihistamine, antivertigo, sedative-hypnotic, antitussive	**Pharm:** Selective serotonin reuptake inhibitor (SSRI) **Therapeutic:** Antidepressant	**Pharm:** Loop diuretic **Therapeutic:** Antihypertensive, diuretic	**Pharm:** Pyrrolidine derivative **Therapeutic:** Anticonvulsant
Mechanism of Action	Inhibits free and clot-bound Factor Xa and prothrombinase activity. Although apixaban has no direct effect on platelet aggregation, it does indirectly inhibit platelet aggregation induced by thrombin. But inhibiting factor Xa, apixaban decreases thrombin generation and thrombus	Binds to central and peripheral H1 receptors, competing with histamine for these sites and preventing it from reaching its side of action.	Inhibits reuptake of the neurotransmitter serotonin by CNS neurons, thereby increasing the amount of Serotonin available in nerve synapses. an elevated serotonin level may result in elevated mood and reduce anxiety or depression.	Inhibits sodium in water reabsorption and a loop of Henle and increases urine formation.	May protect against secondary generalized seizure activity by preventing coordination of epileptiform burst firing. Levetiracetam doesn't seem to involve inhibitory and excitatory neurotransmission.

	development.				
Reason Client Taking	To reduce the risk of stroke.	To treat hypersensitivity reactions.	To treat major depression.	To reduce edema.	As an adjunct to treat partial seizures.
Contraindications (2)	1. Active pathological bleeding. 2. Hypersensitivity to apixaban or its components	1. Hypersensitivity to diphenhydramine, similar antihistamines, or their components. 2. Diphenhydramine has additive effects with alcohol and other CNS depressants.	1. Concomitant therapy with pimozide. 2. Hypersensitivity to escitalopram, citalopram, or its components.	1. Anuria 2. Hypersensitivity to furosemide or its components.	1. Hypersensitivity to levetiracetam or its components. 2. Contraindicated in patients with a low platelet count and anemia.
Side Effects/Adverse Reactions (2)	1. CV: hypotension 2. HEME: excessive bleeding	1. CV: arrhythmias 2. HEME: thrombocytopenia	1. GI: pancreatitis 2. GU: acute renal failure	1. CV: arrhythmias 2. HEME: thrombocytopenia	1. CV: hypotension 2. HEME: thrombocytopenia
Nursing Considerations (2)	1. Know that apixaban should not be given to patients with severe hepatic dysfunction. 2. Beware that if this medication is discontinued prematurely an adequate alternative anticoagulation is not present, the risk of thrombosis increases.	1. Expect to give parenteral form of diphenhydramine only when oral ingestion is impossible. 2. Expect to discontinue drug at least 72 hours before skin test for allergies because drug may inhibit cutaneous histamine response, thus producing false-negative results.	1. Expect the prescriber to reassess the patient periodically to determine the continued need for therapy and evaluate dosage. 2. Expect to taper dosage to avoid serious adverse reactions when therapy is no longer needed.	1. Be aware that patients who are allergic to sulfonamides may also be allergic to furosemide. Monitor the patient closely. 2. Obtain the patient's weight before and periodically during furosemide therapy to monitor fluid loss.	1. Avoid stopping the medication abruptly because doing so may increase seizure activity. Expect to taper dosage gradually. 2. Monitor the patient for seizure activity during therapy. As appropriate, implement seizure precautions according to facility policy.
Key Nursing Assessment(s)/Lab(s) Prior to Administration	The risk of stroke and bleeding in the patient.	Assess the skin's color, texture, and for lesions to monitor for anticholinergic effects or allergy.	Assess dizziness and drowsiness that might affect balance and other functional activities.	Obtain the patient's weight before furosemide therapy.	Assess dizziness and drowsiness that might affect balance and other functional activities.
Client Teaching needs (2)	1. Emphasize the importance of taking this medication exactly as prescribed. 2. Tell the patient to alert all prescribers before any invasive procedure, including dental work, is scheduled.	1. Advise the patient to take the drug with food to minimize GI to stress. 2. Advise the patient to avoid alcohol while taking diphenhydramine.	1. Inform the patient that alcohol use isn't recommended during escitalopram therapy because it may decrease their ability to think clearly and perform motor skills. 2. Urge the patient to inform the prescriber of any OTC drugs	1. Instruct the patient to take furosemide at the same time each day to maintain therapeutic effects. 2. Emphasize the importance of weight and diet control, especially limiting sodium intake.	1. Caution the patient that levetiracetam may cause dizziness and drowsiness, especially during the first 4 weeks of therapy. 2. Advise the patient to keep taking other anticonvulsants, as ordered, while taking this medication.

