

N321 CARE PLAN

N321 Care Plan #2

Lakeview College of Nursing

Morgan Wagner

## N321 CARE PLAN

**Demographics (3 points)**

<b>Date of Admission</b> 06/25/21	<b>Patient Initials</b> R.J.	<b>Age</b> 57 years old	<b>Gender</b> female
<b>Race/Ethnicity</b> african american	<b>Occupation</b> disabled, on social security; used to work as a CNA	<b>Marital Status</b> divorced	<b>Allergies</b> tramadol ampicillin
<b>Code Status</b> full code	<b>Height</b> 5'6"	<b>Weight</b> 188 lbs 11.2 oz (constantly changing with dialysis)	

**Medical History (5 Points)**

**Past Medical History:** coronary artery disease, breast cancer, carcinoma, stage 3 chronic kidney disease, GFR 30-59ml/min, chronic obstructive pulmonary disease (COPD), diabetes mellitus, hypertension, myocardial infarction (MI), chronic systolic heart failure, hyponatremia

**Past Surgical History:** cesarean section, tubal ligation, breast lumpectomy, insertion dialysis catheter

**Family History:** diabetes mellitus and hypertension in mother, father unknown, paternal and maternal grandparents unknown

**Social History (tobacco/alcohol/drugs):** has been smoking since she was 15 years old, smokes 1-2 packs of cigarettes a day; no smokeless tobacco or alcohol use; patient reports using marijuana recreationally throughout her life

**Assistive Devices:** glasses, walker, life vest

**Living Situation:** lives at home alone with the assistance of everyday activities from daughter

**Education Level:** high school graduate, some college

**Admission Assessment**

**Chief Complaint (2 points):** shortness of breath

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**History of present Illness (10 points):** 57 year old african american female with a past medical history of breast cancer, end stage renal disease (ESRD) on hemodialysis, COPD, diabetes mellitus, and chronic systolic heart failure. The patient presented to the emergency department (ED) with complaints of shortness of breath lasting for the last week. The patient stated she felt very winded, almost as if she couldn't catch her breath. In addition to the shortness of breath, the patient stated that she believed she had gained 8 pounds in the last week. Upon admission to the ED, the patient was found to be very congested and wheezing. The patient is not compliant with dietary restrictions, fluid restrictions, and medication regimen. The patient typically dialyzes Mondays, Wednesdays, and Fridays but missed her appointment due to worsening symptoms. The patient denied any chest pain, fever, chills, abdominal pain, nausea, vomiting, and diarrhea.

### **Primary Diagnosis**

**Primary Diagnosis on Admission (2 points):** systolic heart failure

**Secondary Diagnosis (if applicable):** stage 3 chronic kidney disease

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

**Heart failure is a common form of heart disease associated with progressive exercise intolerance and high risk of adverse clinical outcome events (Katz, 2018). The pathophysiology of chronic systolic heart failure is fundamentally determined by the failure of circulatory system to deliver oxygen sufficient for metabolic needs, and it is best explained by a complex interplay between intrinsic abnormalities of ventricular pump function and extracardiac factors that limit oxygen use in metabolically active tissues (Katz, 2018). Heart failure due primarily to systolic dysfunction, also known as heart failure with reduced ejection fraction, accounts for approximately 50% of the heart failure**

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cases (Katz, 2018). According to the Fick equation, peak oxygen uptake during exercise is determined by the product of the peak oxygen cardiac output and the peak arteriovenous oxygen difference (Katz, 2018). Cardiac output reserve is reduced in patients with heart failure in proportion to the severity of functional impairment (Katz, 2018). However, there are several lines of evidence which suggest that reduced cardiac output reserve is not the primary limitation of peak oxygen uptake (Katz, 2018). Acute and chronic pharmacological interventions that increase cardiac output reserve during exercise are not associated with the expected increase in peak oxygen uptake in patients with chronic heart failure (Katz, 2018).

Reduced delivery of cardiac output during exercise in patients with chronic heart failure is attributed to reduced metabolic vasodilation in the skeletal muscle circulation (Katz, 2018). Evidence suggests that the reduction in postischemic metabolic vasodilation in the calf circulation is proportional to the reduction in peak oxygen uptake (Katz, 2018). The mechanisms contributing to reduced metabolic vasodilation have not been fully characterized (Katz, 2018). Sympathetic activation during exercise is not a contributing factor, because pharmacological  $\alpha$ -adrenergic blockade does not increase limb blood flow during exercise or after transient limb ischemia in patients with chronic heart failure (Katz, 2018). Vascular wall edema may play a role, because treatment with loop diuretics is associated with improved postischemic limb vasodilation in patients with chronic systolic heart failure (Katz, 2018). The observation that minimal vascular resistance after a maximal ischemic vasodilation stimulus is increased in chronic heart failure when compared with control subjects without heart failure suggests that remodeling of skeletal

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**muscle microcirculation is a determinant of reduced skeletal muscle blood flow during exercise (Katz, 2018).**

**Heart failure occurs when your heart muscle doesn't pump blood as well as it should (Mayo Clinic Staff, 2020). Not all conditions that lead to heart failure can be reversed, but treatments can improve the signs and symptoms of heart failure and help you live longer (Mayo Clinic Staff, 2020). Heart failure signs and symptoms may include shortness of breath when you exert yourself or when you lie down, fatigue and weakness, swelling or edema in your legs, ankles, and feet, rapid or irregular heart beat, reduced ability to exercise, persistent cough or wheezing, increased need to urinate at night, swelling in your abdomen, rapid weight gain, lack of appetite, nausea, decreased alertness, and chest pain (Mayo Clinic Staff, 2020).**

**Patients with heart failure present with one of three clinical profiles (The Cardiology Advisor, 2019). The first and the most common presentation is with volume overload that manifests as pulmonary or systemic congestion (The Cardiology Advisor, 2019). In the second group, evidence of hypotension and compromised end-organ perfusion, a consequence of low cardiac output, are the main features (The Cardiology Advisor, 2019). The third group has features of both volume overload and systemic hypoperfusion (The Cardiology Advisor, 2019). During the initial assessment for heart failure, vital signs are an important aspect to include during the physical examination. A careful assessment of the arterial pulse rate, rhythm, volume, or character can provide information about the underlying left ventricular pump function, valvular abnormalities, and hemodynamics (The Cardiology Advisor, 2019). Sinus tachycardia is a common feature in patients with acute heart failure and reflects activation of the sympathetic**

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nervous system in response to reduced cardiac output (The Cardiology Advisor, 2019). Frequent ventricular ectopies are a common source of irregular pulse (The Cardiology Advisor, 2019). If they occur frequently as in bigeminy and trigeminy, the pulse can be regularly irregular and the pulse deficit in this setting can be appreciated by simultaneous precordial auscultation and palpation of peripheral pulses (The Cardiology Advisor, 2019). Tachypnea or an increase in respiratory rate about 18 per minute indicates respiratory distress in heart failure and suggests pulmonary congestion (The Cardiology Advisor, 2019). Cheyne-Stokes breathing is an ominous sign and is associated with poor outcome in heart failure (The Cardiology Advisor, 2019). Cold periphery and peripheral cyanosis may suggest low cardiac output, whereas cold and clammy skin is a feature of cardiogenic shock and reflects intense vasoconstriction associated with acute decompensated heart failure (The Cardiology Advisor, 2019).

