N311 Care Plan 4

Lakeview College of Nursing

Kelsey Bierman

Demographics (5 points)

Date of Admission	Client Initials	Age	Gender
11/03/2021	MW	90+	Female
Race/Ethnicity	**Occupation**	**Marital Status**	**Allergies**
Caucasian	Sales	Widowed	Simvastatin (unknown) and tramadol (confusion)
Code Status	**Height**	**Weight**	
DNR	161.3 cm	55.3 kg	

Medical History (5 Points)

Past Medical History: Allergic rhinitis, Anxiety, Arthritis, Barrett's esophagus, Bradycardia, Cardiomegaly, Congestive heart failure, Chronic kidney disease, Closed wedge compression fracture of T3 vertebra, Dementia, Depression, Esophageal reflux, Fall risk, Flash pulmonary edema, Grade III diastolic dysfunction, Hypertension, Breast Cancer, Hyperlipidemia, Hypertensive cardiovascular disease, Iron deficiency, Large hiatal hernia, Mitral regurgitation, Murmur, Osteopenia, Plantar fasciitis, Pulmonary hypertension, Total knee replacement, Tricuspid valve regurgitation, Type 2 diabetes, and Chronic obstructive pulmonary disease (COPD).

Past Surgical History: Hernia repair Inguinal-groin exploration (Left)(12/04/2018), Colonoscopy (08/25/2004), Oesophagogastroduodenoscopy, Arthroplasty of shoulder, and Cataracts.

Family History: Brother: Cerebrovascular accident

Social History (tobacco/alcohol/drugs including frequency, quantity and duration of use): The patient denies past use of alcohol and recreational drugs. Patient stated that she has never smoked.

Admission Assessment

Chief Complaint (2 points): Shortness of breath and difficulty breathing

History of Present Illness – OLD CARTS (10 points): The 90+-year-old Caucasian female presented to the nursing home on 11/03/2021 with difficulty breathing, shortness of breath and inability to care for herself independently at home. The patient states, "I have pain when I try to breathe, and it is even more difficult when I try to talk." The patient mentions that her back pain is dull and aching, and that these symptoms have been exacerbated within the last 5-10 minutes. The patient states that talking and visiting with friends and family aggravates her breathing problems while sitting up in bed or sitting in her wheelchair helps to alleviate her symptoms. The patient states that she has been seeking treatment for her breathing problems for three years now. The Patient is on 3 liters of oxygen via nasal cannula. When I asked the patient the severity of her pain on a numeric pain scale of 0 to 10, 0 representing no pain and 10 being the most excruciating pain imaginable, she replied, "My pain is a 8 out of 10".

Primary Diagnosis

Primary Diagnosis on Admission (3 points): Congestive Heart Failure

Secondary Diagnosis (if applicable): Chronic obstructive pulmonary disease

Pathophysiology of the Disease, APA format (20 points): In the initial stages of congestive heart failure (CHF), cardiac physiology attempts to adapt via several compensatory mechanisms to maintain cardiac output and meet the systemic demands (Brito & Cepeda, 2018). These include the Frank-Starling tool, changes in myocyte regeneration, myocardial hypertrophy, and myocardial hypercontractility (Brito & Cepeda, 2018). The myocardium attempts to compensate via eccentric remodeling with increased wall stress, further

worsening the loading conditions and wall stress (Brito & Cepeda, 2018). A decrease in cardiac output stimulates the neuroendocrine system (Brito & Cepeda, 2018). The neuroendocrine system releases epinephrine, norepinephrine, endothelin-1 (ET-1), and vasopressin (Brito & Cepeda, 2018). This causes vasoconstriction leading to increased afterload (Brito & Cepeda, 2018). There is an increase in cyclic adenosine monophosphate (cAMP), which causes an increase in cytosolic calcium in the myocytes (Brito & Cepeda, 2018). A proliferation in cytosolic calcium in myocytes increases myocardial contractility and further prevents myocardial relaxation (Brito & Cepeda, 2018). Afterload and myocardial contractility with impaired myocardial relaxation increase myocardial oxygen demand (Brito & Cepeda, 2018). This paradoxical need for increased cardiac output to meet myocardial demand eventually leads to myocardial cell death and apoptosis (Brito & Cepeda, 2018). As apoptosis progresses, the cardiac output continues to decrease. However, there is still an increased demand to increase cardiac production; this leads to a cycle of increased neurohumoral stimulation and maladaptive hemodynamic and myocardial responses (Brito & Cepeda, 2018). A decrease in cardiac output also stimulates the renin-angiotensin-aldosterone system (RAAS), leading to increased salt and water retention and increased vasoconstriction (Brito & Cepeda, 2018). These further fuels the maladaptive mechanisms in the heart and cause progressive heart failure (Brito & Cepeda, 2018). In addition to this, the RAAS system releases angiotensin II, which may increase myocardial cellular hypertrophy and interstitial fibrosis (Brito & Cepeda, 2018). This maladaptive function of angiotensin II may also increase myocardial remodeling (Brito & Cepeda, 2018). There are many signs and symptoms of CHF but some include shortness of breath, fatigue and leg weakness, swelling in the ankles, legs and abdomen, weight gain, nocturia,