			they take because of potential for interaction.		

Hospital Medications (5 required) (OSF Database, 2023) (Jones & Bartlett Learning, 2021)

Brand/Generic	**B:** ondansetron **G:** Zofran	**B:** famotidine **G:** Pepcid	**B:** methylprednisolone **G:** Solu-Medrol	**B:** acetaminophen **G:** Tylenol	**B:** benzonatate **G:** Tessalon
Dose	4 mg	20 mg	40 mg	650 mg	100 mg
Frequency	PRN Q6 hours	BID	Q12 hours	PRN Q4 hours	PRN TID
Route	PO	PO	IV	PO	PO
Classification	**Pharm:** SSRA **Therapeutic:** Antiemetic	**Pharm:** Histamine-2 blocker **Therapeutic:** Antiulcer agent	**Pharm:** Glucocorticoid **Therapeutic:** Corticosteroid	**Pharm:** Nonsalicylate, para-aminophenol derivative. **Therapeutic:** Antipyretic, nonopioid analgesic	**Pharm:** cough suppressant **Therapeutic:** Antitussives, nonopioid
Mechanism of Action	Blocks serotonin receptors in the intestine. This action reduces nausea and vomiting by preventing serotonin release in the small intestine.	Famotidine is a H2RA that effectively blocks histamine actions. It reduces gastric volume, acidity, and secretion stimulated by specific food, caffeine, and insulin.	Binds to intracellular glucocorticoid receptors and suppresses inflammatory and immune responses by inhibiting accumulation of monocytes and neutrophils and inflammation sites.	Inhibits enzyme cyclooxygenase, blocking prostaglandin production and interfering with pain impulse generation in the peripheral nervous system.	Benzonatate functions as a local anesthetic in the respiratory tract after being absorbed and circulated there. It does this by reducing the sensitivity of stretch receptors and vagal afferent fibers in the bronchi, alveoli, and pleura of the lower airway and lung. This quiets lessens the cough reflex.
Reason Client Taking	To treat nausea and/or vomiting.	To treat GERD	To treat immune and inflammatory disorders	To treat pain	To treat coughs.
Contraindications (2)	3. Contraindicated in those with serotonin syndrome. 4. Contraindicated in those with a hypersensitivity to glucocorticoids.	1. OTC medications should not be used by patients who have renal impairments or taking other acid reducers. 2. Caution in patients with hepatic or renal impairment.	1. Intrathecal administration 2. Systemic fungal infections.	1. Contraindicated in those with severe hepatic impairment. 2. Contraindicated in those with a hypersensitivity to acetaminophen and its components..	1. Contraindicated in those who are driving or operating machinery. 2. Contraindicated in older adult patients with dysphagia.
Side Effects/Adverse Reactions (2)	1. RESP: bronchospasm 2. RESP: pulmonary embolism	3. RESP: bronchospasm 4. GI: hepatitis	CV: cardiac arrest CV: hypotension	1. GI: hepatotoxicity 2. RESP: pulmonary edema	Resp: bronchospasm CV: hypotension