In addition to the physical examination findings, laboratory tests may also be ordered. BNP or B-type natriuretic peptide measures the concentration of a hormone produced by the left ventricle to help diagnose and grade the severity of heart failure (*Congestive Heart Failure | Lab Tests Online*, 2016). A metabolic panel may be ordered to check for electrolyte imbalances, kidney failure, and liver disease. A complete blood count (CBC) can also be ordered to check for anemia (*Congestive Heart Failure | Lab Tests Online*, 2016).

To diagnose heart failure, the physician will take a careful medical history, review symptoms, and perform a physical examination (Mayo Clinic Staff, 2020). The physician will also check for the presence of risk factors, such as high blood pressure, coronary artery disease, or diabetes (Mayo Clinic Staff, 2020). After the physical exam, the physician

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may also order different tests to help diagnose heart failure (Mayo Clinic Staff, 2020). The first test can be blood tests like discussed before. A chest X-ray may be ordered to help the physician see the condition of your lungs and heart (Mayo Clinic Staff, 2020). An electrocardiogram records the electrical activity of the heart through electrodes attached to the skin, which helps the physician diagnose heart rhythm abnormalities and damage to the heart (Mayo Clinic Staff, 2020). An echocardiogram uses sound waves to produce a video image of the heart so the physician can see the size and shape of the heart along with abnormalities (Mayo Clinic Staff, 2020). In addition to these tests, a stress test, cardiac computerized tomography scan, magnetic resonance imaging, coronary angiogram, and myocardial biopsy may also be ordered to help diagnose heart failure (Mayo Clinic Staff, 2020).

Heart failure is a chronic disease needing lifelong management (Mayo Clinic Staff, 2020). Treatment may help a patient live longer and reduce the chance of dying suddenly (Mayo Clinic Staff, 2020). Physicians can sometimes correct heart failure by treating the underlying cause (Mayo Clinic Staff, 2020). But for most patients, the treatment of heart failure involves a balance of the right medications and, in some cases, use of devices that help the heart beat and contract properly (Mayo Clinic Staff, 2020). An angiotensin-converting enzyme inhibitor is a type of drug given to patients with systolic heart failure to aid in widening the blood vessels and lowering blood pressure, improving blood flow and decreasing the workload of the heart (Mayo Clinic Staff, 2020). Beta blockers not only slow the heart rate and reduce blood pressure but also limit or reverse some of the damage to the heart (Mayo Clinic Staff, 2020). In addition to these drugs, diuretics, aldosterone

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antagonists, inotropes, and digoxin are also commonly prescribed (Mayo Clinic Staff, 2020).

R. J. was admitted on June 25th, 2021 with the primary diagnosis of systolic heart failure and a secondary diagnosis of stage 3 chronic kidney disease. The patient had a past medical history of coronary artery disease, COPD, diabetes mellitus, hypertension, and breast cancer. The patient was brought to the emergency department with a chief complaint of shortness of breath for the previous week before. The patient was found to be ill-appearing with mild distress at rest, edema in both lower extremities, orthopnea, elevated respirations, wheezes and crackles bilaterally in anterior and posterior lungs, and use of accessory muscles, all of which correlate with the primary diagnosis of systolic heart failure. Upon admission, blood work was ordered for the patient. When the labs came back, her monocytes, eosinophils, CO<sub>2</sub>, glucose, creatinine and BNP were elevated, and her RBC, Hct, Hgb, platelets, WBC, lymphocytes, sodium, chloride, and calcium levels, albumin, and phosphate were all elevated. The key lab value that correlates well with the primary diagnosis was the very elevated BNP. The physician's treatment plan was to continue the current management, try to ultrafiltrate 4 L of fluid every time the patient dialyzes until there is no significant edema in the lower extremities.

**Pathophysiology References (2) (APA):**

*Congestive Heart Failure | Lab Tests Online.* (2016, April 15). Lab Tests Online.

<https://labtestsonline.org/conditions/congestive-heart-failure>

Katz, S. D. (2018, February 15). *Pathophysiology of Chronic Systolic Heart Failure. A View from the Periphery.* PubMed. <https://pubmed.ncbi.nlm.nih.gov/29461891/>

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Mayo Clinic Staff. (2020, May 29). *Heart failure - Symptoms and causes*. Mayo Clinic.

<https://www.mayoclinic.org/diseases-conditions/heart-failure/symptoms-causes/syc-20373142>

The Cardiology Advisor. (2019, January 20). *Diagnosis of Heart Failure by History and*

*Physical Examination*. <https://www.thecardiologyadvisor.com/home/decision-support-in-medicine/cardiology/diagnosis-of-heart-failure-by-history-and-physical-examination/>

### 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	Male: 4.7-6.1 Female: 4.2-5.4	3.14	2.40	Patient's decreased RBC may be due to her chronic kidney disease (Pagana et al., 2021).
Hgb	Male: 14-18g/dL Female: 12-16g/dL	8.6	8.4	Patient's decreased Hgb may be due to her chronic kidney disease (Pagana et al., 2021).
Hct	Male: 40-52% Female: 36-47%	26.7	26.4	Patient's decreased Hct may be due to her chronic kidney disease (Pagana et al., 2021).
Platelets	150-400 x 10 <sup>9</sup> /L	50	34	Patient's low platelet count may be due to the Lasix she takes daily ( <i>Drug-Induced Thrombocytopenia</i> , 2019).
WBC	5-10 x 10 <sup>9</sup> /L	2.60	2.40	Patient's decreased WBC count may be due to her daily Lasix ( <i>White Blood Cell Count - Series—Results</i> , 2019). The low levels may also be caused by her chronic kidney disease (Arai, 2017).

