N431 Care Plan # 1

Lakeview College of Nursing

Name: Chloe Stalcup

Demographics (3 points)

Date of Admission	Patient Initials	Age	Gender
6/7/21	**A.W.**	**56**	**Male**
Race/Ethnicity	**Occupation**	**Marital Status**	**Allergies**
Caucasian	**Truck driver**	**Divorced**	**Morphine sulfate**
Code Status	**Height**	**Weight**	
DNR	**5'7"**	**316**	

Medical History (5 Points)

Past Medical History: Patient has a past medical history of COPD, CHF, stable angina, cardiomyopathy, obstructive sleep apnea, T2DM, and lymphedema.

Past Surgical History: Patient had 5 vessel coronary artery bypasses, femoral cardiac catheterization, and back surgery on two lower lumbar vertebrae.

Family History: Patient's father had lung cancer, T2DM, Heart disease, and elevated cholesterol.

Patient's mother had no medical problems.

Social History (tobacco/alcohol/drugs): 30-year smoker of 2PPD; patient quit 2 years ago. Previous moderate alcohol use. Current marijuana use of twice per week.

Assistive Devices: Walking cane on right side.

Living Situation: Lives alone.

Education Level: High school education with two years of college experience.

Admission Assessment

Chief Complaint (2 points): Shortness of breath due to black mold exposure.

History of present Illness (10 points): Patient A.W. presented to the emergency department on 06/09/2021 with shortness of breath due to black mold exposure. The shortness of breath is constant but worsens with activity and when lying flat. The patient described that he, "just couldn't catch my breath", which is what brought him to the emergency department. The patient was diagnosed with COPD in 2012 and believes the black mold exposure worsened his COPD symptoms. Relieving factors of his shortness of breath include sitting up in the hospital chair and leaning over the bedside table. The patient has been walking to the bathroom but states that any other activity makes him too short of breath. The patient has been admitted to SHMC for a COPD exacerbation last spring but has not sought out any other treatment for his current presentation of symptoms.

Primary Diagnosis

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

Secondary Diagnosis (if applicable):.

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

COPD is the third leading reason of death in the United States; it is also a prevalent cause of disability in the U.S. (Capriotti, 2020). COPD exacerbation is what brought 56-year-old A.W. to the emergency department with the complain of shortness of breath. COPD is best noted as a combination of emphysema, chronic bronchitis, and hyperactive airway disease. The play of emphysema in COPD is the overfilling of alveoli, creating an impaired ability to expel carbon dioxide from the lungs. Chronic bronchitis plays a role in the mucus production of COPD patients. This excessive amount of mucus in the airway creates an impaired inspiratory flow of oxygen, leading to hypoxia and cyanosis in COPD patients (Capriotti, 2020).

COPD affects the entire body by decreasing the amount of oxygen and increasing the body's retention of carbon dioxide. Various signs can be observed by this and symptoms of COPD, which include dyspnea upon exertion, productive cough, clubbed fingernails, JVD, barrel chest, and ankle edema (Capriotti, 2020). The evidence of COPD can be observed in patient A.W. by his shortness of breath upon exertion, use of the tripod position, a hacky cough, and through his increased CO2 levels of 36. Increased levels of CO2 indicate hypercarbia which is common in COPD patients. Patients with COPD often have a decreased O2 saturation; A.W.'s O2 levels are at a 92% on room air which is on the lower end of preferred saturation. As for lab diagnostics related to COPD, the patient has an abnormally high C-Reactive protein level (blood test to measure inflammation). This lab test's abnormality supports the presence of inflammation from COPD.

Diagnostic tests used to diagnose COPD include the COPD assessment test (CAT), which assesses the level of SOB and dyspnea (Capriotti, 2020). A CBC, chemistry panel, chest x-ray, ECG, and ABG's are also used to assess retention of CO2, oxygen levels, acid/base problems and assess the physical effects of the disease (Capriotti, 2020). Patient A.W. had a CBC, chemistry panel, and chest x-ray to assess his COPD exacerbation. The patient's current treatment includes nebulizers, corticosteroids, and rescue inhalers to treat his disease.