rapid or irregular heartbeats, a nonproductive cough, loss of appetite and nausea (Cleveland Clinic, 2022). My patients' symptoms included shortness of breath, pulmonary edema, and edema of the lower extremities. The diagnostics for CHF include blood tests, chest X-ray, electrocardiogram (ECG), echocardiogram, stress test, cardiac computerized tomography (CT) scan, magnetic resonance imaging (MRI), coronary angiogram, and a myocardial biopsy (Mayo Clinic, 2017). My patient had a chest X-ray and a CT of abdomen and pelvis with contrast. Specific labs and tests that are done to help diagnose CHF include blood urea nitrogen (BUN) and serum creatinine tests to monitor kidney function. Sodium and potassium levels are also routinely monitored, and a complete blood count (CBC) is done when symptoms of CHF worsen (Mayo Clinic, 2017). My patient recently had a CBC done along with other chemistry labs due to an exacerbation of her symptoms. The main treatments for CHF include diuretics, a renin-angiotensin system inhibitor, angiotensin-converting enzyme (ACE) inhibitor, or angiotensin II receptor blockers (ARB), and a beta-blocker (Brito & Cepeda, 2018). My patient is currently taking diuretics, beta-blockers, and a calcium channel blocker.

Pathophysiology References (2) (APA):

Brito, D., & Cepeda, B. (2018, October 27). *Heart Failure, Congestive (CHF)*. Nih.gov; StatPearls Publishing. https://www.ncbi.nlm.nih.gov/books/NBK430873/

Cleveland Clinic. (2022, January 21). *Heart Failure (Congestive Heart Failure)* https://my.clevelandclinic.org/health/diseases/17069-heart-failure-understanding-heart-failure

Mayo Clinic. (2017). *Heart failure - Diagnosis and treatment - Mayo Clinic*. https://www.mayoclinic.org/diseases-conditions/heart-failure/diagnosis-treatment/drc-20373148

Laboratory Data (20 points)
If laboratory data is unavailable, values will be assigned by the clinical instructor

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

Lab	Normal Range	Admission Value	Today's Value	Reason for Abnormal Value
RBC	**4.0-4.9**	**N/A**	**3.7**	**This is due to the decreased kidney function. The kidney is not secreting enough erythropoietin which stimulates RBC formation. (Capriotti, 2020).**
Hgb	**12-16**	**N/A**	**11.7**	**Hemoglobin is attached to RBCs to deliver oxygen to the body. Because the patient had a low RBC count the patient will also have a low hemoglobin count as well due to less-than-optimal amounts of erythropoietin being secreted by the kidneys. (Capriotti, 2020).**
Hct	**37-48**	**N/A**	**35.5**	**Hematocrit measures the number of RBCs in the blood. Therefore, if there is low RBC count there will be a low hematocrit level because there will be more plasma than RBCs (Capriotti, 2020).**
Platelets	**90-450**	**N/A**	**233**	**N/A**
WBC	**4-10**	**N/A**	**6.3**	**N/A**

Neutrophils	**40-80**	**N/A**	**76.8**	**N/A**
Lymphocytes	**20-40**	**N/A**	**15.2**	**One possible explanation for the lymphopenia is the increase in cortisol during a stress response, which causes a decrease in the relative concentration of lymphocytes. (Blum, 2018)**
Monocytes	**2-10**	**N/A**	**6.5**	**N/A**
Eosinophils	**1-7**	**N/A**	**N/A**	**N/A**
Bands	**0-2**	**N/A**	**N/A**	**N/A**

