

**N321 CARE PLAN #1**

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N321: Adult Health I

Kristal Henry

02/21/2025

### Demographics

<b>Date of Admission</b> 02/09/2025	<b>Client Initials</b> N.L.	<b>Age</b> 88 years old	<b>Biological Gender</b> Female
<b>Race/Ethnicity</b> White/Caucasian	<b>Occupation</b> Retired Registered Nurse	<b>Marital Status</b> Divorced	<b>Allergies</b> Cefepime, Codeine, Penicillin, Sulfa antibiotics, Bactrim, Lisinopril
<b>Code Status</b> Full Code	<b>Height</b> 4'9" (144.8 cm)	<b>Weight</b> 195 lbs (88.9 kg)	

### Medical History

**Past Medical History:** Acute or chronic systolic congestive heart failure, arthritis, atrial fibrillation with rapid ventricular response, breast disease, coronary artery disease, chronic kidney disease, cerebrovascular accident, dehydration, gastroenteritis, gastroesophageal reflux disease, hypertension, asthma, hypercholesterolemia, hyperlipidemia, obesity

**Past Surgical History:** Breast surgery x3, cardioversion, cholecystectomy, colonoscopy, esophagogastroduodenoscopy, foot surgery x3, bilateral total knee arthroplasty, laparoscopic inguinal hernia repair, pacemaker insertion

**Family History:** Maternal grandmother: coronary artery disease (with open heart surgery), Paternal grandfather: coronary artery disease. Patient reports no family medical history on the paternal side.

**Social History (tobacco/alcohol/drugs including frequency, quantity and duration of use):**

Patient reports no history of tobacco use, no history of alcohol use, no history of drug use.

**Education:** High school diploma, Associate's degree in nursing

**Living Situation:** Currently living in a single family home with her daughter and one pet cat.

**Assistive devices:** The patient uses a rolling walker at home, shoe horn, shower seat with 1x assist setup, toilet bars, bed rail.

**Admission History**

**Chief Complaint:** Dyspnea (Shortness of breath)

**History of Present Illness (HPI)– OLD CARTS**

Patient presented to the emergency department from a nursing home complaining of shortness of breath. Patient states she started feeling short of breath the night of February 8th which worsened throughout the night to February 9th. She felt slight tightness located in her chest which made it difficult to breathe or talk. The nursing home called emergency transportation to bring her to the emergency department due to her difficulty breathing. The duration of her symptoms lasted until February 11th when she started feeling better and could breathe easier during treatment. The patient stated, "I did not feel extreme discomfort and no other characteristics besides the inability to breathe well. The inability to cough or take deep breaths caused some anxiety." Some aggravating factors of her present illness include walking, talking, or any physical activity. The only relieving factors for her were not talking, and not doing any physical activity. While she was at the nursing home, they were treating her with a decongestant and cough medicine which she stated did not help her breathing. The patient rates the severity of her symptoms 9/10 on a word scale for discomfort.

**Admission Diagnosis**

**Primary Diagnosis:** Acute kidney injury (AKI)

**Secondary Diagnosis (if applicable):** Fluid Volume Overload

### **Pathophysiology**

An Acute Kidney Injury (AKI) denotes a sudden reduction in the way the kidneys function which can lead to electrolyte imbalances and fluid disturbances in the body (Goyal et al., 2023). Acute renal failure is typically diagnosed by laboratory diagnostic testing such as serum creatinine levels, glomerular filtration rate (GFR), and blood urea nitrogen (BUN) along with decreased urine output. According to the American Kidney Fund (2022), an acute kidney injury usually occurs when there is not enough blood flow to the kidneys (prerenal), when there is direct damage to the kidneys (intrarenal), or if there is a blockage in the urinary tract (postrenal). In patients with a past medical history of chronic kidney disease, existing kidney damage typically presents as an intrarenal kidney injury during the acute disease process.

### **DISEASE PROCESS**

An intrarenal acute kidney injury starts on a cellular level within the kidneys. Damage to the renal parenchyma which includes the glomeruli, tubules, interstitium, and blood vessels, can cause an autoimmune response in the patient which further damages the function of the kidneys (Turgut et al., 2023). In healthy kidney proximal tubular cells, which are the most common cell within the kidney, they regenerate when damage occurs intrinsically. These cells assist in drug metabolism, nutrient reabsorption, waste secretion, and the body's immune response through complement activation.

Complement activation triggers inflammatory events which can cause acute glomerulonephritis through a downstream pathway of systemic inflammation. According to Turgut et al. (2023), the immunologic response triggers an inflammatory process (e.g.,

complement activation, leukocyte migration and release of growth factors and cytokines) and the proliferation of glomerular tissue can result in damage to the basement membrane, capillary endothelium, or mesangial area. Primary renal disease is a major cause of intrinsic renal dysfunction. When kidney dysfunction starts on a cellular level, it can have systemic effects since the kidneys are one of the major organs responsible for important homeostatic functioning which causes a trickle-down effect.