Pathophysiology References (2) (APA):

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

COPD. (2020, April 15). Retrieved June 9, 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	Admission	Today' s	Reason for Abnormal Value

	Range	Value	Value	
RBC	4.40-5.80		4.8	
Hgb	13-16.5		14.4	
Hct	38-50%		41.2	
Platelets	140-440		118	**Decreased platelet levels are a result of patient's enoxaparin use (Pagna, 2018).**
WBC	4-12		4.30	
Neutrophils	40-60		66.2	**Increased neutrophils are related to an increase of stress from COPD exacerbation and possible infection from pneumonia found on chest X-ray (Pagna, 2018).**
Lymphocytes	20-40%		21	
Monocytes	0.2-1.0		9.2	**Increased monocyte count is related to the patients COPD; chronic diseases increased monocyte count (Pagna, 2018).**
Eosinophils	1-4%		3.1	
Bands	0-4%		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-	133-144	133	137	
K+	3.5-5	3.9	4.1	
Cl-	98-107	99	98	
CO2	22-28	32	36	**This increased CO2 is related to decreased expiration of CO2 from COPD (Pagna, 2018).**
Glucose	70-99	319	166	**The patient has elevated blood sugar due to steroid use and T2DM (Pagna, 2018).**

BUN	7-25	16	14	
Creatinine	0.5-1.2	0.84	0.81	
Albumin	3.5-5.3	4.0	N/A	
Calcium	8.8-10.2	10.1	9.5	
Mag	1.6-2.6	1.5	N/A	
Phosphate	2.5-4.5	3.7	N/A	
Bilirubin	<0.5	0.9	N/A	**An increased bilirubin level is related to liver dysfunction and the use of hepatotoxic medications (Pagna, 2018).**
Alk Phos	39-104	63	N/A	
AST	13-39	45	N/A	**An increased AST is related to possible liver dysfunction and the use of hepatotoxic medications (Pagna, 2018).**
ALT	7-52	87	N/A	**An increased ALT is related to possible liver dysfunction and the use of hepatotoxic medications (Pagna, 2018).**
Amylase	23-85	N/A	N/A	
Lipase	0-160	N/A	N/A	
Lactic Acid	0.5-1	N/A	N/A	
Troponin	0-0.4	0.047	N/A	**An increased level of troponin is related to the patient's heart failure. (Pagna, 2018).**
CK-MB	0-9	N/A	N/A	
Total CK	10-105	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 n	Today's Value	Reason for Abnormal
INR	0.8-1.2	1.0	N/A	
PT	10-14s	12.2	N/A	
PTT	30-45s	N/A	N/A	
D-Dimer	<0.5	<215	272	**Elevated D-Dimer indicated a blood clot in the body (Pagna, 2018).**
BNP	<100	64	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	Yellow/clear			
pH	5.0-9.0			
Specific Gravity	WNL			
Glucose	Neg			
Protein	Neg			
Ketones	Neg			

WBC	Neg			
RBC	Neg			
Leukoesterase	Neg			

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

Test	Normal Range	Value on Admission	Today's Value	Explanation of Findings
pH	7.35-7.45			
PaO2	80-100			
PaCO2	35-45			
HCO3	22-28			
SaO2	92-100%	**92%**	**92%**	

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 n	Today's Value	Explanation of Findings
Urine Culture	Negative			
Blood Culture	Negative			
Sputum Culture	Negative			
Stool Culture	Negative			

Lab Correlations Reference (1) (APA):

Pagana, K. D., & Pagana, T. J. (2018). *Mosby's manual of diagnostic and laboratory tests* (7th ed.). Elsevier.

Diagnostic Imaging

All Other Diagnostic Tests (5 points):

- Chest x-ray single view. The x-ray showed mild to moderate congestion in both lungs with no signs of a pneumothorax. Cardiomegaly was also noted.

Diagnostic Test Correlation (5 points):

- The diagnostic findings are related to the patient's recent increased in SOB.

