N431 Care Plan #2

Lakeview College of Nursing

Levi Hahne

Demographics (3 points)

Date of Admission	Patient Initials	Age	Gender
March 19	KK	72	M
Race/Ethnicity	**Occupation**	**Marital Status**	**Allergies**
African American	Retired welder	widowed	NKDA
Code Status	**Height**	**Weight**	
DNR	5’9	146 lbs	

Medical History (5 Points)

Past Medical History: HTN, Afib, hyperlipidemia, COPD

Past Surgical History: appendectomy

Family History: mother diabetes, brother diabetes, father MI

Social History (tobacco/alcohol/drugs): never smoker, casual drinker (1-2) a month

Assistive Devices: none

Living Situation: lives alone

Education Level: high school diploma

Admission Assessment

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

History of present Illness (10 points): Patient complains of shortness of breath and a cough. Patient states his activity levels have declined over the last several days due to the worsening shortness of breath. Patient states exertion aggravates the shortness of breath and rest periods alleviate the shortness of breath along with the use of his PRN oxygen at 2L/min.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): COPD exacerbation

Secondary Diagnosis (if applicable): n/a

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

COPD is the term used to describe the functional changes within the lungs during a disease process. There are two main types of COPD; emphysema and chronic bronchitis. Chronic bronchitis includes symptoms such as daily coughing, overweight and cyanotic, peripheral edema, wheezing and elevated hgb. Emphysema shows enlarged air spaces on x rays, usually in older and thin patients, chest sounds are quiet, and there is severe dyspnea.

This disease process effects the air sacs in the lungs and results in excess mucus and coughing. Damage to these air sacs effects the elasticity which makes it harder to expel carbon dioxide in the lungs. COPD is irreversible once damage occurs. Risk factors for COPD include the number one cause, tobacco smoking, it can also result from secondhand smoke, and inhaling fumes and chemicals.

Doctors may issue pulmonary function tests to help determine the cause and issues going on with a suspected patient. Lung problems, asthma, and exposure to chemicals may warrant a test. Tests may also be done before surgeries. This test can determine allergies, respiratory infections, bronchitis and more.

Complications of COPD show respiratory insufficiency and respiratory failure. Failure depends on the baseline pulmonary function and insufficiency may require ventilator support.

ABGs often help show the severity and distinguish the issues involved. paO2 is usually decreased, PaCo2 is increased, ph is usually normal or acidic, these are the diagnostic findings when tested.

Doctors will order meds based on the complications and certain disease the patient has, bronchodilators are ordered to relieve spasms, corticosteroids to monitor improvement in the lungs, and other meds like antitussives and narcotics may be beneficial.

Treatments that are not pharmacologic include bullectomies, lung volume reduction surgery, and lung transplants.

Pathophysiology References (2) (APA): Belleza, M., Belleza, M., & Marianne. (2019, August 12). Chronic Obstructive Pulmonary Disease (COPD) Nursing Care Management. Retrieved April 1, 2020, from https://nurseslabs.com/chronic-obstructive-pulmonary-disease-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	Admission Value	Today's Value	Reason for Abnormal Value
RBC	3.8-5.3	4	4	
Hgb	12-15.8	13	12	
Hct	36-47	38	37	
Platelets	140-440	175	200	
WBC	4-12	9.4	9	
Neutrophils	47-73	60	60	
Lymphocytes	18-42	30	34	
Monocytes	4-12	8	8	
Eosinophils	0-5	4	4	
Bands	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-	133-144	124	130	Patient has water retention because of renal impairment
K+	3.5-5.1	2.8	4	Cannot remove excess potassium with renal impairment
Cl-	98-107	100	100	
CO2	21-31	23	23	
Glucose	70-99	94	93	
BUN	7-25	24	23	
Creatinine	.5-1	2.8	1	The patient has renal impairment therefore cannot void excess amounts
Albumin	3.5-5.7	4	5	
Calcium	8.8-10.2	9	9.4	
Mag	1.9-2.5	2	2.3	
Phosphate	2.5-4.5	2.7	3.2	
Bilirubin	.2-.8	.6	.6	
Alk Phos	34-104	40	60	
AST	13-39	30	30	
ALT	7-52	40	38	
Amylase	23-85	26	28	