***All lab values from (Capriotti, 2020).**

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-	**136-144**	**N/A**	**140**	**N/A**
K+	**3.7-5.1**	**N/A**	**5**	**N/A**
Cl-	**97-105**	**N/A**	**99**	**N/A**
CO2	**22-30**	**N/A**	**39**	**Hypercapnia is often caused by hypoventilation or disordered breathing where not enough oxygen enters the lungs and not enough carbon dioxide is emitted (Medical News Today, 2020).**
Glucose	**60-200**	**N/A**	**107**	**N/A**
BUN	**8-21**	**N/A**	**31**	**Kidney disease can be an explanation as to why BUN is elevated but because the patient's creatinine is not critically elevated the more likely reason the BUN is elevated is due to dehydration (Capriotti, 2020).**
Creatinine	**0.65-1**	**N/A**	**1.3**	**CHF can affect kidney function and the kidneys filter creatinine from the blood and excrete it through the urine. So, if the creatine levels are high, it could**

				indicate kidney problems (Sherrell, 2021).
Albumin	**3.5-5**	**N/A**	**3.4**	**Problems with the kidneys may cause them to release large amounts of protein into the urine. This can take albumin from the blood, leading to hypoalbuminemia (Medical News Today, 2018).**
Calcium	**8.7-10.7**	**N/A**	**9.5**	**N/A**
Mag	**1.3-2.1**	**N/A**	**N/A**	**N/A**
Phosphate	**2.7-4.8**	**N/A**	**N/A**	**N/A**
Bilirubin	**0.2-1.3**	**N/A**	**0.3**	**N/A**
Alk Phos	**30-125**	**N/A**	**62**	**N/A**

***Lab values from (Cleveland Clinic, 2022; UCSF Health, 2019).**

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 and clear**	**N/A**	**Yellow and Clear**	**N/A**
pH	**4.5-8**	**N/A**	**6.0**	**N/A**
Specific Gravity	**1.005-1.030**	**N/A**	**1.017**	**N/A**
Glucose	**Normal**	**N/A**	**Normal**	**N/A**
Protein	**Negative or trace**	**N/A**	**Negative**	**N/A**
Ketones	**Negative**	**N/A**	**Negative**	**N/A**
WBC	**<=5**	**N/A**	**1**	**N/A**
RBC	**0-3**	**N/A**	**<1**	**N/A**
Leukoesterase	**Negative**	**N/A**	**Negative**	**N/A**

(Capriotti, 2020, pp. 528)

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**

Lab Correlations Reference (1) (APA):

Capriotti, T. M. (2020). *PATHOPHYSIOLOGY : introductory concepts and clinical perspectives.* (2nd ed., pp. 244, 277). F A Davis.

Cleveland Clinic. (2021, September 24). *Electrolytes: Types, Purpose and Normal Levels*. Cleveland Clinic. https://my.clevelandclinic.org/health/diagnostics/21790-electrolytes

UCSF Health. (2019, January 26). *CHEM-20*. Ucsfhealth.org. https://www.ucsfhealth.org/medical-tests/comprehensive-metabolic-panel

Diagnostic Imaging

All Other Diagnostic Tests (10 points): My patient received two additional diagnostic imaging. The first diagnostic imaging my patient received was a chest X-ray to ensure the correct placement of a nasogastric (NG) tube. A chest X-ray is done when the health care

provider is unsure of the placement. Another way to check the correct placement is to test the pH of the tube aspirate (Hacking, 2018). The chest X-ray revealed that the NG tube was midline through the thorax, bisected the carina, crossed the diaphragm in the midline, and the tip of the tube sat below the diaphragm (Hacking, 2018). Checking the placement of the NG tube is important for every patient because if the NG tube is in the airway the patient could aspirate. (Hacking, 2018). The second diagnostic imaging my patient received was a CT abdomen and pelvis with contrast. This is used to help detect diseases of the small bowel, colon, and other internal organs (Radiology (ACR), 2020). It is often used to determine the cause of unexplained pain (Radiology (ACR), 2020). A CT of the abdomen and pelvis can be used to help diagnose infections such as appendicitis, pyelonephritis, or infected fluid collections, also known as abscesses (Radiology (ACR), 2020). My patients' results are currently not available.