### SIGNS & SYMPTOMS

Tubular damage, decreased filtration, and inadequate sodium reabsorption causes a major fluid imbalance within the body. Typically when fluid is retained in the vascular and intracellular spaces blood pressure increases, pitting edema may become prevalent, and breathing may become difficult. Patients may be unaware that acute kidney damage is the reason behind their symptoms, but extreme shortness of breath can be a direct result of kidney dysfunction and is a medical emergency since airway patency is necessary for survival. The inability to walk or speak more than two words in a sentence is cause for worry, which is reason for emergency transport. If an acute kidney injury is gone untreated, long-term damage or mortality may ensue.

### DIAGNOSIS

When a patient presents to the emergency department complaining of dyspnea, baseline labs and imaging is collected to help give a diagnosis. Renal functioning labs are obtained to diagnose an acute kidney injury and an urgent chest x-ray assists to visualize some reasoning behind the patient's dyspnea. An increase in serum creatinine greater than 0.3 mg/dL within 48 hours or greater than 1.5 times their baseline, coupled with a urine output of less than 0.5 mL/kg/hr over 6 hours shows an abrupt change in kidney functioning and leads to a diagnosis of an acute kidney injury (Turgut, et al., 2023).

## TREATMENT

The treatment plan is dependent upon the patient's past medical history, current kidney functioning, and symptoms upon admission. This client's chief complaint was dyspnea, so the treatment team put her on a fluid restriction and implemented daily breathing treatments and diuretics along with her typical pharmaceutical regimine. Given her acute kidney injury her home diuretics were held until her serum creatinine increased over the course of a few days while inpatient, and restarted once improved. The patient remained short of breath with a congested cough, so acapella valve therapy and chest physiotherapy was implemented in her treatment plan. Strict intake & outputs and daily weights were performed to monitor fluid balances, and routine lab work is completed daily to monitor kidney functioning.

### Pathophysiology References (2) (APA):

American Kidney Fund. (2022, April 12). *Acute kidney injury (AKI)*.

<https://www.kidneyfund.org/all-about-kidneys/other-kidney-problems/acute-kidney-injury-aki>

Goyal, A., Daneshpajouhnejad, P., Hashmi, M. F., & Bashir, K. (2023, November 25). *Acute kidney injury*. StatPearls Publishing. <https://www.ncbi.nlm.nih.gov/books/NBK441896/>

Turgut, F., Awad, A. S., & Abdel-Rahman, E. M. (2023). Acute Kidney Injury: Medical Causes and Pathogenesis. *Journal of clinical medicine*, 12(1), 375.

<https://doi.org/10.3390/jcm12010375>

### Laboratory/Diagnostic Data

Lab Name	Admission	Today's	Normal Range	Reasons for Abnormal
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	<b>Value</b>	<b>Value</b>		
Sodium	135 mmol/L	141 mmol/L	136-145 mmol/L	Patient's decreased sodium level may be caused by an angiotensin converting enzyme inhibitor, and is trending up towards a normal range after fluid balances became more normal through use of diuretics and acute kidney treatments (Pagana et al., 2023).
Chloride	103 mmol/L	109 mmol/L	98-107 mmol/L	The patient's increased trend in chloride levels may be related to her kidney dysfunction due to a parallel shift with sodium during fluid shifts (Pagana et al., 2023).
Carbon Dioxide, Venous	21 mmol/L	23 mmol/L	22-30 mmol/L	The lower level may be caused by her kidney dysfunction and diuretic

				use. The level is trending up towards a normal range (Pagana et al., 2023).
Blood Urea Nitrogen	70 mg	86 mg	10-20 mg	The patient's kidney disease causes the urea nitrogen in the blood to not be excreted via the kidneys, and is trending up away from normal due to the acute kidney injury (Pagana et al., 2023).
Creatinine, Blood	2.36 mg/dL	1.71 mg/dL	0.60-1.00 mg/dL	The patient's creatinine is high due to acute tubular necrosis from an acute kidney injury, but is trending down post treatment. The creatinine level is directly proportional to kidney function (Pagana et al., 2023).
Glomerular Filtration Rate,	19 mL/min/1.7	28 mL/min/1.7	$\geq 60$ mL/min/1.73	The patient's GFR is directly related to the

estimated	3 m <sup>2</sup>	3 m <sup>2</sup>	m <sup>2</sup>	amount of creatinine in the blood. Her levels are likely due to her pre-existing chronic kidney failure and her acute kidney injury but are trending up due to the treatment of her diagnosis (Pagana et al., 2023).
Blood Urea Nitrogen/Creatinine ratio	30	50	12-20 ratio	The ratio is very high due to her acute kidney injury, and is most likely out of range most of the time due to her low kidney function (Pagana et al., 2023).
Glucose	112	89	70-99 mg/dL	The patient's glucose is high due to her eating before arriving at the emergency department, but is trending down to normal range with the use of her diabetes medication (Pagana et al., 2023).

