N321 Care Plan #1

Lakeview College of Nursing

Rebekah Moutria

Demographics (3 points)

Date of Admission 2/13/2022	**Client Initials** I.W.	**Age** 70	**Gender** Female
Race/Ethnicity Caucasian	**Occupation** Healthcare Worker	**Marital Status** Widowed	**Allergies** Aspirin (Reaction unknown) Ragweed Pollen (Reaction unknown)
Code Status Full code	**Height** 160cm	**Weight** 101.2kg	

Medical History (5 Points)

Past Medical History: Arthritis, COPD mixed type, Dysesthesia of face, Fibromyalgia, Obesity, Major Depressive Disorder, Von Willebrand disease, Hypertension, Type 2 Diabetes

Past Surgical History: Transforaminal Epidural Steroid (Date unknown), Injection with fluoroscopy (6/21/2017), Trigger point injections (6/21/2017), cholecystectomy (Date unknown), Parotidectomy (Date unknown).

Family History: Father; Cancer, Hypertension. Mother; Arthritis, asthma, bleeding disorder, DVT, COPD, HTN, Migraine. Sister; Myocardial Infraction. Brother; Coronary Artery Bypass Graft

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

Assistive Devices: Prescription glasses

Living Situation: The patient lives in a trailer with her son and grandson, who assist in taking care of her.

Education Level: Associates Degree

Admission Assessment

Chief Complaint (2 points): The patient arrived at the emergency department via EMS for worsening cough and shortness of breath.

History of Present Illness – OLD CARTS (10 points):

A 70-year-old female with a history of COPD mixed type, arthritis, obesity, hypertension, and type 2 diabetes, presented to the emergency department with complaints of uncontrollable coughing. The patient states the coughing has been going on for three weeks and her home nebulizer treatment has not been helping. The patient states she recently started on a new medication from her cardiologist, and it has made her coughing uncontrollable. The patient had worsening shortness of breath while walking around and began coughing up yellow sputum. The patient states that the excessive coughing is causing her achy and sore pain in her abdomen and ribcage. She denies having fever, chills, pain, nausea, or vomiting. The patient states the medication has made her chronic cough worse, and nothing alleviates the cough or the pain.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Acute COPD exacerbation

Secondary Diagnosis (if applicable):

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

Chronic obstructive pulmonary disease is a combination of emphysema, chronic bronchitis, and hyperactive airway disease. It is characterized by poorly reversible airflow limitation caused by these three disorders. With emphysema, the alveoli are overdistended with trapped air. This creates an obstruction to airflow, loss of elastic recoil of the alveoli, and high residual volumes of carbon dioxide in the lungs (Capriotti, 2020). When it comes to chronic bronchitis, there is a hypersecretion of mucus in the large and small airways which creates an

obstruction of inspiratory airflow that prevents optimal oxygen exchange. This can lead to atelectasis from a lack of ventilation (Capriotti, 2020). With the inflammatory changes, there can be permanent remodeling of the pulmonary structures. This means that there could be constriction of the lumens, thickening of the walls, and stimulation of macrophages, neutrophils, T lymphocytes, and cytokines. With the impairment in gas exchange, this can lead to carbon dioxide retention, which can cause muscle weakness, fatigue, and difficulty in carrying out daily activities (Mancopes et al., 2021). The most common complaints of COPD are dyspnea and coughing, both of which the patient exhibited. Some additional signs and symptoms with COPD would be wheezing, a productive cough, hypoxia, cyanosis, barrel-shaped chest, and use of accessory muscles during respirations (Capriotti, 2020).

As far as vital signs, patients with COPD will have prolonged exhalation and purse the lips when exhaling. Their oxygen saturation will be lower due to the decrease in optimal gas exchange and blood pressure will typically be elevated. Some ways to diagnose COPD would be a COPD Assessment Test or spirometry. A CBC with an elevated erythrocyte count, a chest x-ray consistent with emphysema, and an ECG demonstrating a right axis deviation can all be analyzed to support the diagnosis as well (Capriotti, 2020).