Nursing Considerations (2)	1. Monitor the patient's electrocardiogram, as ordered, because ondansetron therapy can prolong the T interval. 2. Monitor the patient closely for signs and symptoms of serotonin syndrome.	1. If using one dose a day, administer medication at bedtime. 2. Use medication cautiously in patients with hepatic or renal impairments.	1. Protect the patient from falling, especially older adults at risk for fractures from osteoporosis. 2. Assess for possible depression or psychotic episodes during therapy.	1. Use medication cautiously in patients with hepatic impairment or active hepatic disease, alcoholism, or severe malnutrition. 2. Monitor renal function in patients on long-term therapy.	1. Consider allergies to benzonatate or tetracaine. 2. Administer orally; caution the patient not to chew or break capsules but to swallow them whole.
Key Nursing Assessment(s)/Lab(s) Prior to Administration	Assess dizziness and drowsiness that might affect gait, balance, and other functional activities prior to administration.	Assess heart, ECG, and heart sounds before administration of famotidine.	Assess vital signs and muscle and joint pain prior to administration.	Assess for pain by having the patient rate on a scale of 0-10.	Assess nasal mucous membranes, skin color, lesions, and lung sounds.
Client Teaching needs (2)	1. Advise the patient to immediately report signs of hypersensitivity, such as a rash. 2. Reassure patients with transient blindness that it resolves within a few minutes to 48 hours.	1. Caution the patient not to take famotidine with other acid-reducing products. 2. Caution the patient to avoid alcohol and smoking during famotidine therapy because they irritate the stomach and can delay ulcer healing.	1. Caution the patient not to stop taking the medication abruptly or to change dosage without consulting the prescriber. 2. Instruct the patient not to obtain vaccinations unless approved by the prescriber.	1. Tell the patient that the tablets may be crushed or swallowed whole. 2. Teach patients to recognize signs of hepatotoxicity, such as bleeding, easy bruising, and malaise.	1. Swallow the capsules whole. 2. Report restlessness, tremor, difficulty breathing, constipation, or rash.

Medications Reference (1) (APA):

OSF Database. (2023).

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

Assessment

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

GENERAL: **Alertness:** Alert **Orientation:** Oriented x4 **Distress:** Acute distress **Overall appearance:** Groomed, awake, and anxious	B.M. is a 68-year-old female. The patient is groomed, awake, and anxious. Height 167.6 cm, Weight 119.3 kg, BMI 42.5 kg/m^2, T 36.7°C temporal, P 115 bpm, 2+ b/l, RR 24, BP 126/73 R antebrachium sitting, 99% O_2 on 2L/min nasal cannula. The patient appears to be in acute distress, related to their anxiety and bilateral knee pain.
INTEGUMENTARY: **Skin color:** Pale; ruddy **Character:** Redness blanchable **Temperature:** Warm **Turgor:** Quick return to original state **Rashes:** None **Bruises:** Ecchymotic – L leg, R bicep **Wounds:** None **Braden Score:** 17 (at-risk) **Drains present:** **Y☐ N ▯** **Type:** N/A	Skin is warm, dry, and cracked upon palpation. Skin is elastic, intact, and without discoloration. Skin turgor is less than two seconds, normal mobility. Nails are without clubbing. There are no rashes or wounds upon inspection. Ecchymosis located on the left leg and right bicep. The patient's capillary refill is less than 3 seconds between fingers and toes bilaterally. Braden score of 17, indication of at-risk. Based on assessment DOS: 01.24.2023.
HEENT: **Head/Neck:** Skull is normocephalic **Ears:** WNL **Eyes:** WNL – The patient wears glasses **Nose:** WNL **Teeth:** Good dentition	The patient's head and neck are symmetrical. The trachea is midline and there is no swelling or rigidity reported. There are non-palpable lymph nodes and lobes. There is acuity to regular voices. There is no visible abnormality of ears or palpable deformities. The sclera is white bilaterally. The client's cornea is clear b/l. Their conjunctiva is pink b/l with no mucus. The patient wears glasses. Their EOMs are intact b/l and PERRLA b/l. The client's septum is midline. The patient has had no oral/dental surgeries, but there is good dentition. The patient does not have dentures.
CARDIOVASCULAR: **Heart sounds:** Clear S1 and S2 w/o murmurs. **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** A-fib **Peripheral Pulses:** Pulses 2+ bilaterally **Capillary refill:** Less than 3 seconds **Neck Vein Distention:** **Y ☐ N ▯** **Edema: Y ▯ N ☐** **Location of Edema:** Upper and lower extremities bilaterally	Upon auscultation, there are clear S1 and S2, increased rate and rhythm, indicative of atrial fibrillation. The patient's PMI is palpable at the 5th intercostal space at the MCL. Mrs. A's extremities are pink, warm, dry, and cracked. There is edema present, located in upper and lower extremities bilaterally. The epitrochlear lymph nodes are nonpalpable b/l. The client's pulses are 2+ b/l. Their capillary refill is less than 3 seconds between fingers and toes b/l. No reports of chest pain.
RESPIRATORY:	Upon auscultation, the patient's lungs are