Calcium	8.4 mg/dL	7.1 mg/dL	8.7-10.5 mg/dL	The patient's calcium levels are trending downward due to her renal disease and fluid volume overload (Pagana et al., 2023).
Total Protein	5.1 g/dL	5.1 g/dL	6.0-8.0 g/dL	Total protein levels are decreased due to the osmotic pressure difference in the vascular space, directly related to fluid volume shifts (Pagana et al., 2023).
Albumin	2.8 g/dL	2.8 g/dL	3.5-5.0 g/dL	Albumin is related to fluid shifts, and with renal insufficiency her levels are not trending anyway, they stay decreased (Pagana et al., 2023).
B-type Natriuretic Peptide	226 pg/mL	653 pg/mL	<100 pg/mL	The patient's BNP levels are trending up and away from normal range due to her congestive heart

				failure and prolonged systemic hypertension (Pagana et al., 2023).
Red Blood Cell	3.54 10 <sup>6</sup> /mcL	3.39 10 <sup>6</sup> /mcL	3.80-5.30 10 <sup>6</sup> /mcL	The RBC count is lower and trending down most likely due to renal disease affecting the rate of erythrocyte production (Pagana et al., 2023).
Hemoglobin	10.6 g/dL	10.2 g/dL	12.0-15.8 g/dL	The patient's hemoglobin is slightly lower and trending down due to her chronic kidney disease affecting production of red blood cells and plasma fluid shifts (Pagana et al., 2023).
Hematocrit	32.5%	31.2%	36.0-47.0%	The hematocrit is lower and trending down most likely due to her chronic kidney disease and the decreased levels of RBC and plasma (Pagana et al.,

				2023).
Platelet Count	99 10 <sup>3</sup> /mcL	75 10 <sup>3</sup> /mcL	140-440 10 <sup>3</sup> /mcL	The platelet count is decreased and trending downward due to the use of anticoagulant and VTE medications for thrombus formation prophylaxis (Pagana et al., 2023).
Red Cell Distribution	16.5%	16.6%	11.8-15.5%	RCD is directly related to MCV and RBC values, so given the out of range results of those, the distribution is affected. The value is trending up slowly (Pagana et al., 2023).
Mean Platelet Volume	9.8 fL	7.9 fL	9.7-12.4 fL	The MPV is trending down due to the use of VTE medication and anticoagulant medication (Pagana et al., 2023).
Neutrophils	90.3%	83.6%	47.0-73.0%	The patient's neutrophils are elevated but trending

				down. The elevation is mostly due to the acute kidney injury and the body's response to muscle breakdown and lack of toxin excretion (Pagana et al., 2023).
Lymphocytes	2.5%	6.9%	18.0-42.0%	Lymphocytes are decreased most likely due to the use of corticosteroids and are trending up as the acute kidney injury returns to normal functioning (Pagana et al., 2023).
Absolute Neutrophils	9.40 10 <sup>3</sup> /mCL	8.30 10 <sup>3</sup> /mCL	1.60-7.70 10 <sup>3</sup> /mCL	The absolute neutrophils may be higher due to asthmatic influence on the respiratory system, but are trending down towards a normal range (Pagana et al., 2023).
Absolute	0.30	0.70	1.30-3.20	The absolute lymphocytes

Lymphocytes	10 <sup>3</sup> /mCL	10 <sup>3</sup> /mCL	10 <sup>3</sup> /mCL	are decreased at first due to corticosteroid use, but are trending towards the normal range (Pagana et al., 2023).
Fecal Occult Blood	Positive (+)	N/A	Negative (-)	The patient had a positive test most likely due to skin breakdown near the anus, but the team put in a GI consult in case she has internal GI bleeding (Pagana et al., 2023).
Methicillin Resistant Staphylococcus Aureus Polymerase Chain Reaction	Positive (+) (nares)	N/A	Negative(-)	The patient has a positive MRSA PCR most likely due to her 35+ year history of working in direct patient care with populations of people who are colonized with the bacteria (Pagana et al., 2023).