The patient was at risk for the development of COPD due to being exposed to secondhand smoke throughout her childhood. The patient suffers from a chronic cough, shortness of breath, and fatigue due to her COPD. When admitted to the hospital, she was being treated for an acute COPD exacerbation. As far as treatment options for this disease, there are short-acting bronchodilation agents, long-acting antimuscarinic agents, phosphodiesterase inhibitors, and leukotriene antagonists (Capriotti, 2020). For non-pharmacological interventions, smoking cessation, oxygen therapy, and pulmonary rehabilitation are wise options.

Pathophysiology References (2) (APA):

Capriotti, T. (2020). *Davis advantage for pathophysiology: Introductory concepts and clinical perspectives*. Philadelphia: F.A. Davis.

Mancopes, R., Borowsky da Rosa, F., Tomasi, L. L., Pasqualoto, A. S., & Steele, C. M. (2021). Chronic obstructive pulmonary disease and dysphagia: What have we learned so far and what do we still need to investigate? *Perspectives of the ASHA Special Interest Groups*, *6*(5), 1212–1221. https://doi.org/10.1044/2021_PERSP-20-00288

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	3.90-4.98x10^6/mcL	4.54	4.27	N/A
Hgb	12.0-15.5 gm/dL	13.6	12.9	N/A
Hct	35-45%	39.6	37.5	N/A
Platelets	150-400/mm3	238	215	N/A
WBC	4.5-11 K/mcL	9.1	7.6	N/A
Neutrophils	2.5-6.0	6.0	7.4	The neutrophil count could be elevated due to the COPD exacerbation (Capriotti, 2020).
Lymphocytes	1.0-4.8	1.5	0.2	N/A
Monocytes	0.4-0.8%	0.7	N/A	N/A
Eosinophils	0.0-8.0%	0.7	N/A	N/A
Bands	0.0-10.0%	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-	135-145 mmol/L	140	138	N/A
K+	3.5-5.1 mmol/L	3.5	3.9	N/A
Cl-	98-107 mmol/L	106	102	N/A
CO2	22-29 mmol/L	27	26	N/A
Glucose	70-99 mg/dL	229	410	The patient's blood glucose was elevated because she is a type 2 diabetic who struggles with hyperglycemia (Capriotti, 2020).
BUN	6-20 mg/dL	7	10	N/A
Creatinine	0.50-1.0 mg/dL	0.69	0.82	N/A
Albumin	3.5-5.2 mg/dL	3.7	N/A	N/A
Calcium	8.4-10.5 mg/dL	8.2	7.8	Calcium levels could be low due to the patient being a type 2 diabetic and having impaired secretion of the parathyroid hormone (Capriotti, 2020).
Mag	1.8-2.6 mg/dL	N/A	N/A	N/A
Phosphate	2.7-4.5 mg/dL	N/A	N/A	N/A
Bilirubin	0.0-1.2 mg/dL	0.3	N/A	N/A
Alk Phos	35-105 U/L	102	N/A	N/A
AST	10-30 U/L	19	N/A	N/A
ALT	10-40 U/L	15	N/A	N/A
Amylase	40-140 U/L	N/A	N/A	N/A

Lipase	0-160 U/L	N/A	N/A	N/A
Lactic Acid	0.5-2.2mmol/L	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
INR	0.8-1.2	N/A	N/A	N/A
PT	11-13 sec	N/A	N/A	N/A
PTT	30-40 sec	N/A	N/A	N/A
D-Dimer	<250 ng/mL	0.64	N/A	D-Dimer levels can be elevated if the patient has any type of blood clotting in the body, such as a bruise or a DVT/PE. Since the patient's CT came back negative for a PE, it could be likely there is some bruising in the body causing the elevated D-Dimer (Capriotti, 2020).
BNP	<100pg/mL	N/A	N/A	N/A
HDL	>60 mg/dL	N/A	N/A	N/A
LDL	<130 mg/dL	N/A	N/A	N/A
Cholesterol	<200 mg/dL	N/A	N/A	N/A
Triglycerides	<150 mg/dL	N/A	N/A	N/A
Hgb A1c	4-5.6%	N/A	N/A	N/A
TSH	0.5-5.0 mIU/L	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	N/A	N/A	N/A	N/A
pH	N/A	N/A	N/A	N/A
Specific Gravity	N/A	N/A	N/A	N/A
Glucose	N/A	N/A	N/A	N/A
Protein	N/A	N/A	N/A	N/A
Ketones	N/A	N/A	N/A	N/A
WBC	N/A	N/A	N/A	N/A
RBC	N/A	N/A	N/A	N/A
Leukoesterase	N/A	N/A	N/A	N/A

A urinalysis was not performed on my patient.