Lipase	**0-160**	**120**	**100**	
Lactic Acid	**140-280**	**180**	**120**	
Troponin	**<.4**	**.3**	**.3**	
CK-MB	**<12**	**6**	**5**	
Total CK	**30-200**	**80**	**110**	

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	**2-3**	**2**	**2**	
PT	**11-13**	**11.8**	**11.9**	
PTT	**25-36**	**29**	**29**	
D-Dimer	**<250**	**160**	**155**	
BNP	**0-99**	**78**	**80**	
HDL	**60**	**60**	**67**	
LDL	**60-130**	**78**	**78**	
Cholesterol	**<200**	**120**	**113**	
Triglycerides	**<150**	**130**	**120**	
Hgb A1c	**4-6.5**	**5**	**5**	
TSH	**.4-4**	**.9**	**.8**	

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 Admissio	Today's Value	Reason for Abnormal

		n		
Color & Clarity	**Yellow and clear**	**Yellow/ clear**	**Yellow**	
pH	**2.3-6.6**	**2.8**	**2.8**	
Specific Gravity	**1.015-1.025**	**1.020**	**1.017**	
Glucose	**Neg**	**neg**	**Neg**	
Protein	**Neg**	**Neg**	**Neg**	
Ketones	**Neg**	**Neg**	**Neg**	
WBC	**<5**	**4**	**3**	
RBC	**<5**	**4**	**4**	
Leukoesterase	**absent**	**absent**	**absent**	

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

Test	**Normal Range**	**Value on Admission**	**Today's Value**	**Explanation of Findings**
pH	**7.35-7.45**	**7.25**	**7.37**	**Increase in C02 can cause acid in the bloodstream**
PaO2	**>90**	**91**	**94**	
PaCO2	**35-45**	**84**	**40**	**Patient may be receiving too much oxygen supplementation**
HCO3	**22-26**	**24**	**23**	
SaO2	**95-100**	**96**	**96**	

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

Test	**Normal Range**	**Value on Admissio n**	**Today's Value**	**Explanation of Findings**
Urine Culture	**Neg**	**n/a**	**n/a**	

Blood Culture	**Neg**	**n/a**	**n/a**	
Sputum Culture	**Neg**	**n/a**	**n/a**	
Stool Culture	**neg**	**n/a**	**n/a**	

Lab Correlations Reference (APA): *Hinkle, J. L., & Cheever, K. H. (2018). Brunner & Suddarth's textbook of medical/surgical nursing. (14th. ed.). Philadelphia, PA*

Diagnostic Imaging

All Other Diagnostic Tests (5 points): Chest X-ray = findings consistent with chronic bronchitis
EKG = shows A fib at a rate of 88 bpm

Diagnostic Test Correlation (5 points): the patient has chronic bronchitis, ruling out emphysema. A fib and COPD put the patient at risk for renal disease. A fib is sometimes a predictor of mortality in patients with COPD

Diagnostic Test Reference (APA): Healthline Editorial Team and James Roland. (2018, November 7). COPD Tests and Diagnosis. Retrieved from https://www.healthline.com/health/copd/tests-diagnosis

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

Home Medications (5 required)

Brand/Generic	**lisinopril prinivil**	**Amiodarone cordarone**	**Aspirin ASA**	**Atorvastatin lipitor**	**Metoprolol beloc**