Diagnostic Test & Purpose	Clients Signs and Symptoms	Results
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<p>2/9/25 STAT Chest X-Ray two views to assess internal structures of lungs to rule out infiltration or infection, and to determine the size, shape, and location of the heart (Johns Hopkins Medicine (n.d.))</p>	<p>Dyspnea</p>	<p>There is prominent septal and lung interstitium thickening seen bilaterally. The heart size is enlarged, but there are no acute pulmonary abnormalities identified.</p>
<p>2/11/25 Computed Tomography of the Brain without contrast to assess detailed information of brain diseases, bleeding, or injuries (RadiologyInfo.org, n.d.)</p>	<p>Altered mental status</p>	<p>The results showed no evidence of acute hemorrhage and resulted as a negative (-) brain scan.</p>
<p>2/12/25 Chest X-Ray single view to compare with previous result</p>	<p>Chest congestion, Dyspnea</p>	<p>This x-ray showed prominent bilateral interstitial opacities, similar to the first result.</p>
<p>2/14/25 Chest X-Ray single view to compare with previous results</p>	<p>History of congestive heart failure</p>	<p>There is no significant change from the previous two chest x-rays.</p>
<p>2/17/25 Chest X-Ray single view to compare with previous results and determine discharge</p>	<p>History of congestive heart failure</p>	<p>There are no significant or worsening changes from previous chest x-ray</p>

plan		obtained on 2/14/25.
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**Diagnostic Test Reference (1) (APA):**

Johns Hopkins Medicine. (n.d.). *Chest X-ray*. Retrieved February 19, 2025, from

<https://www.hopkinsmedicine.org/health/treatment-tests-and-therapies/chest-xray>

Pagana, K.D., Pagana, T.J., Pagana, T.N. (2023). *Mosby's diagnostic & laboratory test reference*. (16th ed.). Elsevier.

RadiologyInfo.org. (n.d.). *Head CT (computed tomography)*. Retrieved February 19, 2025, from

<https://www.radiologyinfo.org/en/info/headct>

**Active Orders**

<b>Active Orders</b>	<b>Rationale</b>
Contact Isolation	Patient was put on contact isolation due to the positive result of MRSA in the nares.
Diet: Cardiac - 2 grams sodium restriction 1.5 L fluid restriction	Patient is put on the cardiac diet due to her history of congestive heart failure. The 1.5 L fluid restriction is due to her fluid volume overload secondary to an acute kidney injury.
Consult Nephrology	A nephrology consult was placed due to her serum creatinine levels going from 1.37-2.36 mg/dL.
Chest X-Ray two views	This x-ray is ordered due to her history of congestive heart failure and dyspnea.
Physical and Occupational Therapy Evaluation	A PT/OT evaluation is to assess her level of functioning given her extensive medical

	history and age.
Aerosol Nebulizer every 6 hours as needed	A nebulizer is ordered as needed to treat dyspnea and chest congestion from mucus.
Pulse Oximetry	This is ordered to assess oxygenation and tissue perfusion before, during, and after the use of an aerosol nebulizer.
Respiratory Therapy Assessment for albuterol and ipratropium treatment plan	This is ordered if the treatment regimen changes and to assess if their treatment plan is helping her symptoms.
Therapy Vest - Subsequent	This is ordered four times daily to percuss mucus and aid in expelling it to help with symptoms of chest congestion.
Admission Weight	A weight on admission is used for medication dosing and to give a baseline weight for future weights to be compared with.
Ambulate Patient	An order for ambulation aids in maintaining functioning to deter deconditioning while inpatient.
Cardiac Monitoring	A cardiac monitor is ordered due to the patient's history of atrial fibrillation with rapid ventricular response to give constant monitoring of this heart abnormality.
Daily Weights	These daily weights are used to assess fluid

	status in the patient with fluid volume overload secondary to an acute kidney injury.
Insert/Maintain Peripheral IV	A peripheral IV is inserted to administer intravenous medication as ordered and maintained for patency in the event of an emergency.
Intake & Output	Strict intake & output is ordered to assess fluid balances and maintain the 1.5 L fluid restriction vs urine output.
Miscellaneous Nursing Care Order	This is an order for nursing to use miconazole powder to the left gluteal region, perineum, and abdominal folds due to skin breakdown and wound care.
Notify Physician	This is ordered to notify the provider if there is a change in vital signs, or new or worsening pain so that the patient's safety and well-being is ensured.
Patient is not on Coumadin	This is ordered to notify the healthcare team that no INR is needed.
Reason for no VTE Prophylaxis	No venous thromboembolism prophylaxis is needed because the patient is already on antithrombotic medications.
Respiratory Therapy Assessment Score	This score is ordered so that pulmonary

	functioning is monitored and documented on a patient with dyspnea and chest congestion.
Saline Lock IV	A saline lock is implemented upon intravenous (IV) insertion so that IV patency is kept.
Up as Tolerated	This activity status is ordered to notify the care team that the patient has the ability to be up out of bed as she can tolerate.
Vital Signs per Unit Routine	These are ordered every 4 hours per unit policy to document trends and changes in vital signs that can show a change in status.
Wound/Ostomy Consult	This is ordered because the patient has wounds on her sacral and perineal region that need evaluated a wound treatment plan implemented.