Diagnostic Test Reference (1) (APA):

Weerakkody, Y. (n.d.). *Pulmonary edema: radiology reference article*. Radiopaedia Blog RSS. https://radiopaedia.org/articles/pulmonary-oedema.

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

Home Medications (5 required)

Brand/Generic	**Acetaminophen/ Tylenol**	**Albuterol/ AccuNeb**	**Carvedilol/ Coreg**	**Losartan/ Cozaar**	**Prednisone/ Deltasone**
Dose	650 mg	2.5mg	12..5 mg	25 mg	20 mg
Frequency	PRN	PRN	BID	Once daily	Once daily
Route	Oral	Nebulizer	Oral	Oral	Oral
Classification	Antipyretic, non-opioid analgesic.	Bronchodilator.	Antihypertensive, heart failure treatment adjunct therapy.	Antihypertensive	Glucocorticoid
Mechanism of Action	Block's prostaglandins, and acts on the	Decreases intracellular calcium levels to	Reduces cardiac output by causing	Inhibits angiotensin II, decreasing blood	Suppresses inflammatory and immune

	temperature regulating center of hypothalamus.	relax bronchial smooth muscle and inhibit histamine.	vasodilation and decreasing vascular resistance. Decreases BP and cardiac workload.	pressure.	responses by binding to glucocorticoids.
Reason Client Taking	Moderate pain	COPD	Congestive heart failure.	HTN	COPD
Contraindications (2)	Hepatic impairment. Liver impairment.	Hypersensitivity (This is the only one in my med book).	Asthma Second or third-degree AV block.	Concurrent aliskiren therapy. Patients with renal impairments.	Hypersensitivity Systemic fungal infection.
Side Effects/Adverse Reactions (2)	Hypotension. Hepatoxicity.	Angina. Bronchospasm.	Angina Hypoglycemia	Hypotension Thrombocytopenia	Seizures GI bleeding
Nursing Considerations (2)	Use with caution in hepatic impaired patients. Liver function tests are required with long term use.	Monitor serum potassium levels due to medication induce hypokalemia. Use cautiously in patients with cardiac disorders.	May cause hypoglycemia in T2DM patients. Assess glucose levels. Not routinely held due to upcoming surgery.	Monitor blood pressure. Monitor for renal function.	Administer once daily in the morning. Assess skin integrity and wound healing.
Key Nursing Assessment(s)/ Lab(s) Prior to Administration	AST/ALT, bilirubin, creatinine levels.	Lung sounds, vital signs.	Ejection fraction, vitals.	Blood pressure, creatinine levels, potassium levels.	Adrenal labs. CRP, ESR, Glucose testing.
Client Teaching needs (2)	Tell the patient it may be crushed or swallowed whole. Caution patient not to	Teach patient how to use inhaler. Instruct patient to wash	Instruct patient not to crush or chew medication. Warn patient that it may cause	Avoid potassium containing salt substitutes. Tell patient to warn their	Patients with diabetes may have increased glucose levels.

	exceed daily maximum dosage.	mouthpiece after use.	dizziness and orthostatic hypotension.	primary care Dr. of Losartan use.	Teach the signs and symptoms of adrenal insufficiency.

Hospital Medications (5 required)

Brand/Generic	**Enoxaparin/ Lovenox**	**Furosemide e/ Lasix**	**Magnesium sulfate/ NA**	**Ondansetron/ Zofran**	**Spironolactone/ Aldactone**
Dose	40 mg	40 mg	2 G	4 mg	25 mg
Frequency	BID	BID	Once daily	QID PRN	Once daily
Route	Sub Q	IV	IV	IV	Oral
Classification	Anticoagulant	Antihypertensive, diuretic.	Electrolyte replacement	Antiemetic	Diuretic
Mechanism of Action	Binds and inactivates clotting factors Xa and thrombin, preventing the conversion to fibrin and preventing clots.	Inhibits Na+ and water reabsorption, reducing fluid volume and decreasing blood pressure, and cardiac output.	Improves the sodium potassium pump by distributing potassium into intracellular spaces.	Block's serotonin receptors and prevents serotonin release by the small intestine. Reduces nausea and vomiting.	Preventing sodium and water reabsorption and causing excretion to increase output and reduce blood volume and blood pressure.