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Neutrophils	55-70	69.4	60.0	
Lymphocytes	20-40	15.1	24.0	Patient's decreased WBC count may be due to her chronic kidney disease (Pagana et al., 2021).
Monocytes	2-8	9.5	10.5	Patient's increased monocyte levels may be due to her systolic heart failure and coronary artery disease (Pietrangelo, 2019). The increased levels may also be due to her chronic kidney disease (Koraishy, 2018).
Eosinophils	1-4	5.5	4.8	Increased eosinophil levels may be due to her daily Lasix ( <i>Common and Rare Side Effects for Lasix Oral</i> , n.d.). The levels may also be due to her breast cancer (Mayo Clinic Staff, 2019). Increased eosinophils can also be due to chronic heart failure and chronic kidney disease (Cleveland Clinic Medical Professionals, 2018).
Bands	0.5-1	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-	136-145 mEq/L	120	135	Patient's decreased sodium levels may be due to her daily Lasix, chronic kidney disease, or edema caused by heart failure or kidney disease ( <i>Sodium   Lab Tests Online</i> , 2019).
K+	3.5-5 mEq/L	3.5	3.6	
Cl-	98-106 mEq/L	86	99	Patient's decreased chloride levels may be due to her heart failure and COPD ( <i>Chloride   Lab Tests Online</i> , 2019).
CO2	23-30 mEq/L	30	32	Patient's elevated CO2 may be due to her diagnosis of COPD and chronic kidney disease ( <i>Carbon Dioxide (CO2) in Blood</i> , 2020).
Glucose	74-106 mg/	169	103	Patient's elevated glucose may be

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	dL			due to current diagnosis of diabetes mellitus ( <i>Glucose Tests   Lab Tests Online, 2020</i> )
BUN	10-20 mg/dL	12	7	Patient's decreased BUN may be due to her chronic kidney disease and treatment of dialysis (Pagana et al., 2021).
Creatinine	0.5-1.1 mg/dL	1.98	1.14	Patient's increased creatinine may be due to her chronic kidney disease and treatment of dialysis (Pagana et al., 2021).
Albumin	3.5-5 mg/dL	2.4	N/A	Patient's decreased albumin may be due to her chronic kidney disease and treatment of dialysis (Pagana et al., 2021).
Calcium	9-10.5 mg/dL	7.9	8.1	Patient's decreased calcium may be due to her chronic kidney disease and treatment of dialysis (Pagana et al., 2021).
Mag	1.3-2.1 mEq/dL	1.4	N/A	
Phosphate	3-4.5 mg/dL	3.1	1.0	Patient's phosphate may be low due to her diagnosis of diabetes mellitus or her dialysis treatment ( <i>Phosphorus   Lab Tests Online, 2018</i> ).
Bilirubin	0.3-1 mg/dL	0.8	N/A	
Alk Phos	30-120 U/L	111	N/A	
AST	0-35 U/L	20	N/A	
ALT	4-36 U/L	17	N/A	
Amylase	60-120 U/L	N/A	N/A	
Lipase	0-160 U/L	16.6	N/A	
Lactic Acid	Venous blood: 5-20 mg/dL  Arterial blood: 3-7	N/A	N/A	

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	mg/dL			
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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	0.8-1.1	N/A	N/A	
PT	11-12.5 sec	N/A	N/A	
PTT	60-70 sec	N/A	N/A	
D-Dimer	Greater than 0.4 mcg/mL or greater than 250 ng/mL	N/A	N/A	
BNP	Less than 100 pg/mL	3024	4700	Patient's elevated BNP may be due to her diagnosis of heart failure (Pagana et al., 2021).
HDL	Male: greater than 45 mg/dL  Female: greater than 55 mg/dL	N/A	N/A	
LDL	Adult: less than 130 mg/dL  Children: less than 110 mg/dL	N/A	N/A	
Cholesterol	Less than 200 mg/dL	N/A	N/A	
Triglycerides	40-180 mg/dL	N/A	N/A	
Hgb A1c	Below 5.7%	N/A	N/A	
TSH	2-10 mU/L	N/A	N/A	

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Urinalysis **Highlight All Abnormal Labs**—Explanations must be in complete sentences and contain in-text citations in APA format. **Verified with Professor Lawson, no lab tests were done for urine and cultures!**

Lab Test	Normal Range	Value on Admission	Today's Value	Reason for Abnormal
Color & Clarity	Clear, Amber/ Yellow	N/A	N/A	
pH	4.6-8 Average: 6	N/A	N/A	
Specific Gravity	1.005-1.03	N/A	N/A	
Glucose	30-300 mg/day	N/A	N/A	
Protein	0-8 mg/dL	N/A	N/A	
Ketones	Negative	N/A	N/A	
WBC	0-4 per low- power field Negative for cast	N/A	N/A	
RBC	Less than or equal to 2, negative for cast	N/A	N/A	
Leukoesterase	Negative	N/A	N/A	

Cultures **Highlight All Abnormal Labs**—Explanations must be in complete sentences and contain in-text citations in APA format. **Verified with Professor Lawson, no lab tests were done for urine and cultures!**

Test	Normal Range	Value on Admission	Today's Value	Explanation of Findings
Urine Culture	Negative: less than 10,000 per mm of U  Positive: greater than	N/A	N/A	

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	<b>100,000 per mm of U</b>			
<b>Blood Culture</b>	<b>Negative</b>	<b>N/A</b>	<b>N/A</b>	
<b>Sputum Culture</b>	<b>Normal Upper RT</b>	<b>N/A</b>	<b>N/A</b>	
<b>Stool Culture</b>	<b>Normal intestinal flora</b>	<b>N/A</b>	<b>N/A</b>	

**Lab Correlations Reference (1) (APA):**

**Arai, Y. (2017, July 11). *Low white blood cell count is independently associated with chronic kidney disease progression in the elderly: the CKD-ROUTE study*. PubMed.**

**<https://pubmed.ncbi.nlm.nih.gov/28699033/>**

**Carbon Dioxide (CO<sub>2</sub>) in Blood. (2020, July 30). MedlinePlus. <https://medlineplus.gov/lab-tests/carbon-dioxide-co2-in-blood/>**

**Chloride | Lab Tests Online. (2019, November 26). Lab Tests Online.**

**<https://labtestsonline.org/tests/chloride>**

**Cleveland Clinic Medical Professionals. (2018, February 5). *Eosinophilia: Causes, Treatment*. Cleveland Clinic. <https://my.clevelandclinic.org/health/diseases/17710-eosinophilia>**

**Common and Rare Side Effects for Lasix oral. (n.d.). WebMD. Retrieved July 1, 2021, from <https://www.webmd.com/drugs/2/drug-3776-8043/lasix-oral/furosemide-oral/details/list-sideeffects>**

**Drug-induced thrombocytopenia. (2019, May 22). MedlinePlus.**

**<https://medlineplus.gov/ency/article/000556.htm>**

**Glucose Tests | Lab Tests Online. (2020, August 18). Lab Tests Online.**

**Koraishy, F. M. (2018, September). *Monocyte count modifies the association between chronic kidney disease and risk of death*. PubMed.**

**<https://pubmed.ncbi.nlm.nih.gov/29974856/>**

**Mayo Clinic Staff. (2019, October 8). *Eosinophilia*. Mayo Clinic.**

**<https://www.mayoclinic.org/symptoms/eosinophilia/basics/definition/sym-20050752?reDate=01072021>**

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Pagana, K. D., Pagana, T. N., & Pagana, T. J. (2021). *Mosby's diagnostic and laboratory test reference* (15th ed.). Elsevier.