### Medications

#### Home Medications (Must List ALL)

Medications	Reason for taking
Acetaminophen	The patient is taking this as needed for pain control.

Albuterol 108 (90 base)	This is an aerosol solution used as an antiasthmatic when she feels dyspnea at home.
Montelukast (Singulair)	This inhaler is used as needed at home for symptoms of dyspnea from asthma.
Apixaban	This is a blood thinner used for venous thromboembolism prophylaxis.
Empagliflozin	This is ordered to treat her diagnosis of Type II Diabetes.
Ertugliflozin L-PyroglyutamicAC	This is used in conjunction with her other diabetes medication to control blood glucose levels.
Losartan	The patient uses this to treat hypertension at home.
Prazosin	This is used in conjunction with her other antihypertensives to lower blood pressure.
Metoprolol Succinate	This is a beta-blocker used to treat hypertension.
Guafenisin	This medication is used to treat the patients cough and cold symptoms.
Fluticasone	This is a decongestant to aid in expelling mucus.
Furosemide	This diuretic is used to get rid of excess fluid

	volume that she holds onto from her chronic kidney disease.
Spironolactone	This is used in conjunction with her other diuretic to ensure proper fluid balances.
Allopurinol	This is used to treat symptoms of gout and lower the levels of uric acid in the blood.
Folic Acid	This is a hematopoietic agent used due to B-vitamins aiding in the formation of healthy cell reproduction.
Nitrofurantoin Monohydrate Macrocrystal	This is used as an antibiotic to treat bladder infections.
Famotidine	This is an ulcer drug used for the patient's symptoms of gastroesophageal reflux disorder.

### Hospital Medications (Must List ALL)

<b>Brand/</b>	albuterol/	allopurinol/	apixaban/	budesonide	empaglifl	famotidi
<b>Generic</b>	Proventil, Ven tolin 2.5 mg inhaled three times a day	Zyloprim 50 mg oral once daily	Eliquis 2.5 mg oral twice a day	/Pulmicort 500 mcg nebulizer twice a day	ozin/ Jardiance 10 mg oral once daily	ne/ Pepcid 20 mg oral once daily
<b>Classific</b>	Short-acting-	Xanthine	Factor Xa	Corticoster	Sodium-	Histamin

<b>ation</b>	beta-2 adrenergic agonist (SABA), Bronchodilato r, Respiratory Agent (Jones & Bartlett Learning, 2023).	oxidase inhibitor, Anti-gout agent, Uric Acid reducer (Jones & Bartlett Learning, 2023).	Inhibitor, Anticoagula nt, Blood thinner (Jones & Bartlett Learning, 2023).	oid, Glucocortic oid, Anti- inflammato ry agent (Jones & Bartlett Learning, 2023).	Glucose Cotranspo rter-2 (SGLT2) Inhibitor, Antidiabet ic agent, hypoglyce mic agent (Jones & Bartlett Learning, 2023).	e-2 Receptor Agonist, Antiulcer agent, Gastric Acid suppress ant (Jones & Bartlett Learning , 2023).
<b>Reason Client Taking</b>	This medication is used when the patient is feeling short of breath to dilate the bronchioles.	To treat pain associated with gout from uric acid elevation in the blood.	This is ordered for venous thromboem bolism prophylaxis.	This is ordered to treat the patients dyspnea from asthma and pulmonary inflammati on.	This medicatio n is ordered to lower blood glucose levels for her history of	The patient is taking this medicati on to reduce acid levels related to

					Type II diabetes.	GERD.
<b>Key nursing assessment(s) prior to administration</b>	The nurse should ask the patient their discomfort level of their dyspnea, pulse oximetry, drug-drug interactions. (Jones & Bartlett Learning, 2023).	The nurse should check kidney function labs, uric acid levels, and drug-drug interactions. (Jones & Bartlett Learning, 2023).	The nurse should assess for signs of bleeding, evaluate labs prior to administration, assess fall risk score and intervention s. (Jones & Bartlett Learning, 2023).	The nurse should assess the patient's respiratory status, monitor for side effects of the inhaled medication. (Jones & Bartlett Learning, 2023).	The nurse should assess the blood glucose levels, electrolyte imbalance s, and ensure there are no drug interactions with her other medications. (Jones & Bartlett Learning, 2023).	The nurse should assess gastrointestinal symptoms prior to administration, as well as monitor for CNS effects in elderly patients. (Jones & Bartlett Learning, 2023).