Reason Client Taking	Reduce the risk of blood clots due to decreased activity.	CHF, HTN	Lasix use and electrolyte imbalance.	Nausea and vomiting due to other medication.	HTN, CHF, edema.
Contraindications (2)	Active bleeding Hypersensitivity	Hypersensitivity Diabetes	Heart block Myocardial infarction	Use of apomorphine. Long QT syndrome.	Adrenal insufficiency. Addison's disease.
Side Effects/ Adverse Reactions (2)	CHF Melena	Arrhythmias Thromboembolism	Hypotension Syncope	Hypotension Serotonin syndrome.	Encephalopathy. Metabolic alkalosis.
Nursing Considerations (2)	Use caution in patients with a history of heparin induced thrombocytopenia. Use caution in patients with an increased risk of hemorrhage.	Use with caution in patients with hepatic cirrhosis. Monitor patient for hearing tests and ototoxicity.	Observer for early hypermagnesemia. Assess cardiac status and electrolytes with use.	Correct electrolyte imbalances before administration. Monitor for serotonin syndrome.	Assess patient's potassium levels. Monitor patients with renal impairment for function.
Key Nursing Assessment(s)/ Lab(s) Prior to Administration	aPTT, platelets, assessment for current bleeding.	Lung sounds, weight, electrolyte levels, vitals (BP), glucose levels.	Heart sounds, electrolytes, EKG	Electrolyte levels, vitals.	Electrolyte levels, blood pressure.
Client Teaching needs (2)	Patient needs to avoid cuts/falls. Avoid NSAID's due	Tell patient to take at the same time each day. Do not take at	May cause diarrhea. Prevent constipation with increased	S/S of serotonin syndrome. Reassure transient	Take with meals. Warn patient they may experience

	to increased risk of bleeding.	bedtime due to having to use the bathroom often with use.	dietary fiber.	blindness will resolve within 48 hours.	dizziness.

Medications Reference (1) (APA):

Nurse's drug handbook. (2020). Jones & Bartlett Learning.

Assessment

Physical Exam (18 points)

GENERAL (1 point): **Alertness: A&O x 4** **Orientation:** **Distress: Patient does not appear distressed.** **Overall appearance: Patient is not well groomed.**	
INTEGUMENTARY (2 points): **Skin color: Normal for race.** **Character: Intact and dry.** **Temperature: Warm.** **Turgor: Rapid rebound skin turgor.** **Rashes: Patient has a rash on his forehead.** **Bruises: Patient has various bruises on forearms.** **Wounds: No open wounds.** **Braden Score: 18** **Drains present: Y☐ N ☒** **Type:**	
HEENT (1 point): **Head/Neck: Normocephalic head. Trachea midline.** **Ears: Pearly grey tympanic membrane. No lesions or drainage.** **Eyes: PERRLA** **Nose: Septum midline. Turbinate's pink and moist.** **Teeth: Patient has all his teeth; good dentition.**	.

CARDIOVASCULAR (2 points): **Heart sounds: S1, S2 noted.** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable): Regular rate; in the 80's. Regular rhythm.** **Peripheral Pulses: Carotid, radial, brachial, ulnar, and femoral pulses 2+ bilaterally. Posterior tibial pulses non-palpable. Dorsalis pedis pulse on left foot is faint due to edema; dorsalis pedis on right foot 2+.** **Capillary refill: <3 seconds.** **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☒ N ☐** **Location of Edema: below the knee, non-pitting edema bilaterally.**	.
RESPIRATORY (2 points): **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character** **Breath sounds clear, and slightly diminished in the lower lobes bilaterally.**	.
GASTROINTESTINAL (2 points): **Diet at home: Patient does not watch what they eat at home. Patient reports eating at drive throughs most days.** **Current Diet: Diet at hospital is Cardiac.** **Height: 5'7"** **Weight: 316** **Auscultation Bowel sounds: Bowel sounds hyperactive in all four quadrants. Patient had just eaten breakfast.** **Last BM: Morning of 06/06/2021** **Palpation: Pain, Mass etc.: Abdomen soft and not distended. No masses noted. No pain reported.** **Inspection: Large accumulation of fat.** **Distention: None** **Incisions: None** **Scars: None** **Drains: None** **Wounds: None** **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Size:** **Feeding tubes/PEG tube Y ☐ N ☒**	.