*Phosphorus* | *Lab Tests Online*. (2018, June 14). Lab Tests Online. <https://labtestsonline.org/tests/phosphorus>

Pietrangelo, A. (2019, November 19). *What Does It Mean If Your Monocyte Levels Are High?* Healthline. <https://www.healthline.com/health/monocytes-high#causes-of-high-levels>

*Sodium* | *Lab Tests Online*. (2019, December 19). Lab Tests Online. <https://labtestsonline.org/tests/sodium>

*White blood cell count - series—Results*. (2019, January 29). MedlinePlus. [https://medlineplus.gov/ency/presentations/100151\\_3.htm](https://medlineplus.gov/ency/presentations/100151_3.htm)

### Diagnostic Imaging

**All Other Diagnostic Tests (5 points):** Chest X-Ray and EKG

**Diagnostic Test Correlation (5 points):**

Chest X-Rays produce images of your heart, lungs, blood vessels, airways, and the bones in your chest and spine (Mayo Clinic Staff, 2020b). Chest X-rays can also reveal fluid in or around your lungs or air surrounding a lung (Mayo Clinic Staff, 2020b). Upon inspection of the Chest X-ray, my patient was found to have total opacification of the left hemithorax with the right lung appearing grossly clear.

An electrocardiogram, also known as an EKG, records the electrical signals in your heart (Mayo Clinic Staff, 2020a). It is a common and painless test used to quickly detect heart problems and monitor heart health (Mayo Clinic Staff, 2020a). My patient was found to have sinus tachycardia with occasional premature ventricular complexes, low voltage QRS, and possible anterolateral infarct.

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**Diagnostic Test Reference (1) (APA):**

**Mayo Clinic Staff. (2020a, April 9). *Electrocardiogram (ECG or EKG)* - Mayo Clinic. Mayo**

**Clinic. <https://www.mayoclinic.org/tests-procedures/ekg/about/pac-20384983>**

**Mayo Clinic Staff. (2020b, May 2). *Chest X-rays* - Mayo Clinic. Mayo Clinic.**

**<https://www.mayoclinic.org/tests-procedures/chest-x-rays/about/pac-20393494>**

**Current Medications (10 points, 1 point per completed med)**

**\*10 different medications must be completed\***

**Home Medications (5 required)**

<b>Brand/Generic</b>	<b>quetiapine (Seroquel)</b>	<b>furosemide (Lasix)</b>	<b>metoprolol succinate SR (Toprol XL)</b>	<b>albuterol (Proventil HFA)</b>	<b>spironolactone (Aldactone)</b>
<b>Dose</b>	<b>100 mg</b>	<b>40 mg</b>	<b>50 mg</b>	<b>108 mcg/ACT (90 base)</b>	<b>25 mg</b>
<b>Frequency</b>	<b>take 1 tablet by mouth every day in the evening</b>	<b>take 1 tablet by mouth twice daily</b>	<b>take 1 tablet by mouth daily</b>	<b>take 2 puffs by mouth every 6 hours as needed for wheezing/ cough</b>	<b>take 1 tablet by mouth daily</b>
<b>Route</b>	<b>oral</b>	<b>oral</b>	<b>oral</b>	<b>oral</b>	<b>oral</b>

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<b>Classification</b>	<b>antipsychotic</b>	<b>antihypertensive , diuretic</b>	<b>antianginal, antihypertensive</b>	<b>bronchodilator</b>	<b>diuretic</b>
<b>Mechanism of Action</b>	May produce antipsychotic effects by interfering with dopamine binding to dopamine type 2 receptor sites in the brain and by antagonizing serotonin 5-HT <sub>2</sub> , dopamine type 1, histamine H <sub>1</sub> , and adrenergic alpha 1 and alpha 2 receptors (Jones & Bartlett Learning, 2019).	Inhibits sodium and water reabsorption in the loop of Henle and increases the urine formation. As the body's plasma volume decreases, aldosterone production increases, which promotes sodium reabsorption and the loss of potassium and hydrogen ions. By reducing intracellular and extracellular fluid volume, the drug reduces blood pressure and decreases cardiac output	Inhibits stimulation of beta <sub>1</sub> -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. Also helps reduce blood pressure by decreasing renal release of renin (Jones & Bartlett Learning, 2019).	Albuterol attaches to beta 2 receptors on bronchial cell membranes, which stimulates the intracellular enzyme adenylate cyclase to convert adenosine triphosphate (ATP) to cyclic adenosine monophosphate (cAMP). This reaction decreases intracellular calcium levels. It also increases intracellular levels of cAMP. Together, these effects relax bronchial smooth-muscle cells and inhibit histamine release (Jones & Bartlett Learning,	Normally, aldosterone attaches to receptors on the walls of distal convoluted tubule cells, causing sodium and water reabsorption in the blood. This drug competes with aldosterone for these receptors, thereby preventing sodium and water reabsorption and causing their excretion through the distal convoluted tubules. Increased urinary excretion of sodium and water reduces blood volume and blood pressure (Jones & Bartlett Learning, 2019).

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				2019).	
<b>Reason Client Taking</b>	<b>This medication is often prescribed for certain mental or mood conditions, such as bipolar disorder and schizophrenia. I would clarify with the provider about the appropriate indication for use, as this is not listed on the medical diagnosis list.</b>	<b>Patient is taking to treat symptoms of fluid retention (edema) due to heart failure (Jones &amp; Bartlett Learning, 2019).</b>	<b>Patient is taking to treat hypertension</b>	<b>This medication is often prescribed as a bronchodilator that relaxes muscles in the airways and increases airflow to the lungs. It is often used to treat patients with asthma or certain types of chronic obstructive pulmonary disease (COPD). Therefore, my patient is taking to help treat her COPD.</b>	<b>Patient is taking for heart failure and edema</b>
<b>Contraindications (2)</b>	<b>hypersensitivity to quetiapine or its components</b>	<b>anuria, hypersensitivity to furosemide or its components, allergy to sulfa</b>	<b>acute heart failure, pulse less than 45 beats per minute, second or third degree AV block</b>	<b>Hypersensitivity to albuterol or its components</b>	<b>acute renal insufficiency, conditions associated with hyperkalemia, anuria</b>
<b>Side Effects/Adverse Reactions (2)</b>	<b>suicidal ideations, cardiomyopathy, hyponatremia, and neutropenia</b>	<b>arrhythmias, thromboembolism, hepatocellular insufficiency, hypocalcemia, hypokalemia, hypomagnesemia, hyponatremia</b>	<b>arterial insufficiency, cardiac arrest, heart failure, bronchospasm</b>	<b>hypotension, bronchospasm, pulmonary edema</b>	<b>encephalopathy, hypotension, renal failure, hyponatremia</b>
<b>Nursing</b>	<b>-Know that</b>	<b>-Use cautiously</b>	<b>-Use this</b>	<b>-Administer</b>	<b>-Know that in</b>