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	N/A	N/A	N/A
Blood Culture	N/A	N/A	N/A	N/A
Sputum Culture	N/A	N/A	N/A	N/A
Stool Culture	N/A	N/A	N/A	N/A

None of the following cultures were performed on this patient.

Lab Correlations Reference (1) (APA):

Capriotti, T. (2020). *Davis advantage for pathophysiology: Introductory concepts and clinical perspectives*. Philadelphia: F.A. Davis.

Diagnostic Imaging

All Other Diagnostic Tests (5 points):

Diagnostic Test Correlation (5 points):

EKG: An electrocardiogram records the heart's electrical activity through electrodes placed on different points of the body (Capriotti, 2020). The patient needed this diagnostic test completed due to coming into the ER with shortness of breath. This test can tell us if our patient is having cardiac issues such as a STEMI. With a history of hypertension, obesity, and diabetes, our patient is more at risk for coronary problems so performing an EKG is essential.

CT Angio Chest Pulmonary with contrast: A CT scan can show more specific views of the respiratory system and allow us to see complications such as lung abscesses, tumors, tuberculosis, or pleural effusions (Capriotti, 2020). Due to the patient having an elevated D-dimer lab, this test was performed to look for the possibility of a pulmonary embolism.

Chest x-ray: Chest x-rays can show abnormalities such as inadequate lung expansion, COPD changes, tumors, pneumothorax, or the presence of fluid accumulation (Capriotti, 2020). With the patient experiencing shortness of breath, a worsening cough, and producing yellow sputum, a chest x-ray will help rule out complications such as pneumonia. No acute cardiopulmonary processes were detected.

Diagnostic Test Reference (1) (APA):

Capriotti, T. (2020). *Davis advantage for pathophysiology: Introductory concepts and clinical perspectives*. Philadelphia: F.A. Davis.

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

Home Medications (5 required)

Brand/ Generic	**Metformin hydrochloride/ Fortamet**	**Sertraline/ Zoloft**	**Atorvastin calcium/ Lipitor**	**Pregabalin/ Lyrica**	**Montelukast sodium, Singulair**
Dose	500mg	150mg	20mg	75mg	10mg
Frequency	BID	Daily	Daily	BID	Daily
Route	PO	PO	PO	PO	PO
Classification	Pharmacologic class: Biguanide Therapeutic class: Antidiabetic	Pharmacologic class: Selective serotonin reuptake inhibitor Therapeutic class: Antidepressant	Pharmacologic class: HMG-CoA reductase inhibitor Therapeutic class: Antihyperlipidemic	Pharmacologic class: Gamma-aminobutyric acid analogue Therapeutic class: Analgesic, anticonvulsant	Pharmacologic class: Leukotriene receptor antagonist Therapeutic class: Antiallergen, antiasthmatic
Mechanism of Action	Promotes storage of excess glucose as glycogen in the liver to reduce glucose production (Jones & Bartlett Learning, 2021).	Inhibits reuptake of serotonin in CNS at the presynaptic neuronal membrane (MedlinePlus, 2022).	Reduces plasma cholesterol and lipoprotein levels by inhibiting HMG-CoA reductase and cholesterol synthesis in the liver (Jones & Bartlett Learning, 2021).	Binds to the Alpha2-delta site in CNS tissue where it may reduce the calcium-dependent release of neurotransmitters (Jones & Bartlett, 2021).	Antagonizes receptors for cysteinyl leukotrienes, produced by arachidonic acid metabolism and released from eosinophils and mast cells (Jones & Bartlett, 2021).
Reason Client Taking	To reduce blood glucose levels	Major depressive disorder	To help control lipid levels	Manage fibromyalgia	Seasonal allergies
Contraindications (2)	Acute or chronic	Manic depression,	Hypersensitivity to	Hypersensitivity to	Hypersensitivity to the