Accessory muscle use: **Y** ☐ **N** ☐ **Breath Sounds: Location, character** **ET Tube:** **Size of tube:** N/A **Placement (cm to lip):** N/A **Respiration rate:** N/A **FiO2:** N/A **Total volume (TV):** N/A **PEEP:** N/A **VAP prevention measures:** N/A	resonant. Respirations are unlabored and fine crackles noted anterior and posterior bilaterally. Former smoker; no history of illicit drug use. No ET tube placement.
GASTROINTESTINAL: **Diet at home:** Regular **Current Diet:** Regular **Height:** **Weight:** **Auscultation Bowel sounds:** Audible; normoactive **Last BM:** 01/23/2023 **Palpation: Pain, Mass etc.:** None **Inspection:** **Distention:** None **Incisions:** None **Scars:** None **Drains:** None **Wounds:** None **Ostomy:** **Y** ☐ **N** ☐ **Nasogastric:** **Y** ☐ **N** ☐ **Size:** N/A **Feeding tubes/PEG tube** **Y** ☐ **N** ☐ **Type:** N/A	Upon inspection, the patient's abdomen is rounded and nondistended. There are active and normal bowel sounds and no tenderness after palpation of all four quadrants. The patient's BMI is 42.5 kg/m^2, indicating morbid obesity. Last BM on 01/23/2023 The patient is on a Regular diet while at the hospital; denies nausea, pain, and vomiting. There is no pain with defecation. There is no distention, incisions, scars, or wounds visible on the abdomen. There is no ostomy, NG tube, or PEG tube in place for this patient. Bowel Function Promotion includes: adequate fluid intake promoted; commode/bedpan at bedside; ambulation promoted.
GENITOURINARY: **Color:** Clear, yellow **Character:** No odor, not cloudy **Quantity of urine:** N/A – voided in toilet **Pain with urination:** **Y** ☐ **N**☐ **Dialysis:** **Y** ☐ **N** ☐ **Inspection of genitals:** WNL **Catheter:** **Y** ☐ **N** ☐ **Type:** N/A **Size:** N/A **CAUTI prevention measures:** N/A	The patient voided 4x during clinical rotation. The patient reports no pain or discharge with urination. Incontinent – brief alternative to an indwelling catheter was considered, but patient denied. Voids spontaneously without difficulty.
MUSCULOSKELETAL: **Neurovascular status:** **ROM:** Active ROM encouraged	The patient has generalized weakness and is moderately impaired. The patient's arm muscle strength is rated at a 2/5 and their hip muscle