Diagnostic Imaging Reference (1) (APA):

Hacking, C. (2018, April 2). *Nasogastric tube position on chest x-ray (summary) | Radiology Reference Article | Radiopaedia.org*. Radiopaedia. https://radiopaedia.org/articles/nasogastric-tube-position-on-chest-x-ray-summary?lang=us

Radiology (ACR), R. S. of N. A. (RSNA) and A. C. of. (2020, June 15). *Computed Tomography (CT) - Abdomen and Pelvis*. Radiologyinfo.org. https://www.radiologyinfo.org/en/info/abdominct

Current Medications (10 points, 2 points per completed med)
5 <u>different</u> medications must be completed

Medications (5 required)

Brand/ Generic	**Furosemide/ Lasix**	**Metolazone/ Zaroxolyn**	**Metoprolol tartrate/Lopresor (CAN)**	**Clopidogrel bisulfate/Plavix**	**Amlodipine besylate/Norvasc**
Dose	**40 mg**	**5 mg**	**25 mg**	**75 mg**	**10 mg**
Frequency	**Once a day**	**Once stat**	**1 tablet twice a day**	**1 tablet per day**	**1 tablet per day**
Route	**P.O.**	**P.O.**	**P.O.**	**P.O.**	**P.O.**

Classification	**Pharmacologic class: Loop diuretic Therapeutic class: Antihypertensive, diuretic.**	**Pharmacologic class: Thiazide-like diuretic Therapeutic class: Diuretic**	**Pharmacologic class: Beta-adrenergic blocker Therapeutic class: Antianginal, antihypertensive**	**Pharmacologic class: $P2Y_{12}$ platelet inhibitor Therapeutic class: Platelet aggregation inhibitor**	**Pharmacologic class: Calcium channel blocker Therapeutic class: Antianginal, antihypertensive**
Mechanism of Action	**Inhibits sodium and water reabsorption in the loop of Henle and increases urine formation. As the body's plasma volume decreases, aldosterone production increases, which promotes sodium reabsorption and the loss of potassium and hydrogen ions. Furosemide also increases the excretion of ammonium, bicarbonate**	**Promotes renal excretion of sodium and water by inhibiting their reabsorption in distal convoluted tubules. The resulting reduction in extracellular fluid volume and plasma reduces blood pressure. Also helps to reduce blood pressure by decreasing peripheral vascular resistance.**	**Inhibits stimulation of beta-receptor sites, located mainly in the heart, resulting in decreased cardiac excitability, cardiac output, and myocardial oxygen demand. These effects help relieve angina, minimize cardiac tissue damage from a myocardial infarction, and help relieve symptoms of heart failure.**	**Binds to adenosine diphosphate (ADP) receptors on the surface of activated platelets. This action blocks ADP, which deactivates nearby glycoproteins IIb/IIIa receptors and prevents fibrinogen from attaching to receptors. Without fibrinogen, platelets can't aggregate and form thrombi.**	**Binds to dihydropyridine and nondihydropyridine cell membrane receptor sites on myocardial and vascular smooth-muscle cells and inhibits influx of extracellular calcium ions across slow calcium channels. This decreases intracellular calcium level, inhibiting smooth-muscle cell contractions and relaxing coronary and vascular smooth muscles, decreasing peripheral vascular**

	, calcium, magnesium, and phosphate. By reducing intracellular and extracellular fluid volume, the drug reduces blood pressure and cardiac output.				**resistance, and reducing systolic and diastolic blood pressure. Decreased peripheral vascular resistance also decreases myocardial workload, oxygen demand, and angina. Also, by inhibiting coronary artery muscle cell contractions and restoring blood flow, the drug may relieve Prinzmetal's angina.**
Reason Client Taking	**Heart failure**	**Heart failure**	**Essential hypertension**	**Stroke prevention**	**Essential hypertension**
Contraindications (2)	**Anuria and hypersensitivity to furosemide or its components**	**Anuria and hepatic coma or precoma**	**Cardiogenic shock or heart block greater than first degree.**	**Active pathological bleeding or hypersensitivity to clopidogrel or its components.**	**Hypersensitivity to amlodipine or its components**
Side Effects/ Adverse Reactions (2)	**Aplastic anemia and hyperglycemia**	**Venous thrombosis and hepatic dysfunction**	**CVA and arrhythmias**	**Fatal intracranial bleeding and insulin**	**Arrhythmias and pancreatitis**

				autoimmune syndrome	

All Medication facts from (Jones & Bartlett Learning, 2021).

Medications Reference (1) (APA):

Jones & Bartlett Learning. (2021). *2022 Nurse's Drug Handbook.* Jones & Bartlett Learning.