	metabolic acidosis, Severe renal disease (Jones & Bartlett Learning, 2021).	Increased risk of bleeding (MedlinePlus, 2022).	atorvastatin or its components, unexplained persistent rise in serum transaminase level (Jones & Bartlett Learning, 2021).	pregabalin or its components, Decreased lung function (Jones & Bartlett Learning, 2021).	drug or its components, depression (Jones & Bartlett Learning, 2021).
Side Effects/ Adverse Reactions (2)	Hypoglycemia, nausea (Jones & Bartlett Learning, 2021).	Difficulty breathing, seizures (MedlinePlus, 2022).	Dyspnea, Flu-like symptoms (Jones & Bartlett Learning, 2021).	Hypoglycemia, fatigue (Jones & Bartlett Learning, 2021).	Insomnia, cough (Jones & Bartlett Learning, 2021).
Nursing Considerations (2)	Give metformin tablets with food to reduce the risk of GI upset. Give E.R. tablets with an evening meal (Jones & Bartlett Learning, 2021).	Take this medication at the same time every day, with or without food. Instruct patient to not take this drug while taking other serotonin boosters (MedlinePlus, 2022).	Expect to measure lipid levels 2 to 4 weeks after therapy starts and adjust the dose as directed. Monitor blood glucose because of atorvastatin therapy's effect on blood glucose (Jones & Bartlett, 2021).	Instruct patient not to chew, crush, or split extended-release tablets. The patient should take the tablets whole and after an evening meal. (Jones & Bartlett Learning, 2021).	Advise the patient to take the dose as prescribed and not to decrease the dose if they are feeling well. Instruct the patient to report increased bleeding or skin reactions (Jones & Bartlett Learning, 2021).

Hospital Medications (5 required)

Brand/ Generic	**Doxycycline/ Oracea**	**DilTIAZem hydrochloride/ Diltzac**	**Heparin sodium/ Hepalean (CAN)**	**Budesonide /Entocort**	**Formoterol fumarate/ Oxese Turbuhaler**
Dose	100mg	120mg	5000units	2mL	2mL
Frequency	BID	Daily	BID	BID	BID
Route	PO	PO	subq	Soln-inhalation	Soln-inhalation
Classification	Pharmacologic class: Tetracycline Therapeutic class: Antibiotic (Jones & Bartlett Learning, 2021)	Pharmacologic class: Calcium channel blocker Therapeutic class: Antianginal, antiarrhythmics, antihypertension (Jones & Bartlett Learning, 2021)	Pharmacologic class: Anticoagulant Therapeutic class: Anticoagulant (Jones & Bartlett Learning, 2021)	Pharmacologic class: Corticosteroids Therapeutic class: Antiasthmatic, anti-inflammatory (Jones & Bartlett Learning, 2021)	Pharmacologic class: Selective beta2-adrenergic agonist Therapeutic class: Bronchodilator (Jones & Bartlett Learning, 2021)
Mechanism of Action	Inhibits bacterial protein synthesis by binding to the 30S ribosomal subunit (Jones & Bartlett Learning, 2021)	Inhibits calcium movement into coronary and vascular smooth muscle cells by blocking slow calcium channels in cell membranes (Jones & Bartlett Learning, 2021)	Binds with antithrombin 3, enhancing antithrombin 3s inactivation of the coagulation enzymes thrombin and factors Xa and Xia (Jones & Bartlett Learning,	"It binds and activates glucocorticoid receptors (GR) in the effector cell (e.g., bronchial) cytoplasm that allows the translocation of this	Attaches to beta2 receptors on bronchial membrane, stimulating the intracellular enzyme adenyl cyclase to convert to