Supportive devices: Walker **Strength:** **ADL Assistance: Y☐ N ☐** **Fall Risk: Y ☐ N☐** **Fall Score:** 20 (high risk) **Activity/Mobility Status:** **Independent (up ad lib) ☐** **Needs assistance with equipment ☐** **Needs support to stand and walk ☐**	strength is rated at a 2/5. The patient is not independent, and 1 assist is needed and on standby when getting up from bed and/or walking from the bathroom to the bed. The patient has difficulty performing ADLs and difficulty with mobility. There is left and right joint swelling and tenderness present in both knees. The patient has a high fall risk with a score of 20.
NEUROLOGICAL: **MAEW: Y ☐ N☐** **PERLA: Y ☐ N☐** **Strength Equal: Y ☐ N ☐ if no - Legs ☐ Arms ☐ Both ☐** **Orientation:** Oriented x4 **Mental Status:** Alert and oriented x4 **Speech:** Coherent **Sensory:** Intact **LOC:** None	The patient is alert and relaxed. B.M. is oriented x4, to person, place, time, and situation. The patient's speech is coherent, and their senses are intact. Upon assessment, PERRLA b/l. The patient's strength is not equal throughout upper and lower extremities bilaterally. The patient could not perform pedal pushes and hand grips with ease. The patient follows commands, but motor responses are not good.
PSYCHOSOCIAL/CULTURAL: **Coping method(s):** Medication and distraction methods **Developmental level:** Developmental level appropriate for age. **Religion & what it means to pt.:** The patient is Catholic, and religion is important to them and their family. **Personal/Family Data (Think about home environment, family structure, and available family support):** Support from husband.	The patient is taking acetaminophen for knee related problems. The patient is taking multiple medications for anxiety and depression. The patient is afraid, fearful, and anxious. The patient is alert and oriented x4 (to person, place, time, and situation). Thought processes are coherent and memory is intact. Developmental level is appropriate for age. The patient practices Catholicism and explains how religion is important to them and their family. Support system from husband.

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

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0900	120 bpm	130/74; R antebrachium sitting	26	36.7°C (temporal)	99% O2 – 2L/min nasal cannula
1100	115 bpm	126/73; R antebrachium sitting	24	36.7°C (temporal)	99% O2 – 2L/min nasal cannula

Vital Sign Trends/Correlation: Heart rate and respiratory rate are increased, secondary to the patient's atrial fibrillation, at the time of assessment. Oxygen levels remain at 99%, but the patient is on oxygen at 2L/min via a nasal cannula.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0900	Numerical scale	Knees bilaterally	Pain scale score = 7 Severe	Grimacing, aching	Pain management: acetaminophen
1100	Numerical scale	Knees bilaterally	Pain scale score = 6 Severe	Grimacing, aching	Pain management: acetaminophen

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: 20 G **Location of IV:** Right Antecubital **Date on IV:** 01/22/2023 **Patency of IV:** Clean, dry, intact **Signs of erythema, drainage, etc.:** None **IV dressing assessment:** Transparent	20 G IV located in the right antecubital space. | Saline locked and capped | Transparent, clean, dry, and intact.
Other Lines (PICC, Port, central line, etc.)	None
Type: N/A **Size:** N/A **Location:** N/A **Date of insertion:** N/A **Patency:** N/A **Signs of erythema, drainage, etc.:** N/A **Dressing assessment:** N/A **Date on dressing:** N/A **CUROS caps in place: Y ☐ N ☐** **CLABSI prevention measures:** N/A	None

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
Regular Diet 75% of meal	Estimated: 500 mL The patient voids in the toilet.

125 mL of water	

Nursing Care

Summary of Care (2 points)

Overview of care: Assisted with passing medication, ambulation, and assessments for the patient, including patient vital signs. The patient received anti-anxiety medication due to their increased anxiety during the hospital stay. The patient also received furosemide for their edema and acetaminophen PRN for their bilateral knee pain. The patient, B.M., was provided education on the importance of the CPAP machine from respiratory therapy and reinforced by myself.

Procedures/testing done: XR Chest performed on 01/22/2023 – see results above.