Dose	**40mg**	**200mg**	**81mg**	**40mg**	**50mg**
Frequency	**daily**	**daily**	**daily**	**Daily HS**	**Daily BID**
Route	**PO**	**PO**	**PO**	**PO**	**PO**
Classification	**Ace inhib**	**antiarrhythmic**	**antipyretic**	**Lipid lowering**	**Beta blockers**
Mechanism of Action	**Blocks conversion of angiotensin**	**Prolongs refractory period**	**Produces analgesia**	**Inhibits HMG**	**Blocks beta**
Reason Client Taking	**Lower blood pressure**	**Fix arrhythmic heartbeats**	**For pain**	**High lipid levels**	**Decrease bp**
Contraindications (2)	**Hx of angioedema and current use of aliskiren if diabetic**	**Cardiogenic shock and severe sinus dysfunction**	**Other nsaid usage and bleeding disorders**	**Active liver disease and unexplained rise in AST or ALT**	**Tachycardiac and aggressive behavior**
Side Effects/Adverse Reactions (2)	**Dizzy and headache**	**Confusion and fatigue**	**Tinnitus and nausea**	**Confusion and headache**	**Anxiety and depression**
Nursing Considerations (2)	**Implement aerobic exercises and avoid causing vasodilation with certain exercises**	**Monitor ecg and monitor ast/alt**	**Look for allergies and caution asthma pts**	**Don't confuse with Zyrtec may give without food**	**Assess heart rate and report chest pain**
Key Nursing Assessment(s)/Lab (s) Prior to Administration	**Check blood pressure before, check neuro status**	**Assess for ARDS and for pulmonary toxicity**	**Monitor hepatic function and assess pain**	**Obtain diet history and evaluate serum cholesterol**	**Assess exercise tolerance and assess bp**
Client Teaching needs (2)	**Take as directed and pt**	**No grapefruit juices and take as**	**Take with full glass**	**Avoid grapefruit and take**	**Report wheezing and look for**

	should move slowly if positioning up right	**directed**	**water and report tinnitus**	**missed dose within 12 hours of missed time**	**cold extremities**

Hospital Medications (5 required)

Brand/Generic	**NS**	**Potassium chloride**	**azithromycin**	**Levaquin levofloxacin**	**Acetaminophen Tylenol**
Dose	**75ml**	**40meq**	**500mg**	**750mg**	**650mg**
Frequency	**Per hr**	**One time**	**daily**	**daily**	**Q6h prn**
Route	**IV**	**IV**	**PO**	**IV**	**PO**
Classification	**Electrolyte replacement**	**Electrolyte replacement**	**anti infective**	**Anti-infective**	**Antipyretic**
Mechanism of Action	**Maintains acid base balance**	**Maintain acid base balance**	**Inhibits protein synthesis**	**Inhibit bacterial DNA**	**Inhibit prostaglandin**
Reason Client Taking	**Restore fluids**	**potassium deficiency**	**Helps treat lung disease**	**Kill bacteria in lungs**	**Pain**
Contraindications (2)	**Decreased serum sodium and fluid retention**	**Renal impairment and hyperkalemia**	**Hx of jaundice and hx of renal impairment**	**Use of amiodarone and hx of myasthenia gravis**	**Hepatic impairment and alcohol**
Side Effects/Adverse Reactions (2)	**Hypokalemia and edema**	**Weakness and confusion**	**Hypotension and dizzy**	**Nightmare and tremor**	**Agitation and dyspnea**
Nursing Considerations	**Dose depends on**	**Administer after meals**	**1 hr before meals and**	**May give without**	**Tylenol pm is not the same**

(2)	**age**	**and assess for toxicity**	**mix contents thoroughly**	**food and don't confuse with levetiracetam**	**and give with full glass of water**
Key Nursing Assessment(s)/Lab(s) Prior to Administration	**Assess fluid balance and monitor sodium**	**Monitor potassium and monitor chloride**	**Assess signs of anaphylaxis and assess for infection**	**Anaphylaxis signs symptoms and look for infection**	**Assess alcohol usage and assess drug usage**
Client Teaching needs (2)	**Explain purpose of infusion and teach how to take tablets if needed**	**Take as directed and avoid salt substitutes**	**Don't take with antacids and take as directed**	**Taking theophylline call your doctor immediately and drink at least 2000ml water daily**	**Avoid alcohol and discontinue if rash occurs**

Medications Reference (APA): Up-to-Date Drug Information. (n.d.). Retrieved February 9, 2020, from https://www.drugguide.com/ddo/.