			2021)	budesonide-GR complex in the bronchi nucleus, which binds to both HDCA2 and CBP" (Kalola, 2021)	adenosine triphosphate to cAMP (Jones & Bartlett Learning, 2021)
Reason Client Taking	Inflammatory lesions of rosacea	Hypertension	Prevention of DVT/PE	Seasonal allergies	Treatment of bronchospasms from COPD
Contraindications (2)	Hypersensitivity to doxycycline or their components, liver disease (Jones & Bartlett Learning, 2021)	Acute MI, Pulmonary edema (Jones & Bartlett Learning, 2021)	Hypersensitivity to heparin or its components, inability to monitor coagulation parameters when full-dose heparin is administered (Jones & Bartlett Learning, 2021)	History of hypersensitivity to budesonide or any of the ingredients of the budesonide formulation, severe milk protein allergy (Kalola, 2021)	Hypersensitivity to formoterol fumarate or its components, patients who have asthma (Jones & Bartlett Learning, 2021)
Side Effects/Adverse Reactions (2)	Headache, intracranial hypertension (Jones & Bartlett Learning, 2021)	Hypotension, heart failure (Jones & Bartlett Learning, 2021)	Wheezing, chest pain (Jones & Bartlett Learning, 2021)	Headache, dizziness, gas, vomiting, fatigue, pain (Jones & Bartlett Learning, 2021)	Chest pain, hypotension (Jones & Bartlett Learning, 2021)
Nursing Considerations (2)	Give this medication without regard to meals.	Explain that capsules and E.R. tablets must be swallowed	Alternate injection sites and watch for signs of	Instruct patient to prime oral inhaler	Teach patient to not increase formoterol

	Monitor liver function test results as appropriate to detect hepatotoxicity (Jones & Bartlett Learning, 2021)	whole. Advise patient to monitor blood pressure and heart rate closely (Jones & Bartlett Learning, 2021)	bleeding or hematoma. Administer subcutaneous heparin into the anterior abdominal wall, above the iliac crest and 2 inches away from the umbilicus (Jones & Bartlett Learning, 2021)	before using it for the first time. Determine if the patient has a milk allergy. (Jones & Bartlett Learning, 2021)	dosage or frequency without consulting the prescriber first. Teach patient to store the drug in its original packaging and open it immediatel y before use. (Jones & Bartlett Learning, 2021)

Medications Reference (1) (APA):

Jones, D.W. (2021). Nurse's drug handbook. (A. Bartlett, Ed.) (20th ed.). Jones & Bartlett Learning.

Kalola, U. K. (2021, June 20). *Budesonide*. National Center for Biotechnology Information. Retrieved October 14, 2021, from https://pubmed.ncbi.nlm.nih.gov/33085348/.

MedlinePlus. (2022, January 15). Sertraline: Medlineplus drug information. MedlinePlus. Retrieved February 18, 2022, from https://medlineplus.gov/druginfo/meds/a697048.html

Assessment

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

GENERAL: **Alertness:**	Patient was alert and oriented to person, place, time, and situation. (x4)

Orientation: **Distress:** **Overall appearance:**	Patient was relaxed and accepting of her situation during assessment. Patient showed no signs of distress. Overall appearance was clean and well groomed.
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score: 23** **Drains present: Y☐ N ☒** **Type:**	Patient's skin color was appropriate for ethnicity. Skin was warm, dry, and intact. Skin turgor was loose. Patient had no rashes, bruises, or wounds present. Patient's Braden score was 23. Patient had no drains present.
HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	Patient's head appears normocephalic. Neck appeared symmetrical with trachea at midline. Ears had no visible drainage, and no redness. Patient claims no hearing loss or pain in the ears. Eyes exhibited PERRLA. Extraocular movements were intact. Pupils were observed to be 2 mm. Eyes appeared symmetrical with no drainage present, conjunctiva was pink and not inflamed. Patient's nose was symmetrical and deviated septum was not detected. Patient has good oral hygiene, tongue appeared pink and midline with no sores. No dental carries were present. Buccal mucosa was pink and moist. .
CARDIOVASCULAR: **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** **Peripheral Pulses:** **Capillary refill:** **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☐ N ☒** **Location of Edema:**	S1 and S2 heard. S3 and S4 not heard. Normal rate and rhythm were heard upon auscultation. Upper peripheral pulses were palpable at 3+. No jugular vein distention was noted. Capillary refill was less than 3 seconds. No edema present.
RESPIRATORY: **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	Bilateral expiratory wheezing heard upon anterior and posterior auscultation. Respiratory rate was observed while client was seated in her bed to be 18 breaths per minute. Patient has no chest deformities. Respirations were observed to be even, calm, and regular. No accessory muscles were used. Patient exhibits a productive cough.