<b>Brand/ Generic</b>	fluticasone/ Flonase  2 sprays in both nostrils daily/dose for each nostril	folic acid/Folvite  1 mg oral once daily	furosemide/ Lasix  40 mg oral twice a day	guaifenesin /Mucinex  600 mg oral twice a day	losartan/ Cozaar  50 mg oral once a day	metoprol ol succinate /Toprol- XL 50 mg orally every 12 hours
<b>Classific ation</b>	Corticosteroid  Glucocorticoi d, Anti- inflammatory agent (Jones & Bartlett Learning, 2023).	Vitamin, Water soluble B vitamin, Antianemic agent (Jones & Bartlett Learning, 2023).	Loop diuretic, Diuretic hypertensiv e, Diuretic (Jones & Bartlett Learning, 2023).	Expectoran t, Mucolytic agent, Cough suppressant (Jones & Bartlett Learning, 2023).	Angiotens in II receptor blocker, Antihyper tensive agent (Jones & Bartlett Learning, 2023).	Beta blocker, Adrenerg ic blocker, Antihype rtensive (Jones & Bartlett Learning , 2023).
<b>Reason Client Taking</b>	Client is taking this to prevent	The client is taking this vitamin to	The client is taking this diuretic to	The client is taking this for her	The client takes this to control	The client is taking

	asthmas induced dyspnea and reactions to allergens intranasally.	support the overall functioning of metabolism within the body and support proper cell reproduction.	help control fluid volume overload which directly influences her blood pressure readings and weight.	symptoms of chest congestion in conjunction with her chest percussion therapy to expel excess mucous.	her hypertension.	this along with other hypertensives to control their high blood pressure.
<b>Key nursing assessment(s) prior to administration</b>	The nurse should assess the respiratory status of the patient, ensuring there is nasal patency to deliver the correct dose for the route.	The nurse should monitor the patient for signs of B-vitamin deficiency, as well as assess the results of a CBS to	The nurse should assess the daily weights, edema, and vital signs in case the patient has orthostatic hypotension	The nurse should assess the respiratory status of the patient, specifically auscultation of lung sounds, as well as	The nurse should assess the blood pressure and heart rate of the client, as well as renal function	The nurse should assess the blood pressure, heart rate, and orthostatic vital signs of

	(Jones & Bartlett Learning, 2023).	monitor for anemia. (Jones & Bartlett Learning, 2023).	. (Jones & Bartlett Learning, 2023).	their hydration status. (Jones & Bartlett Learning, 2023).	labs. (Jones & Bartlett Learning, 2023).	the patient. (Jones & Bartlett Learning, 2023).
<b>Brand/ Generic</b>	miconazole 2% powder/Zeasorb apply topically twice a day to abdominal folds/groin	montelukast /Singulair 10 mg oral once every evening	prednisone/ Deltasone 20 mg oral once a day with breakfast	simvastatin /Zocor 10 mg oral once a day at night	sodium chloride 3% 4 mL nebulizer twice daily	spironolactone/ Aldactone 12.5 mg oral once a day at night
<b>Classification</b>	Antifungal agent, Imidazole Derivative (Jones & Bartlett	Leukotriene Receptor Antagonist, Anti- inflammatory agent,	Corticosteroid, Glucocorticoid, Anti-inflammatory /immunosu	HMG-CoA reductase inhibitor (statin), Antilipemic (Jones &	Hypertonic Mucolytic solution, Expectorant,	Potassium- sparing Diuretic, Diuretic (Jones &

	Learning, 2023).	Antiasthmatic (Jones & Bartlett Learning, 2023).	oppressive (Jones & Bartlett Learning, 2023).	Bartlett Learning, 2023).	Airway Clearance Therapy (Jones & Bartlett Learning, 2023).	Bartlett Learning, 2023).
<b>Reason Client Taking</b>	The client uses this powder to reduce the occurrence of fungal infections in her skin folds, maintaining skin integrity.	The client takes this to open up her bronchioles that may be affected by asthma attacks or irritants.	The client is taking this to reduce the inflammation caused by an immune response from her acute kidney injury.	This patient is taking a statin to reduce effects of hyperlipidemia.	The patient is taking this to expel mucus to clear her airway .	The patient is taking this given her history of congestive heart failure to reduce fluid volume overload and maintain