Assessment

Physical Exam (18 points)

GENERAL (1 point): **Alertness: awake** **Orientation: partial oriented** **Distress: fair amount due to breathing complications** **Overall appearance: well groomed, mobile, dyspnea**	
INTEGUMENTARY (2 points): **Skin color: dark** **Character: dry** **Temperature: warm extremities** **Turgor: rapid recoil** **Rashes: present on left arm** **Bruises: none** **Wounds: no wounds** **Braden Score: 17** **Drains present: Y☐ N ☒** **Type:**	
HEENT (1 point): **Head/Neck:moveable and no scabs** **Ears: no earwax, tympanic membrane seen** **Eyes: PERLA** **Nose: no discharge or blockage** **Teeth: white and all present**	.
CARDIOVASCULAR (2 points): **Heart sounds: s1 and s2 present, no gallop or murmurs** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable): regular** **Peripheral Pulses: weak thread +1** **Capillary refill: less than 3 seconds refill** **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☐ N ☒** **Location of Edema:**	.
RESPIRATORY (2 points): **Accessory muscle use: Y☐ N ☐** **Breath Sounds: Location, character**	.
GASTROINTESTINAL (2 points): **Diet at home: greens and meats with occasional fast food**	.

Current Diet: tea, apples **Height: 5'9** **Weight: 146 lbs** **Auscultation Bowel sounds: all 4 quadrants heard and no hyper or hypobowel sounds** **Last BM: yesterday** **Palpation: Pain, Mass etc.:** **Inspection:** **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: yellow** **Character: clear** **Quantity of urine: >30 ml/hr** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals: no swelling or discoloration** **Catheter: Y ☐ N ☒** **Type:** **Size:**	
MUSCULOSKELETAL (2 points): **Neurovascular status: alert and responsive** **ROM: moves all extremities well** **Supportive devices: none** **Strength: bilateral equal strength** **ADL Assistance: Y☐ N ☒** **Fall Risk: Y ☐ N☒** **Fall Score: n/a** **Activity/Mobility Status:** **Independent (up ad lib) ☐** **Needs assistance with equipment ☐** **Needs support to stand and walk ☐**	.
NEUROLOGICAL (2 points):	.

MAEW: Y ☒ N☐ **PERLA: Y ☒ N☐** **Strength Equal: Y ☒ N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation: alert and responsive** **Mental Status: normal with age** **Speech: pronunciation proper and clear speech** **Sensory: able to speak and feel objects** **LOC: coherence is normal and knows his surroundings**	
PSYCHOSOCIAL/CULTURAL (2 points): **Coping method(s): reading** **Developmental level: highschool** **Religion & what it means to pt.: n/a** **Personal/Family Data (Think about home environment, family structure, and available family support): wife supports him**	.

Vital Signs, 2 sets (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
7am	**88**	**152/68**	**24**	**36.8**	**97 2L via NC**
11am	**68**	**150/62**	**24**	**36.5**	**98 2L via NC**

Vital Sign Trends:

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
7am	**6/10**	**generalized**	**high**	**dull**	**Tylenol**
11am	**2/10**	**generalized**	**low**	**dull**	**No intervention**

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: 20G **Location of IV: left antecubital** **Date on IV: yesterday** **Patency of IV:patent dressing clean and dry** **Signs of erythema, drainage, etc.: none** **IV dressing assessment:**	Normal saline Potassium chloride Levaquin

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
NS 75 ml 4x **Tea PO 240ml** **Apple juice 120ml**	**750ml voided** **Stool 2x**

Nursing Care

Summary of Care (2 points)

Overview of care: administered oxygen to patient, taught breathing exercises, administered saline and other anti-infective meds. Monitored I/O's, looked over critical labs, potassium being the highest concern.