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<b>Considerations (2)</b>	<b>quetiapine shouldn't be used for elderly patients with dementia related psychosis because drug increases the risk of death in these patients -Monitor patients (particularly children and young adults) closely for suicidal tendencies, especially when therapy starts or dosage changes, because depression may worsen temporarily during these times</b>	<b>in patients with advanced hepatic cirrhosis -Be aware that patients who are allergic to sulfonamides may also be allergic to furosemide</b>	<b>medication with extreme caution in patients who bronchospastic disease who don't respond to or can't tolerate other antihypertensives -Check for signs of poor glucose control in patient with diabetes mellitus, this drug can interfere with therapeutic effects of insulin or oral antidiabetic drugs</b>	<b>pressurized inhalations of albuterol during second half of inspiration, when airways are open wider and aerosol distribution is more effective -Be aware that drug tolerance can develop with prolonged use</b>	<b>diagnosing primary aldosteronism, test is considered positive if patient's serum potassium level rises when spironolactone is given and falls when it is discontinued -Evaluate spironolactone's effectiveness by assessing blood pressure and presence of degree of edema</b>
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## Hospital Medications (5 required)

Brand/Generic	epoetin alfa - EPBX (Retacrit)	iron sucrose (Venofer)	glucose gel (Glucose)	folic acid (Folvite)	insulin glargine (Lantus)
<b>Dose</b>	8000u (2 mL)	100 mg (5mL)	40% gel (15 g)	1 mg	100u/mL
<b>Frequency</b>	inject 8000u subcutaneously for one dose	administer 100 mg (5mL) by slow IV push injection over 2-5 minutes	administer 1 dose if patient is unable to take food, but conscious and able to	take 1 tablet by mouth daily	inject 25 units subcutaneously every morning and 10 units subcutaneously every evening

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			swallow		
<b>Route</b>	subcutaneous	IV	oral	oral	subcutaneous
<b>Classification</b>	antianemic	hematinic	antihypoglycemic	water-soluble vitamins	long-acting insulin
<b>Mechanism of Action</b>	Stimulates the release of reticulocytes from the bone marrow into the bloodstream, where they develop into mature RBCs (Jones & Bartlett Learning, 2019).	Acts to replenish iron stores lost during dialysis because of increased erythropoiesis and insufficient absorption of iron from GI tract. Also normalizes RBC production by binding with hemoglobin or being stored as ferritin in reticuloendothelial cells of the bone marrow, liver, or spleen (Jones & Bartlett Learning, 2019).	Glucose can act as precursors to generate other biomolecules such as vitamin C. It plays a role as a signaling molecule to control glucose and energy homeostasis ( <i>Glucose Gel Oral: Uses, Side Effects, Interactions, Pictures, Warnings &amp; Dosing - WebMD, n.d.</i> ), ( <i>Glucose: Uses, Interactions, Mechanism of Action   DrugBank Online, 2015.</i> )	Folic acid, as it is biochemically inactive, is converted to tetrahydrofolic acid and methyltetrahydrofolate by dihydrofolate reductase (DHFR). These folic acid congeners are transported across cells by receptor-mediated endocytosis where they are needed to maintain normal erythropoiesis, synthesize purine and thymidylate nucleic acids, interconvert amino acids, methylate tRNA, and generate	Insulin glargine binds to the insulin receptor (IR), a heterotetrameric protein consisting of two extracellular alpha units and two transmembrane beta units. The binding of insulin to the alpha subunit of IR stimulates the tyrosine kinase activity intrinsic to the beta subunit of the receptor. The bound receptor autophosphorylates and phosphorylates numerous intracellular substrates such as insulin receptor substrates (IRS) proteins, Cbl, APS, Shc and Gab 1. Activation of these proteins leads to the activation of downstream signalling

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				<p>and use formate. Using vitamin B12 as a cofactor, folic acid can normalize high homocysteine levels by remethylation of homocysteine to methionine via methionine synthetase (Folic Acid: Uses, Interactions, Mechanism of Action   DrugBank Online, 2005).</p>	<p>molecules including PI3 kinase and Akt. Akt regulates the activity of glucose transporter 4 (GLUT4) and protein kinase C (PKC), both of which play critical roles in metabolism. Insulin glargine is completely soluble at pH 4, the pH of administered solution, and has low solubility at physiological pH 7.4. Upon subcutaneous injection, the solution is neutralized resulting in the formation of microprecipitates. Small amounts of insulin glargine are released from microprecipitates giving the drug a relatively constant concentration over time profile over 24 hours with no pronounced peak. This release mechanism allows the drug</p>
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					to mimic basal insulin levels within the body ( <i>Insulin Glargine: Uses, Interactions, Mechanism of Action</i>   <i>DrugBank Online</i> , 2005).
<b>Reason Client Taking</b>	<b>Patient is taking due to hemodialysis treatment</b>	<b>Patient is taking due to hemodialysis treatment</b>	<b>Patient may take due to possible low blood sugar</b>	<b>This medication is often prescribed for folic acid deficiency, megaloblastic anemia, and in anemias of nutritional origins pregnancy, infancy, or childhood. I would clarify with the provider about the appropriate indication for use, as this is not listed on the medical diagnosis list.</b>	<b>Patient is taking due to diabetes mellitus to control blood sugar</b>
<b>Contraindications (2)</b>	<b>breastfeeding, pregnancy, uncontrolled hypertension, infants and</b>	<b>anemia other than iron deficiency, hypersensitivity to iron</b>	<b>hypersensitivity to glucose gel or its component</b>	<b>renal disease, failure, or impairment, hypersensitivity</b>	<b>episodes of hypoglycemia, hypersensitivity to insulin glargine or its</b>