GASTROINTESTINAL: **Diet at home:** **Current Diet** **Height:** **Weight:** **Auscultation Bowel sounds:** **Last BM:** **Palpation: Pain, Mass etc.:** **Inspection:** **Distention:** **Incisions:** **Scars:** **Drains:** **Wounds:** **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Size:** **Feeding tubes/PEG tube Y ☐ N ☒** **Type:**	Patient states at home she restricts her calories to 1200-1700 per day, with a limit of 60 carbohydrates per day. She focuses on eating enough protein, fruits, and vegetables. Her current diet in the hospital is regular and restricted to 1500-1700 calories daily. Patient has a good appetite and was planning for dinner. Patient's height is 160cm. Patient's weight is 101.2kg. Bowel sounds were heard in all four quadrants. Patient's last bowel movement was the morning of 2/13/2022. Patient states that bowel movement was normal in consistency and color. Abdomen was soft and not tender to palpation. No masses were palpated. Patient had no drains or wounds present.
GENITOURINARY: **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☐ N ☒** **Type:** **Size:**	Patient states there was no pain, urgency, or frequency upon urination. During shift, urine was not inspected. Patient is not on dialysis and did not have a catheter. Inspection of genitals was not performed during shift.
MUSCULOSKELETAL: **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☐ N ☒** **Fall Risk: Y ☐ N☒** **Fall Score: 15** **Activity/Mobility Status:** **Independent (up ad lib)** ☐ **Needs assistance with equipment** ☐ **Needs support to stand and walk** ☐	The patient ambulated well without assistance. Patient did not use any supportive devices. Upper extremity strength is 5/5 on right side and 5/5 on the left side. Lower extremity strength is 5/5 on right side and 5/5 on the left side. Patient exhibited equal strength in both arms and legs. Patient exhibited full ROM in both arms and legs. Patient was able to display opposition with all fingers and thumbs. Her fall risk score was 15. Cranial nerves 1-12 were intact.
NEUROLOGICAL: **MAEW: Y ☐ N☐** **PERLA: Y ☐ N☐**	Patient is alert and oriented x4. Eyes exhibit PERLA signs. Patient's speech is well articulated and clear. Patient moves all

Strength Equal: Y ☐ N ☐ if no - Legs ☐ Arms ☐ Both ☐ **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	extremities well and displays no signs of paralysis. Patient displayed equal strength in all extremities. Patient senses touch in both arms and legs.
PSYCHOSOCIAL/CULTURAL: **Coping method(s):** **Developmental level:** **Religion & what it means to pt.:** **Personal/Family Data (Think about home environment, family structure, and available family support):**	The patient states she has a good support system. She lives at home with her son and grandson who help with ADLs. She has Christian beliefs and uses prayer and church as a form of coping. Patient has a general associate degree.

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

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
1335	99bpm	121/74mmhg	18/min	37.0 Tympanic	96% RA
1530	96bpm	140/78mmhg	18/min	37.4 Tympanic	94% RA

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
1530	0-10	Abdomen	4	Pressure/sore	The patient would get up and go for a walk around the unit to distract herself from the pain.
1645	0-10	Abdomen/ribcage	5	Sore/Achy	The patient would get up and go for a walk around the unit to distract

					herself from the pain.

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:**	Patient has a 22 gauge IV in her left forearm. IV was dated 02/13/2022. IV was patent with no phlebitis or infiltration present. There were no signs of erythema or drainage present. Dressing was transparent, dry and intact. During the time of IV assessment, there were no fluids currently being administered.

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
Oral intake 240 mL Oral intake 240mL Water 180mL	No output was charted for this patient.

Nursing Care

Summary of Care (2 points)

Overview of care: The patient was in good spirits for the duration of the shift. The patient did multiple walks around the unit and ambulated well without assistance. The patient was able to maintain normal oxygen levels without oxygen therapy.

Procedures/testing done: An EKG, CT pulmonary angiogram with contrast, and a chest x-ray were performed.

Complaints/Issues: The patient reported pain of 5/10 in her abdomen due to excessive and forceful coughing.

Vital signs (stable/unstable): The patient's vital signs were all stable.

Tolerating diet, activity, etc.: The patient is tolerating her diet well. Due to her type 2 diabetes, she is restricted to 1500-1700 per day. The patient is ambulating well without assistance.

Physician notifications: The patient should use an incentive spirometer 10 times per hour.