Assessment

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

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	**The patient was alert and oriented at times four (name, DOB, time, and place). The patient was in active acute distress. The patient was overall well-groomed.**
INTEGUMENTARY: **Skin color:** **Character:** **Temperature: Warm and dry to touch** **Turgor: slight tenting** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☒** **Type:**	**The patient skin color was white and has red undertones. Her skin was warm and dry upon palpation. The patient had slight tenting. Skin spots were normal for age with no rashes, lesions, or bruising. Normal quantity, distribution, and texture of hair. Nails without clubbing or cyanosis. Capillary refills less than 3 seconds in fingers and toes bilaterally. The patient had bleeding above the lip due to her nasal cannula rubbing against her skin.**
HEENT:	

Head/Neck: **Ears:** **Eyes:** **Nose:** **Teeth:**	**Head and neck are symmetrical, trachea is midline without deviation, thyroid is not palpable, no noted nodules. Bilateral carotid pulses are palpable and 2+. No lymphadenopathy in the head or neck is noted.**
CARDIOVASCULAR: **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** **Peripheral Pulses:** **Capillary refill: 3 seconds** **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☒ N ☐** **Location of Edema:**	**Clear S1, S2, and S3 gallop was present. No S4 sounds present. There was a present of a murmur. PMI palpable at 5th intercostal space at midclavicular line. Peripheral pulses were all +2. The patient has lower extremity edema this is +1. The patient has pulmonary edema as evidence crackles in the lungs.**
RESPIRATORY: **Accessory muscle use: Y☒ N ☐** **Breath Sounds: crackles in right upper and left upper lobes**	**The patient does use accessory muscles when breathing. Respirations were 22 breaths per minute and respirations were shallow. Respirations were symmetrical with labored breathing present. The patient had wheezing present in the upper right and left quadrants. The patient also had crackles in all lung fields. No rhonchi noted.**
GASTROINTESTINAL: **Diet at home:** **Current Diet** **Height:** **Weight:** **Auscultation Bowel sounds:** **Last BM:** **Palpation: Pain, Mass etc.:** **Inspection: normal** **Distention: N/A** **Incisions: N/A** **Scars: N/A** **Drains: N/A** **Wounds: N/A** **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Size: N/A** **Feeding tubes/PEG tube Y ☐ N ☒** **Type: N/A**	**The patient is on a regular diet at home and currently on a regular diet at the nursing home.** **Height: 161.3 cm** **Weight: 55.3 kg** **Bowel sounds were normal in all four quadrants.** **Last bowel movement was 03/7/2022.**
GENITOURINARY: **Color:**	**The patient had yellow and clear urine with no foul order. The amount of urine excreted was**

Character: **Quantity of urine:** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☐ N ☒** **Type:** **Size:**	**moderate.**
MUSCULOSKELETAL: **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☒ N ☐** **Fall Risk: Y ☒ N☐** **Fall Score: 50** **Activity/Mobility Status:** **Independent (up ad lib) ☐** **Needs assistance with equipment ☐** **Needs support to stand and walk☐**	**All extremities have full range of motion. The patient needs 1-2 assists to ambulate and to stand.**
NEUROLOGICAL: **MAEW: Y ☒ N☐** **PERLA: Y ☐ N☒** **Strength Equal: Y ☒ N ☐ if no -** **Legs ☐ Arms ☐ Both ☒** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	**Hand grips and pedal pushes and pulls demonstrate equal but weak strength. Pupils are not equal, round, and reactive to light and accommodation.**
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):**	**Not assessed.**

Vital Signs, 1 set (5 points) – HIGHLIGHT ALL ABNORMAL VITAL SIGNS

Time	Pulse	B/P	Resp Rate	Temp	Oxygen

0710	**110 beats per minute**	**130/54 mm Hg**	**22 breaths per minute**	**36.4°C**	**90% on 3L nasal cannula**

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0720	**Numeric Pain Scale**	**Chest**	**8 out of 10**	**Achy**	**High-fowler's or fowler's position 3 L of O_2 nasal cannula**

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
136 mL of water 174 mL of V8 juice Total = 310 mL	**Urinated a moderate amount into the toilet but unable to assess the exact amount due to her not peeing in the hat.**

Nursing Diagnosis (15 points)
Must be NANDA approved nursing diagnosis

Nursing Diagnosis	Rationale	Interventions (2 per dx)	Outcome Goal (1 per dx)	Evaluation
• Include full nursing diagnosis with "related to" and "as evidenced by" components • Listed in order by priority – highest priority to lowest	• Explain why the nursing diagnosis was chosen			• How did the client/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications