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	neonates	salts or their components, iron overload	s	vity to folic acid or its components , pernicious anemia	components
<b>Side Effects/Adverse Reactions (2)</b>	congestive heart failure, seizures, deep vein thrombosis, pulmonary congestion	hypotension, shock, hypoglycemia, angioedema	hypotension, allergic reaction, itching, trouble breathing	abdominal cramps, diarrhea, irritability, nausea, stomach upset	anxiety, blurred vision, chills, difficulty thinking, drowsiness
<b>Nursing Considerations (2)</b>	-Be aware that this drug shouldn't be given to cancer patients when a cure is anticipated because drug may decrease survival rate and increase tumor progression -Use drug cautiously in patients with cardiovascular disorders caused by hypertension, a history of porphyria or seizures, vascular disease, or a hematologic disorder	-Give drug directly into dialysis line by slow IV injection or by infusion -Assess blood pressure often after drug administration because hypotension is a common adverse reaction that may be related to infusion rate	-Do not give oral glucose gel to a patient who is unconscious -Monitor the patient's blood glucose levels	-Administer orally if at all possible. With severe GI malabsorption or very severe disease, give IM, IV, or subcutaneously -Use caution when giving the parenteral preparing to premature infants. These preparations contain benzyl alcohol and may product a fatal gasping syndrome	-Inspect skin areas that will be used for injection, note any areas that are bruised, thickened, or scarred which could interfere with insulin absorption and alter anticipated response -Have a colleague double check the dosage of insulin drawn up

**Medications Reference (1) (APA):**

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**Folic acid: Uses, Interactions, Mechanism of Action | DrugBank Online. (2005, June 30).**

**DrugBank. <https://go.drugbank.com/drugs/DB00158>**

**Glucose Gel Oral: Uses, Side Effects, Interactions, Pictures, Warnings & Dosing - WebMD.**

**(n.d.). WebMD. Retrieved July 1, 2021, from**

**<https://www.webmd.com/drugs/2/drug-144242/glucose-gel-oral/details>**

**Glucose: Uses, Interactions, Mechanism of Action | DrugBank Online. (2015, November 27).**

**DrugBank. <https://go.drugbank.com/drugs/DB09341>**

**Insulin glargine: Uses, Interactions, Mechanism of Action | DrugBank Online. (2005, June**

**13). DrugBank. <https://go.drugbank.com/drugs/DB00047>**

**Jones & Bartlett Learning. (2019). 2020 Nurse's Drug Handbook (19th ed.). Jones &**

**Bartlett Learning.**

### Assessment

#### Physical Exam (18 points)

<b>GENERAL (1 point):</b> <b>Alertness:</b> <b>Orientation:</b> <b>Distress:</b> <b>Overall appearance:</b>	<b>Appears alert and oriented x3</b>  <b>well groomed</b>  <b>ill-appearing</b>  <b>mild distress at rest</b>
<b>INTEGUMENTARY (2 points):</b> <b>Skin color:</b> <b>Character:</b> <b>Temperature:</b> <b>Turgor:</b> <b>Rashes:</b>	<b>Brown/black skin color with slight palness</b> <b>Skin warm and dry upon palpation</b> <b>No rashes, lesions, or bruising</b> <b>Normal quantity, distribution, and texture of hair</b> <b>Nails without clubbing or cyanosis</b>

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<p><b>Bruises:</b>  <b>Wounds:</b> .  <b>Braden Score:</b>  <b>Drains present:</b> Y <input type="checkbox"/>      N <input type="checkbox"/>  <b>Type:</b></p>	<p><b>Skin turgor normal mobility</b>  <b>Capillary refill less than 3 seconds fingers and toes bilaterally</b>  <b>No drains present</b>  <b>Braden score of 14, medium risk</b>  <b>Single lumen implant port (infraclavicular fossa) on right side of chest</b>  <b>Double lumen tunneled central line (internal jugular vein) on right side of chest</b></p>
<p><b>HEENT (1 point):</b>  <b>Head/Neck:</b>  <b>Ears:</b>  <b>Eyes:</b>  <b>Nose:</b>  <b>Teeth:</b></p>	<p><b>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.</b></p> <p><b>Bilateral sclera white, bilateral cornea clear, bilateral conjunctiva pink, no visible drainage from eyes. Bilateral lids are moist and pink without lesions or discharge noted. PERRLA bilaterally , red light reflex present bilaterally, Rosemburg 20/20, EOMs intact bilaterally.</b></p> <p><b>Bilateral auricles moist and pink without lesions, bilateral canals clear with pearly grey tympanic membranes</b></p> <p><b>Septum is midline, turbinates are moist and pink bilaterally and no visible bleeding or polyps. Bilateral frontal sinuses are nontender to palpation.</b></p> <p><b>Posterior pharynx and tonsils are moist and pink without exudate noted. Tonsil size is 1+. Uvula is midline; soft palate rises and falls symmetrically. oral mucosa overall is moist and pink without lesions noted.</b></p> <p><b>Patient has no teeth, dentures in their place</b></p>
<p><b>CARDIOVASCULAR (2 points):</b>  <b>Heart sounds:</b>  <b>S1, S2, S3, S4, murmur etc.</b>  <b>Cardiac rhythm (if applicable):</b>  <b>Peripheral Pulses:</b>  <b>Capillary refill:</b></p>	<p><b>Clear S1 and S2 without murmurs, gallops or rubs.</b>  <b>PMI palpable at 5<sup>th</sup> intercostal space at MCL.</b>  <b>Normal rate and rhythm.</b>  <b>Peripheral pulses are 2+ in all upper and lower extremities.</b></p>