Complaints/Issues: Shortness of breath | Pain in left and right knee; pain level assessment score = 6. Acetaminophen given for pain.

Vital signs (stable/unstable): Unstable – secondary to atrial fibrillation. Increased HR and respiratory rate.

Tolerating diet, activity, etc.: The patient is tolerating a diet (Regular Diet). The patient has difficulty performing ADLs and with mobility. 1 assist on standby for ambulation and performing ADLs and mobility.

Physician notifications: Notified the physician due to increased reports of anxiety. The provider put in an order for 0.25 mg IV of lorazepam (Ativan) to help with anxiety.

Future plans for client: Outpatient therapy at OSF in Danville.

Discharge Planning (2 points)

Discharge location: The patient will be going home with their husband.

Home health needs (if applicable): None

Equipment needs (if applicable): Walker

Follow up plan: Outpatient therapy at OSF in Danville. Further appointments pending results of echocardiogram and neurology consultation.

Education needs: CPAP importance | Discharge planning is pending.

Nursing Diagnosis (15 points) (Phelps, 2020)
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 ● Listed in order by priority – highest priority to lowest priority pertinent to this client	**Rationale** ● Explain why the nursing diagnosis was chosen	**Interventions (2 per dx)**	**Outcome Goal (1 per dx)**	**Evaluation** ● How did the client/family respond to the nurse's actions? ● Client response, status of goals and outcomes, modifications to plan.
1. Ineffective airway clearance related to copious secretions as evidenced by shortness of breath.	The patient is at an increased risk for ineffective airway clearance due to the inability to clear secretions or obstructions from the respiratory tract to maintain a clear airway (Hinkle & Cheever, 2022).	1. Assess changes in blood pressure, heart rate, and temperature. 2. Encourage the patient to cough out secretions. If the cough is ineffective, institute suctioning of the airway as needed.	The patient will maintain a clear, open airway as evidenced by normal breath sounds, normal rate and respirations, and the ability to effectively cough up secretions.	The patient was compliant and cooperative. The patient's airway remains clear and allows for adequate ventilation. The patient's oxygen level remains within normal range. The patient doesn't experience dyspnea or change in respiratory pattern. The patient demonstrates understanding of changes needed to diminish oxygen demands.
2. Impaired gas exchange related to altered oxygen supply as evidenced by abnormal ABG values.	Due to the patient's diagnosis of COPD, they are not effectively eliminating CO2, rather, they are retaining it (Hinkle & Cheever, 2022).	1. Assist the patient with ADLs to decrease tissue oxygen demand. 2. Teach the patient relaxation techniques to reduce tissue oxygen demand.	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.	The patient responds positively. The patient's respiratory rate remains within established limits, and they do not experience dyspnea. The patient performs relaxation techniques.
3. Ineffective breathing pattern	The main priority for this patient is to	1. Assess and record respiratory rate and	The patient will report feeling rested each day	The patient was cooperative. The patient will achieve maximum

	related to ineffective inspiration and expiration occurring with chronic airway constraints as evidenced by adventitious lung sounds.	manage their ABCs. Airway patency is crucial for a patient who has COPD (Hinkle & Cheever, 2022).	depth at least every 4 hours. 2. Administer oxygen is ordered.	and comfortable when breathing.	lung expansion with adequate ventilation. The patient will also demonstrate skills and conserving energy while carrying out ADLs.
4.	Activity intolerance related to an imbalance between oxygen supply and demand due to inefficient work of breathing as evidenced by shortness of breath.	Patients diagnosed with COPD can experience hypoxia during increased activity and may need oxygenation to avoid hypoxemia which puts the patient at risk for exacerbations of the condition (Hinkle & Cheever, 2022).	1. Administer supplemental oxygen as indicated. 2. Teach and assist the patient with active ROM exercises.	The patient will report reduced episodes of dyspnea during an activity.	The patient was cooperative and compliant. The patience pulse and respiratory rates will remain within prescribed limits during activity. The patient also states a desire to increase activity level.
5.	Deficient knowledge related to lack of recall as evidenced by statements of concerns and misconceptions.	The knowledge of the patient about COPD is a key factor in determining the behavior of the patient towards self-management (Hinkle & Cheever, 2022).	1. Explain and reinforce explanations of COPD. 2. Encourage the patient to explore ways to control triggering factors in and around the home.	The patient will verbalize understanding of COPD and treatment.	The patient was compliant. The patient will initiate necessary lifestyle changes and participate in the treatment regimen.