						electrolyte balance.
<b>Key nursing assessment(s) prior to administration</b>	The nurse should use inspection between the skin folds and perineal region to assess for skin breakdown, moisture level, and signs of fungal infections. (Jones & Bartlett Learning, 2023).	The nurse should assess respiratory status, assess for allergic rhinitis manifestations, and monitor for the effectiveness of the medication. (Jones & Bartlett Learning, 2023).	The nurse should assess for infection due to the immunosuppressant mechanism, as well as blood glucose levels since steroids can increase them. (Jones & Bartlett Learning, 2023).	The nurse should use this medication cautiously in elderly patients and those with renal impairment (Jones & Bartlett Learning, 2023).	The nurse should monitor respiratory status, assess for cough and mucus clearance ability (Jones & Bartlett Learning, 2023).	The nurse should evaluate the patient's serum potassium level, assess the blood pressure, and monitor output. (Jones & Bartlett Learning, 2023).

### Prioritize Three Hospital Medications

Medications	Why this medication was chosen	List 2 side effects. These must correlate to your client
1. Furosemide	I chose this medication because it gets rid of excess fluid that her body holds on to from her congestive heart failure and kidney disease.	<ol style="list-style-type: none"> <li>1. The most important side effect is her serum creatinine levels may be decreased.</li> <li>2. This medication may interact with ace inhibitors, which can cause hypotension which is important for safety. (Jones &amp; Bartlett Learning, 2023).</li> </ol>
2. Apixaban	This medication is important because she is at high risk for thromboembolisms from her atrial fibrillation, and reduces the likelihood of stroke and systemic embolisms.	<ol style="list-style-type: none"> <li>1. Bleeding is a very high risk when on this medication. If the patient falls and hits her head, she is at high risk for a brain</li> </ol>

		<p>bleed, and safety is priority (Jones &amp; Bartlett Learning, 2023).</p> <p>2. The patient needs to report any unusual bruising, or signs of anemia as this medication can directly influence the amount of RBCs and Hemoglobin (Jones &amp; Bartlett Learning, 2023).</p>
3. Albuterol	I chose this inhaler because it dilates her bronchioles during asthma attacks, which maintains her airway and offers relief.	1. The patient may experience vascular effects by the use of albuterol and potassium-lowering drugs like diuretics which may cause hypokalemia (Jones & Bartlett Learning,

		<p>2023).</p> <p>2. The patient needs to be aware of her cardiac functioning as hypokalemia directly influences the rate and rhythm of the heart, especially given her history of atrial fibrillation with rapid ventricular response (Jones &amp; Bartlett Learning, 2023).</p>
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**Medications Reference (1) (APA)**

Jones & Bartlett Learning. (2023). *2024 Nurse's Drug Handbook* (23rd ed.). Jones & Bartlett.

**Physical Exam**

**HIGHLIGHT ALL PERTINENT ABNORMAL FINDINGS**

<p><b>GENERAL:</b></p> <p><b>Alertness:</b></p> <p><b>Orientation:</b></p> <p><b>Distress:</b></p> <p><b>Overall appearance:</b></p>	<p>Patient is alert &amp; oriented to person, time, place, and situation with no signs of distress. Patient's overall appearance is well-groomed, calm &amp; cooperative.</p>
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<p><b>Infection Control precautions:</b></p> <p><b>Client Complaints or Concerns:</b></p>	<p>Patient is on contact precautions due to positive MRSA PCR result in the nostrils. At this time, the patient has no complaints, and is primarily concerned with her discharge plan.</p>
<p><b>VITAL SIGNS:</b></p> <p><b>Temp:</b></p> <p><b>Resp rate:</b></p> <p><b>Pulse:</b></p> <p><b>B/P:</b></p> <p><b>Oxygen:</b></p> <p><b>Delivery Method:</b></p>	<p>Temp: 97.7 degrees Fahrenheit</p> <p>Resp rate: 17 respirations</p> <p>Pulse: 83 beats per minute</p> <p>B/P: 114/74</p> <p>Oxygen: 96%</p> <p>Delivery Method: Room Air</p>
<p><b>PAIN ASSESSMENT:</b></p> <p><b>Time:</b></p> <p><b>Scale:</b></p> <p><b>Location:</b></p> <p><b>Severity:</b></p> <p><b>Characteristics:</b></p> <p><b>Interventions:</b></p>	<p>Patient rates pain 0/10 on the Word Scale. Given the rating of 0, there is no time, scale, location, severity, characteristics, or interventions for pain.</p>
<p><b>IV ASSESSMENT:</b></p> <p><b>Size of IV:</b></p> <p><b>Location of IV:</b></p> <p><b>Date on IV:</b></p> <p><b>Patency of IV:</b></p>	<p>Size of IV: 20 gauge</p> <p>Location of IV: Left antecubital vein</p> <p>Date on IV: Placed on 2/14/2025</p> <p>Patency of IV: Flushes easily without complaint, and has blood return</p>