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<b>Neck Vein Distention:</b> Y <input type="checkbox"/> N <input type="checkbox"/> <b>Edema</b> Y <input type="checkbox"/> N <input type="checkbox"/> <b>Location of Edema:</b>	<b>No neck vein distention.</b> <b>Edema present in both lower extremities.</b> <b>Orthopnea present</b> <b>Capillary refill less than 3 seconds in fingers and toes</b>
<b>RESPIRATORY (2 points):</b> <b>Accessory muscle use:</b> Y <input type="checkbox"/> N <input type="checkbox"/> <b>Breath Sounds: Location, character</b>	<b>Normal pattern of respirations.</b> <b>Slightly elevated rate of respirations.</b> <b>Respirations symmetrical but labored.</b> <b>Lung sounds not clear throughout anterior/posterior bilaterally, wheeze and crackles present</b> <b>Shortness of breath</b> <b>Orthopnea present</b> <b>Deep, congested cough present</b> <b>Use of accessory muscles</b>
<b>GASTROINTESTINAL (2 points):</b> <b>Diet at home:</b> <b>Current Diet</b> <b>Height:</b> <b>Weight:</b> <b>Auscultation Bowel sounds:</b> <b>Last BM:</b> <b>Palpation: Pain, Mass etc.:</b> <b>Inspection:</b> <b>Distention:</b> <b>Incisions:</b> <b>Scars:</b> <b>Drains:</b> <b>Wounds:</b> <b>Ostomy:</b> Y <input type="checkbox"/> N <input type="checkbox"/> <b>Nasogastric:</b> Y <input type="checkbox"/> N <input type="checkbox"/> <b>Size:</b> <b>Feeding tubes/PEG tube</b> Y <input type="checkbox"/> N <input type="checkbox"/> <b>Type:</b>	<b>Abdomen is soft, nontender, no organomegaly or masses notes upon palpation of all four quadrants.</b> <b>Bowel sounds are normoactive in all four quadrants.</b> <b>No CVA tenderness noted bilaterally.</b> <b>Low sodium diet at home and in the hospital, but does not follow</b> <b>Fluid restrictions, does not follow</b> <b>5'6"</b> <b>188 lbs 11.2 oz (constantly changing with dialysis)</b> <b>Last bowel movement at 0700 on 06/28</b> <b>No distention, incisions, scars, drains, or wounds.</b> <b>No ostomy</b> <b>No NG tube, feeding tube, or PEG tube</b>
<b>GENITOURINARY (2 Points):</b> <b>Color:</b> <b>Character:</b> <b>Quantity of urine:</b> <b>Pain with urination:</b> Y <input type="checkbox"/> N <input type="checkbox"/> <b>Dialysis:</b> Y <input type="checkbox"/> N <input type="checkbox"/> <b>Inspection of genitals:</b> <b>Catheter:</b> Y <input type="checkbox"/> N <input type="checkbox"/> <b>Type:</b> <b>Size:</b>	<b>Clear, yellow urine</b> <b>200 ml output</b> <b>No pain with urination</b> <b>Currently doing dialysis M, W, F (everyday while in hospital)</b> <b>Genitals appeared clean</b> <b>No catheter</b>
<b>MUSCULOSKELETAL (2 points):</b> <b>Neurovascular status:</b>	<b>All extremities have full ROM</b> <b>Hand grips and pedal pushes/pulls</b>

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<b>ROM:</b> <b>Supportive devices:</b> <b>Strength:</b> <b>ADL Assistance:</b> Y <input type="checkbox"/> N <input type="checkbox"/> <b>Fall Risk:</b> Y <input type="checkbox"/> N <input type="checkbox"/> <b>Fall Score:</b> <b>Activity/Mobility Status:</b> <b>Independent (up ad lib)</b> <input type="checkbox"/> <b>Needs assistance with equipment</b> <input type="checkbox"/> <b>Needs support to stand and walk</b> <input type="checkbox"/>	<b>demonstrate normal and equal strength (2+)</b> <b>No swelling, tenderness, deformity, or signs of injury</b> <b>Patient uses a walker, has a life vest</b> <b>Patient needs ADL assistance</b> <b>Fall score of 80, high risk</b> <b>Needs assistance to get up and walk with walker</b>
<b>NEUROLOGICAL (2 points):</b> <b>MAEW:</b> Y <input type="checkbox"/> N <input type="checkbox"/> <b>PERLA:</b> Y <input type="checkbox"/> N <input type="checkbox"/> <b>Strength Equal:</b> Y <input type="checkbox"/> N <input type="checkbox"/> if no - <b>Legs</b> <input type="checkbox"/> <b>Arms</b> <input type="checkbox"/> <b>Both</b> <input type="checkbox"/> <b>Orientation:</b> <b>Mental Status:</b> <b>Speech:</b> <b>Sensory:</b> <b>LOC:</b>	<b>Alert and oriented x3</b> <b>No focal deficits</b> <b>Moves all extremities well</b> <b>PERRLA intact bilaterally</b> <b>Strength is equal in upper extremities bilaterally</b> <b>No LOC</b>
<b>PSYCHOSOCIAL/CULTURAL (2 points):</b> <b>Coping method(s):</b> <b>Developmental level:</b> <b>Religion &amp; what it means to pt.:</b> <b>Personal/Family Data (Think about home environment, family structure, and available family support):</b>	<b>Mood and behavior is normal</b> <b>Patient has a normal developmental level</b> <b>Patient states she “likes to watch TV” to cope</b> <b>Believes in God, but does not practice or worship</b> <b>Patient is Baptist, goes to church every sunday when able to</b> <b>Patient’s daughter and mother are very supportive and help to take care of her</b>

## Vital Signs, 2 sets (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0701	78	115/77	18	97.3	94%
0855	111	110/86	26	98.9	100%

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**Pain Assessment, 2 sets (2 points)**

<b>Time</b>	<b>Scale</b>	<b>Location</b>	<b>Severity</b>	<b>Characteristics</b>	<b>Interventions</b>
<b>0701</b>	<b>0-10 face scale</b>	<b>N/A</b>	<b>0, happy face</b>	<b>N/A</b>	<b>N/A</b>
<b>1101</b>	<b>0-10 face scale</b>	<b>N/A</b>	<b>0, happy face</b>	<b>N/A</b>	<b>N/A</b>

**IV Assessment (2 Points)**

<b>IV Assessment</b>	<b>Fluid Type/Rate or Saline Lock</b>
<b>Size of IV: 20 gauge</b> <b>Location of IV: medial side of right arm</b> <b>Date on IV: 06/25/21</b> <b>Patency of IV: flushes without difficult, patent</b> <b>Signs of erythema, drainage, etc.: No</b> <b>IV dressing assessment: clean, dry, intact</b>	normal saline, 0.9% sodium chloride

**Intake and Output (2 points)**

<b>Intake (in mL)</b>	<b>Output (in mL)</b>
<b>3580 mL</b>	<b>15400 mL</b>

**Nursing Care****Summary of Care (2 points)**

**Overview of care: Patient was well taken care of during my clinical time. The patient spent most of the day doing her dialysis treatment, so I kept her company. I made sure that the patient was warm, comfortable, always had water, and the call light was within reach. I always ensure her bible and purse were by her side, because if she couldn't see them she would get very upset. I elevated the head of her bed as she was experiencing shortness of breath. I monitored her fluid intake and made sure her bed rails were always up to ensure patient safety.**

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**Procedures/testing done:** Dialysis was performed, the patient had a chest x-ray and EKG performed.

**Complaints/Issues:** The patient constantly wished to go home.

**Vital signs (stable/unstable):** Vital signs were mostly stable, the patient's blood pressure usually runs around the same range, the morning O2 percentage was low because she refused to wear her oxygen mask, respirations were elevated because the patient had shortness of breath and endured multiple coughing fits.

**Tolerating diet, activity, etc.:** Patient was not following her fluid and dietary restrictions.

**Physician notifications:** Continue the current management, try to ultrafiltrate 4 L of fluid every time the patient dialyzes but still has significant edema of legs.