Type:	
GENITOURINARY (2 Points): **Color: Normal for skin color/race.** **Character: Normal character.** **Quantity of urine: 750 mL during shift.** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals: Normal, no drainage or rashes/wounds.** **Catheter: Y ☐ N ☒** **Type:** **Size:**	
MUSCULOSKELETAL (2 points): **Neurovascular status: A&O X 4** **ROM: Full ROM** **Supportive devices: Cane used on right side.** **Strength: Strong grips/pushes/pulls.** **ADL Assistance: Y☐ N ☒** **Fall Risk: Y ☐ N☒** **Fall Score: 6** **Activity/Mobility Status: Patient likes to be active but becomes winded with activity.** **Independent (up ad lib) ☐x** **Needs assistance with equipment ☐** **Needs support to stand and walk☐ (uses cane)**	.
NEUROLOGICAL (2 points): **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐** **Strength Equal: Y ☒ N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation: Oriented to time, place, date, and current events.** **Mental Status: Intact.** **Speech: Clear, appropriate for age.** **Sensory: Intact.** **LOC: Awake, responding to conversation.**	.
PSYCHOSOCIAL/CULTURAL (2 points): **Coping method(s): Fishing/smoking marijuana.**	.

Developmental level: Normal for age. **Religion & what it means to pt.: Patient identifies as a Christian. Reports that he does not go to church often.** **Personal/Family Data (Think about home environment, family structure, and available family support): Patient does not have a support system other than a few friends due to being divorced.**	

Vital Signs, 2 sets (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0756	88	151/61	16	98.6	92% RA
1101	83	156/90	16	98.4	92% RA

Vital Sign Trends: The patient's vitals have a common trend from 0756 to 1101. The patient has an overall elevated systolic blood pressure and presents with an elevated diastolic blood pressure at 1101. The patient has a common and steady trend in heart rate, respirations, temperature, and oxygen saturation.

Pain Assessment, 2 sets (2 points)

Time	**Scale**	**Location**	**Severity**	**Characteristics**	**Interventions**
0756	**Numeric**	**N/A**	**0**	**N/A**	**N/A**
1101	**Numeric**	**Chest**	**3**	**Dull; "Just uncomfortable" per patient.**	**Got patient up to sit in the hospital chair.**

IV Assessment (2 Points)

IV Assessment	**Fluid Type/Rate or Saline Lock**
Size of IV: 20 g **Location of IV: Left forearm** **Date on IV: 06/7/2021** **Patency of IV: Positive for blood return, flushes easily.** **Signs of erythema, drainage, etc.: None.** **IV dressing assessment: Site clean, dry, and intact.**	N/A

Intake and Output (2 points)

Intake (in mL)	**Output (in mL)**
360 mL	**750 mL**

Nursing Care

Summary of Care (2 points)

Overview of care: Patient was administered his daily medications, insulin, and Enoxaparin. Patient was provided comfort interventions to reduce chest pain and improve chest expansion. SCD's and TED hose were applied to the patient. EKG was performed to patient.

Procedures/testing done: Chest X-ray, CBC, chemistry labs, EKG.

Complaints/Issues: Chest pain, shortness of breath.

Vital signs (stable/unstable): Vital signs were stable; patient has hypertension which was witnessed by the elevated systolic blood pressure of above 150 mmHg.

Tolerating diet, activity, etc.: Patient is tolerating his diabetic diet; A.W. becomes short of breath upon exertion and respirations increase with movement.

Physician notifications: N/A

Future plans for patient: Patient will discharge home and adhere to medication regimen.

Discharge Planning (2 points)

Discharge location: Home.

Home health needs (if applicable): N/A

Equipment needs (if applicable): Equipment for nebulizer treatments.