Future plans for the client: Anticipating the client will remain on COPD medications to relieve the exacerbation symptoms.

Discharge Planning (2 points)

Discharge location: Patient plans on returning home to her son and grandson.

Home health needs (if applicable): The patient will continue with home health.

Equipment needs (if applicable): Incentive Spirometer

Follow up plan: The patient will need to follow up with PCM and cardiologist.

Education needs: The patient will need to be educated on the use of an incentive spirometer and some medication education as well.

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	**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

• Listed in order by priority – highest priority to lowest priority pertinent to this client				and outcomes, modifications to plan.
1. Ineffective airway clearance related to excessive mucus as evidenced by worsening cough.	The patient arrived at the ED with complaints of shortness of breath and uncontrollable cough.	1.Observe for persistent, hacking, or moist cough. 2. Assist client to maintain a comfortable position to facilitate breathing by raising the head of the bed.	1. Patient's airway will remain patent and oxygen levels will remain in normal range.	The patient and her family were supportive of the nursing actions. The patient focused on increasing fluid intake to help with the excessive mucus and productive cough.
2. Impaired gas exchange related to reduced tolerance for activity as evidenced by shortness of breath while ambulating.	The patient stated that her shortness of breath got worse as she was trying to walk around.	1. Auscultate breath sounds, noting areas of decreased airflow and adventitious sounds. 2.Assess respiratory rate and depth. Note the use of accessory muscles, and pursed-lip breathing.	1. The patient will demonstrate improved ventilation and adequate oxygenation of tissues by ABGs within the client's normal range.	The patient was able to maintain normal oxygen levels without the need for her nasal cannula.
3. Ineffective breathing pattern related to retained secretions as evidenced	Upon auscultation of the lungs, bilateral expiratory wheezing was noted.	1. Administer oxygen, expectorants, bronchodilators, and other drugs as ordered.	1. The patient will participate in the treatment regimen within the level of ability and situation.	The patient was able to ambulate well without shortness of breath.

by bilateral expiratory wheezing		2 Assist with respiratory treatments such as spirometry and chest physiotherapy.		

Other References (APA):

Concept Map (20 Points):

Subjective Data

The patient reported worsening cough with yellow sputum production, shortness of breath while ambulating, and pain 5/10 in the abdomen from excessive coughing.

Nursing Diagnosis/Outcomes

Ineffective airway clearance related to excessive mucus as evidenced by worsening cough.
Outcome: The patient's airway will remain patent and oxygen levels will remain within the normal range.

Impaired gas exchange related to reduced tolerance for activity as evidenced by shortness of breath while ambulating.
Outcome: The patient will demonstrate improved ventilation and adequate oxygenation of tissues by ABGs within the client's normal range.

Ineffective breathing pattern related to retained secretions as evidenced by bilateral expiratory wheezing
Outcome: The patient will participate in the treatment regimen within the level of ability and situation.

Objective Data

An EKG, CT pulmonary angiogram with contrast, and a chest x-ray were performed. Results confirmed no acute cardiopulmonary processes. Lab results showed an elevated d-dimer, however, no pulmonary embolisms were detected on the CT.

Client Information

A 70-year-old female with a history of COPD mixed type presented to the emergency department with complaints of coughing from a COPD exacerbation. The patient states the coughing has been going on for three weeks, and her home nebulizer treatment has not been helping. The patient had worsening shortness of breath while walking around and began coughing up yellow sputum. She denies having fever, chills, pain, nausea, or vomiting.

Nursing Interventions

Ineffective airway clearance related to excessive mucus as evidenced by worsening cough.
Observe for persistent, hacking, or moist cough.
Assist the client to maintain a comfortable position to facilitate breathing by raising the head of the bed.

paired gas exchange related to reduced tolerance for activity as denced by shortness of breath while ambulating.
cultate breath sounds, noting areas of decreased airflow and ntitious sounds.
ss respiratory rate and depth. Note the use of accessory muscles pursed-lip breathing.

ffective breathing pattern related to retained secretions as evidenced bilateral expiratory wheezing
dminister oxygen, expectorants, bronchodilators, and other drugs as ordered.
Assist with respiratory treatments such as spirometry and chest physiotherapy.