**Future plans for patient:** Discharge and follow up with primary is per the patient's request.

**Discharge Planning (2 points)**

**Discharge location:** The patient will be going back to live at home by herself.

**Home health needs (if applicable):** Patient's daughter assists with every day living

**Equipment needs (if applicable):** Patient needs her walker and life vest

**Follow up plan:** Follow up with primary care provider after discharge, follow fluid and dietary restrictions

**Education needs:** The patient does not fully understand the seriousness of her condition. I believe there is a cognitive issue going on, but it does not state a diagnosis or illness in the patient's chart. The patient was very persistent on going home, even after she

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was informed that her left lung was completely full of fluid. Her provider needs to sit her down and address the major illnesses and issues that are going on.

## Nursing Diagnosis (15 points)

**\*Must be NANDA approved nursing diagnosis and listed in order of priority\***

<b>Nursing Diagnosis</b> ● Include full nursing diagnosis with “related to” and “as evidenced by” components	<b>Rational</b> ● Explain why the nursing diagnosis was chosen	<b>Intervention (2 per dx)</b>	<b>Evaluation</b> ● How did the patient/family respond to the nurse’s actions? ● Client response, status of goals and outcomes, modifications to plan.
<b>1. Decreased cardiac output related to systolic heart failure as evidence by abnormal EKG, edema, and dyspnea</b>	<b>The patient’s nursing diagnosis was chosen due to her diagnosis of chronic systolic heart failure.</b>	<b>1. Monitor and record heart rate, rhythm, and blood pressure and auscultate heart and lung sounds at least every 4 hours.</b>  <b>2. Maintain dietary restrictions as ordered.</b>	<b>The patient understood the importance of maintaining a pulse and blood pressure within set limits and was able to verbally communicate the reason back to me. When I discussed the dietary and fluid restrictions to the patient, she became very upset and refused to talk about the subject any longer. The patient’s daughter was not there to discuss the appropriate interventions for her mother.</b>
<b>2. Excess fluid volume related to systolic heart failure and chronic kidney disease as evidence by edema, pleural effusion,</b>	<b>The patient’s nursing diagnosis was chosen due to the crackles noted in her chest, the edema constantly present in both lower extremities, the sodium</b>	<b>1. Weigh patient daily before breakfast as ordered to provide consistent readings.</b>  <b>2. Administer diuretics per providers orders to promote fluid</b>	<b>Before admission to the hospital, the patient knew that it was important to weigh herself daily and made it a normal part of her daily routine. Therefore, I did not have to provide much information about</b>

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<p><b>electrolyte imbalance, weight gain, and adventitious breath sounds</b></p>	<p><b>imbalance, and the diagnosis of systolic heart failure and chronic kidney disease.</b></p>	<p><b>excretion</b></p>	<p><b>daily weights. After informing the patient and emphasizing on the need of taking her diuretic, she agreed to try to remember to take her medications every day. She even made a goal of setting herself a daily reminder to take her medications.</b></p>
<p><b>3. Risk-prone health behaviors related to noncompliance as evidence by refusal to follow dietary and fluid restrictions and insistence to go home without regards to medical condition</b></p>	<p><b>The patient's nursing diagnosis was chosen because of her noncompliance in regards to her physical condition. The patient refuses to follow her dietary and fluid restrictions as well as medication regimen. The patient also insisted on going home and signed an AMA (against medical advice) form even though her left lung was completely full of fluid.</b></p>	<p><b>1. Begin teaching patient and caregivers the skills needed to adequately manage care</b></p> <p><b>2. Encourage patient to express feelings in a safe, private environment</b></p>	<p><b>The patient's daughter was not present to listen to the different interventions I had in regards to her mother's care. I explained to my patient that I wanted her to express her feelings to me, and she began to cry and state that she just wanted to go home. I believe that my patient was just very confused, and did not adequately understand her poor health condition. I explained how dangerous some of the illnesses that she has are, and that gave her some insight into the problems that she has. It almost seemed as though she understands that she may die, but she showed no interest in bettering herself nor her health.</b></p>

## Other References (APA):

Phelps, L. L. (2020). *Sparks & Taylor's Nursing Diagnosis Reference Manual* (11th ed.).

LWW.

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**Concept Map (20 Points):**

**Subjective Data**  
Patient came into the ED complaining of shortness of breath. She stated she felt very winded, almost as if she couldn't catch her breath.

Patient also stated she believed she had gained 8 pounds in the last week.

Patient informed us that she usually dialyzes Mondays, Wednesdays, and Fridays.

**Objective Data**  
Vitals at 0838: HR 115/77, Respirations 18, Temp. 97.3 F, O2 94%  
Vitals at 0855: HR 111, BP 110/86, Respirations 26, Temp. 98.9 F, O2 100%  
Ill-appearing with mild distress at rest  
Braden score of 14, medium risk  
Single lumen implant port (infraclavicular fossa) on right side of chest  
Double lumen tunneled central line (internal jugular vein) on right side of chest  
Patient has no teeth, dentures in their place  
Edema present in lower extremities bilaterally  
Orthopnea present  
Elevated respirations  
Wheeze and crackles present bilaterally in anterior and posterior lungs  
Deep congested cough  
Use of accessory muscles  
Fall score of 80, high risk  
Decreased RBC, Hgb, Hct, platelets, WBC, lymphocytes, sodium and chloride levels, calcium levels, albumin, and phosphate  
Elevated monocytes, eosinophils, CO2, glucose, creatinine and BNP.

### Patient Information

African American  
Female  
57 years old  
Full code  
Allergies to tramadol and penicillin  
5'6  
188 lbs 11.2 oz  
Divorced  
Systolic Heart Failure  
Chronic Kidney Disease COPD  
Dialysis M/W/F weekly

**Nursing Diagnosis/Outcomes**  
Decreased cardiac output related to systolic heart failure as evidence by abnormal EKG, edema, and dyspnea

Patient will maintain adequate cardiac output

Patient will understand diet, medication regimen, and prescribed activity level

Patient's pulse and blood pressure remains within set limits

Excess fluid volume related to systolic heart failure and chronic kidney disease as evidence by edema, pleural effusion, electrolyte imbalance, weight gain, and adventitious breath sounds

Patient's BUN, creatinine, sodium, and potassium levels will stay within acceptable ranges

Patient will return to baseline weight

Patient will have unlabored respirations

Risk-prone health behaviors related to noncompliance as evidence by refusal to follow dietary and fluid restrictions and insistence to go home without regards to medical condition

Patient recognizes necessity of learning to live with impairment

Patient will demonstrate ability to perform simple self-care measures

### Nursing Interventions

1. Monitor and record heart rate, rhythm, and blood pressure and auscultate heart and lung sounds at least every 4 hours.
2. Maintain dietary restrictions as ordered.
3. Weigh patient daily before breakfast as ordered to provide consistent readings.
4. Administer diuretics per providers orders to promote fluid excretion
5. Begin teaching patient and caregivers the skills needed to adequately manage care
6. Encourage patient to express feelings in a safe, private environment