Follow up plan: Patient will continue care under his primary care physician Dr. Sodhi.

Education needs: Patient needs educated on weight reduction, medication administration, and at home nebulizer treatment.

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 statement of SOB and increased respirations	**Patient presented to the emergency department with a chief complaint of SOB. Airway maintenance is imperative in the health of a patient.**	**1.Assist the patient in raising the HOB or leaning over a table to optimize breathing.** **2.Encourage pursed lip breathing.**	**Patient was able to find an optimal position by sitting up in the hospital chair and leaning over the bedside table. Patient engaged in purse lip breathing; respirations lowered and ease of breathing improved.**
2. Impaired gas exchange in relation to alveoli destruction as evidenced by	**Proper gas exchange of oxygen in and the expiration of CO2 is imperative in**	**1. Assess patients O2 and CO2 levels.** 2.**Encourage patient to stay in an upright or semi-**	**The patients gas levels were assessed and used to monitor the effectiveness of treatment. The patient implemented an upright**

dyspnea on exertion, SOB, and increased respirations.	**maintaining a proper oxygen saturation.**	**fowlers position.**	**position and reduced CO2 levels.**
3. Deficient knowledge related to lack of information as evidenced by patient's inability to follow through instruction.	**Patient education is imperative in the betterment of their condition.**	**1.Educate patient on how to implement diaphragmatic breathing. 2.Educate patient on the importance of avoiding others with respiratory infections.**	**Patient was able to successfully repeat the process of diaphragmatic breathing and stated understanding of the importance to avoid others with respiratory infections.**
4. Activity intolerance related to imbalance oxygen supply and demand as evidenced by shortness of breath upon exertion and increased respiratory rate.	**Patients with COPD have a decreased oxygen supply which creates fatigue and shortness of breath upon exertion.**	**1. Teach and assist patients with active ROM activities. 2. Provide patient with rest in between activities and clump activities to reduce over exertion.**	**Patient was able to use active ROM activities to stay active and was able to rest in between activities and clump activities together. Patient was able to preserve energy.**

Other References (APA):

***Nursing Diagnosis For COPD*. Nanda Nursing Diagnosis List. (n.d.).**

http://www.nandanursingdiagnosislist.org/nursing-diagnosis-for-copd/.

Concept Map (20 Points):

Subjective Data

SOB on exertion
Patient likes to be active but is restricted due to fatigue and SOB.
"I just couldn't catch my breath."
Symptoms of COPD exacerbation worsened after contact with black mold.

Nursing Diagnosis/Outcomes

Impaired gas exchange in relation to alveoli destruction as evidenced by dyspnea on exertion, SOB, and increased respirations.
Patient used purse lip breathing to blow off CO2 and increase oxygen levels. Gas exchange was improved as evidenced by an increase in O2 saturation levels.
Deficient knowledge related to lack of information as evidenced by patient's inability to follow through instruction.
Patient was able to engage in diaphragmatic breathing and properly recited the process.
Ineffective airway clearance related to COPD as evidenced by statement of SOB and increased respirations.
Patient sits upright in hospital chair and leans on bedside table to help with breathing. Ease of breathing was noted by a reduced respiratory rate.
Activity intolerance related to imbalance oxygen supply and demand as evidenced by shortness of breath upon exertion and increased respiratory rate.
Patient was able to clump activities such as brushing teeth and combing hair all at once to reduce fatigue and shortness of breath.

Objective Data

Hypercarbia
Increased RR on exertion
Increased Neutrophils/Monocytes
Increased CRP
Hyperglycemia
Pleural congestion found on x-ray.
Cardiomegaly noted on x-ray.

Patient Information

A.W. 56 y/o male
COPD
CHF
T2DM
Lives alone; divorced.
Truck driver

Nursing Interventions

Patient is educated on positioning to best support gas exchange.
Patient is taught pursed lip breathing.
Patient is educated on avoiding respiratory infections.
Patient implemented active ROM activities to stay active and reduce muscle atrophy.
Patient was educated on clumping activities to reduce fatigue.