Other References (APA):

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

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

Concept Map (20 Points): The Concept Map can be found on page 23 of the Care Plan.

Subjective Data

- The patient appears to be in acute distress, describing being short of breath.
- The patient lives at home with their husband.
- The patient rates their pain a 6 on the Numerical scale.
  - Location: Knees bilaterally
  - Treatment: acetaminophen

Nursing Diagnosis/Outcomes

1. Ineffective airway clearance related to copious secretions as evidenced by shortness of breath.
   i. The patient will maintain a clear, open airway as evidenced by normal breath sounds, normal rate, and respirations, and the ability to effectively cough up secretions.
2. Impaired gas exchange related to altered oxygen supply as evidenced by abnormal ABG values.
   i. The patient will demonstrate improved ventilation and adequate oxygenation of tissues by ABGc within the patient's normal range and be free of symptoms of respiratory distress.
3. Ineffective breathing pattern related to ineffective inspiration and expiration occurring with chronic airway constraints as evidenced by adventitious lung sounds.
   i. The patient will report feeling rested each day and comfortable when breathing.
4. Activity intolerance related to an imbalance between oxygen supply and demand due to inefficient work of breathing as evidenced by shortness of breath.
   i. The patient will report reduced episodes of dyspnea during an activity.
5. Deficient knowledge related to lack of recall as evidenced by statements of concerns and misconceptions.
   i. The patient will verbalize understanding of COPD and treatment.

Objective Data

- Vital Signs: height 167.6 cm, weight 119.3 kg, T 36.7C temporal, P 115, RR 24, BP 126/73 R antebrachium sitting, O2 99% 2L/min via nasal cannula.
- Hospital medications:
  - **G:** famotidine **B:** Pepcid
  - **G:** acetaminophen **B:** Tylenol
  - **G:** methylprednisolone **B:** Solu-Medrol
  - **G:** ondansetron **B:** Zofran
  - **G:** benzonatate **B:** Tessalon
- Fall Risk Score: 20 (high risk risk)
- Braden Scale Score: 17 (high risk)
- XR Chest performed

Client Information

- 68-year-old female admitted for shortness of breath and fall
- PMH: A-fib, arthritis, brain aneurysm, carcinoma, chronic pain, clotting disorder, CHF, fibromyalgia, hyperlipidemia, HTN, lymphedema, shoulder dislocation, sleep apnea
- PSH: Breast surgery (bilateral mastectomy), shoulder surgery, hysteroscopy, cardiac catheterization.
- No tobacco or illicit drug use. Former smoker, quit 24 years ago. Alcohol consumption: socially
- The client is noncompliant with CPAP machine.

Nursing Interventions

Some nursing interventions include:

- Assess changes in blood pressure, heart rate, and temperature.
- Encourage the patient to cough out secretions. If the cough is ineffective, institute suctioning of the airway as needed.
- Assist the patient with ADLs to decrease tissue oxygen demand.
- Teach the patient relaxation techniques to reduce tissue oxygen demand.
- Assess and record respiratory rate and depth at least every 4 hours.
- Administer oxygen is ordered.
- Administer supplemental oxygen as indicated.
- Teach and assist the patient with active ROM exercises.
- Explain and reinforce explanations of COPD.
- Encourage the patient to explore ways to control triggering factors in and around the home.