Procedures/testing done: chest x-ray, EKG, and ABG levels

Complaints/Issues: none

Vital signs (stable/unstable): stable with tachypnea

Tolerating diet, activity, etc.: tolerating well

Physician notifications: n/a

Future plans for patient: Patient will need continuous oxygen therapy at home – 2L via NC. Patient is also requesting visiting nurses and a bath aide. Will follow up with PCP in 1 week following discharge

Discharge Planning (2 points)

Discharge location: home

Home health needs (if applicable): none

Equipment needs (if applicable): oxygen tank at 2L

Follow up plan: follow up appointments if required by physician

Education needs: deep breathing exercises

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. Impaired Gas Exchange related to decreased lung compliance as evidence by dyspnea on exertion, decreased oxygen content, decreased oxygen saturation, and increased PCO2.	**Patient cannot effectively exchange oxygen and carbon dioxide because the air sacs are damaged**	**1. Breathing exercises and treatment to get ABGs within normal limits 2.patient will verbalize benefits of a cpap machine at home if needed**	**Family and patient willing to follow treatment guidelines. Patient understands severity of disease**
2. Risk for activity intolerance related to lung	**Patient has trouble catching their breath when up and**	**1. avoid frequent movement with patient**	**Patient complied and resting per request**

disease as evidence of losing their breath when moving	**moving**	**2. Provide rest periods such as 10 hours sleep**	
3. Risk for anxiety related to lung complications as evidenced of tachypnea	**Patients respirations sat at 24 per minute both vital checks**	**1. Breathing exercises to calm the patient** **2 allow patient to express feelings of nervous and anxiety**	**Patient complied and is willing to let his mind ease a little more**
4. Risk for deficient patient expressed knowledge due to not knowing how his disease occurred as evidence by learning what dep breathing exercises are and their benefits	**Patient expressed minimal knowledge and understanding of his complications**	**1. Teach the patient deep breathing and incentive spirometer exercises** **2. allow for proper time and setting for education**	**Patient complied and listened with no television on and middle of the day where he would be awake as well as making eye contact with the nurse**

Other References (APA):

Concept Map (20 Points):

N431 CARE PLAN

Subjective Data

High Pain and given Tylenol
Later pain was minimal
Patient had minor headache

Nursing Diagnosis/Outcomes

1.	Impaired Gas Exchange related to decreased lung compliance as evidence by dyspnea on exertion, decreased oxygen content, decreased oxygen saturation, and increased PCO2.
2.	**Risk for activity intolerance related to lung disease as evidence of losing their breath when moving**
3.	**Risk for anxiety related to lung complications as evidenced of tachypnea**
4.	**Risk for deficient patient expressed knowledge due to not knowing how his disease occurred as evidence by learning what dep breathing exercises are and their benefits**

Nursing Interventions

1.
Breathing exercises and treatment to get ABGs within normal limits
2.patient will verbalize benefits of a cpap machine at home if needed

1. avoid frequent movement with patient **2.** **Provide rest periods such as 10 hours sleep**
1. Breathing exercises to calm the patient **2 allow patient to express feelings of nervous and anxiety**
1. Teach the patient deep breathing and incentive spirometer exercises **2. allow for proper time and setting for education**

Objective Data

Coughing, mucus production
Tachypnea
Weakness
IV drip

Patient Information
5’9 146lbs

Patient complains of shortness of breath and a cough. Patient states his activity levels have declined over the last several days due to the worsening shortness of breath. Patient states exertion aggravates the shortness of breath and rest periods alleviate the shortness of breath along with the use of his PRN oxygen at 2L/min