priority pertinent to this client				to plan.
1. Excess fluid volume related to the use of diuretics as evidence by orthopnea, S3 heart sounds and bilateral peripheral edema	**This nursing diagnoses was chosen because the patient has both pulmonary edema and trace edema in calves bilaterally**	**1.Help patient into a position that aids breathing, such as fowler's or semi-fowler's position (Phelps, 2020).** **2.Give skin care every 4 hours. Change the patient's position at least every 2 hours. Elevate edematous extremities (Phelps, 2020).**	**1. The patient's vital signs will be within normal ranges for age. The patient will have symmetrical and unlabored respirations. The patient will have no tenting, and the lower extremity edema will not get worse than trace edema for the duration of her stay at the nursing home.**	**Goal met: The patient will demonstrate stabilized fluid volume with balanced intake and output, breath sounds are clear or are clearing, vital signs are within acceptable range, patient has an absence of edema.**
2. Impaired gas exchange related to pulmonary edema as evidence by crackles upon auscultation and shortness of breath	**This nursing diagnosis was chosen because the patient's chief complaint was difficulty breathing and she had a low SaO2.**	**1. Have the patient turn, cough, and deep breath every 4 hours (Phelps, 2020).** **2.Monitor ABG levels and notify providers immediately if PaO_2 drops or $PaCO_2$ rises**	**1. The patient will maintain adequate ventilation and have clear breath sounds on auscultation and the patient's ABG levels will return to baselines in 2 weeks (03/24/2022)**	**Goal met: Patient will be able to demonstrate improvement in gas exchange as evidenced by normal breath sounds, pH of 7.38, PaO_2 of 80, and a $PaCO_2$ of 45.**

		(Phelps, 2020).		

Other References (APA):

Blum, A. (2018). Role of Lymphocytes in Heart Disease. *Circulation*, *98*(15). https://doi.org/10.1161/circ.98.15.1587/c

Medical News Today. (2018, March 8). *Hypoalbuminemia: Causes, treatment, and symptoms*. Www.medicalnewstoday.com. https://www.medicalnewstoday.com/articles/321149#causes

Medical News Today. (2020, October 20). *Hypercapnia: Causes, treatments, and diagnosis*. Www.medicalnewstoday.com. https://www.medicalnewstoday.com/articles/320501

Phelps, L. L. (2020). *Sparks & Taylor's Nursing Diagnosis Reference Manual*. Wolters Kluwer Medical.

Sherrell, Z. (2021, February 27). *High creatinine levels: Causes, symptoms, and when to seek help*. Www.medicalnewstoday.com. https://www.medicalnewstoday.com/articles/when-to-worry-about-creatinine-levels

Concept Map (20 Points):

Subjective Data

"I have pain when I try to breath, and it is even more difficult when I try to talk."
"Sometimes I wish my family would go away so I don't have to talk"
The patient mentions that her back pain is dull and aching, and that these symptoms have been exacerbated within the last 5-10 minutes.
"My pain is an 8 out of 10".

Nursing Diagnosis/Outcomes

Excess fluid volume related to the use of diuretics as evidence by orthopnea, S3 heart sounds and bilateral peripheral edema
Goal: The patient's vital signs will be within normal ranges for age. The patient will have symmetrical and unlabored respirations. The patient will have no tenting, and the lower extremity edema will not get worse than trace edema for the duration of her stay at the nursing home.
Impaired gas exchange related to pulmonary edema as evidence by crackles upon auscultation and shortness of breath
Goal: The patient will maintain adequate ventilation and have clear breath sounds on auscultation and the patient's ABG levels will return to baselines.

Objective Data

Vital signs: 0710. Pulse: 110 bpm, BP: 130/54 mm Hg, RR: 22 Breaths/minute, Temp: 36.4℃, O_2: 90% on 3L nasal cannula.
Morse fall score: 50
Braden Score: 13
Diagnostic tests: Chest X-ray and CT abdomen and pelvis with contrast.

Client Information

The patient was a 90+-year-old Caucasian female. Past medical history: CHF, Chronic kidney disease, Type 2 diabetes, and COPD. Past Surgical History: Hernia repair Inguinal-groin exploration (Left) (12/04/2018), Colonoscopy (08/25/2004), Oesophagogastroduodenoscopy, Arthroplasty of shoulder, and Cataracts.

Nursing Interventions

Nursing Diagnosis 1:
Help patient into a position that aids breathing, such as fowler's or semi-fowler's position (Phelps, 2020).
Give skin care every 4 hours. Change patient's position at least every 2 hours. Elevate edematous extremities (Phelps, 2020).
Nursing Diagnosis 2:
Have the patient turn, cough, and deep breath every 4 hours (Phelps, 2020).
Monitor ABG levels and notify provider immediately if PaO2 drops or PaCO2 rises (Phelps, 2020).