<p><b>Signs of erythema, drainage, etc.:</b></p> <p><b>IV dressing assessment:</b></p> <p><b>Fluid Type/Rate or Saline Lock:</b></p>	<p>Signs of erythema, drainage, etc.: No erythema, dressing soaked with blood due to use of anticoagulant medication</p> <p>IV dressing assessment: Tegaderm with paper tape</p> <p>Fluid Type/Rate or Saline Lock: Saline Lock in place to ensure patency</p>
<p><b>INTEGUMENTARY:</b></p> <p><b>Skin color:</b></p> <p><b>Character:</b></p> <p><b>Temperature:</b></p> <p><b>Turgor:</b></p> <p><b>Rashes:</b></p> <p><b>Bruises:</b></p> <p><b>Wounds:</b> .</p> <p><b>Braden Score:</b></p> <p><b>Drains present:</b> Y <input type="checkbox"/> N <input type="checkbox"/></p> <p><b>Type:</b></p>	<p>Skin color is a pale tan, warm to touch, and dry with no signs of moisture. Skin turgor is slow to return to its original state. Reddened rash in the skin folds of the abdomen and perineal regions are present, and treated with antifungal powder during perineal care. Multiple bruises are present on bilateral upper extremities. Stage 2 pressure wound on the coccyx, stage 2 pressure wound on the sacrum, and skin breakdown noted in the gluteal folds.</p> <p>Braden Score: 16</p> <p>Sensory Perception: 4</p> <p>Moisture: 2</p> <p>Activity: 3</p> <p>Mobility: 3</p> <p>Nutrition: 3</p>

	<p>Friction &amp; Shear: 1</p> <p>Patient is using an external female catheter connected to continuous suctioning.</p>
<p><b>HEENT:</b></p> <p><b>Head/Neck:</b></p> <p><b>Ears:</b></p> <p><b>Eyes:</b></p> <p><b>Nose:</b></p> <p><b>Teeth:</b></p>	<p>Head is normocephalic and symmetrical. Trachea is midline with no deviation, no lymph nodes palpable. Bilateral carotid pulses are palpable and 2+.</p> <p>Bilateral ears have no wounds, lesions, or deformities. Bilateral ear canals are clear.</p> <p>PERRLA bilaterally, pupil size is 3mm, EOMs are intact bilaterally. Bilateral sclera are white, bilateral cornea clear. No visible drainage from eyes.</p> <p>The nasal septum is midline, turbinates are moist and pink, with no visible bleeding.</p> <p>Zero adult teeth are in the mouth, full set of upper dentures &amp; full set of lower dentures are present and clean. Oral mucosa moist, pink, with no lesions visible. Soft palate rises and falls symmetrically.</p> <p>.</p>
<p><b>CARDIOVASCULAR:</b></p> <p><b>Heart sounds:</b></p>	<p>Clear S1 &amp; S2 cardiac sounds are present. No murmurs or gallops. <b>Cardiac rhythm is irregular</b></p>

<p>S1, S2, S3, S4, murmur etc.</p> <p><b>Cardiac rhythm (if applicable):</b></p> <p><b>Peripheral Pulses:</b></p> <p><b>Capillary refill:</b></p> <p><b>Neck Vein Distention:</b> Y <input type="checkbox"/> N <input type="checkbox"/></p> <p><b>Edema</b> Y <input type="checkbox"/> N <input type="checkbox"/></p> <p><b>Location of Edema:</b></p>	<p>due to atrial fibrillation. Radial pulses 1+ bilaterally, Brachial pulses 1+ bilaterally, Posterior tibial pulses 1+ bilaterally, Dorsalis pedis pulses not performed because client refused to take off her shoes. Capillary refill &lt;3 seconds bilaterally. No evidence of neck vein distension.</p> <p>Pitting edema noted in bilateral upper extremities 2+, pitting edema noted in bilateral lower extremities 3+.</p>
<p><b>RESPIRATORY:</b></p> <p><b>Accessory muscle use:</b> Y <input type="checkbox"/> N <input type="checkbox"/></p> <p><b>Breath Sounds: Location, character</b></p>	<p>There is no accessory muscle use for this patient.</p> <p>Normal rate of respirations at 17 breaths per minute. Respirations are symmetrical and not labored. Breath sounds clear anterior/posterior positions RUQ, RMQ, RLQ, LUQ, LLQ, with no evidence of crackles, rhonchi, or wheezes.</p> <p>Slightly diminished lung sounds noted in the LLQ.</p>
<p><b>GASTROINTESTINAL:</b></p> <p><b>Diet at home:</b></p> <p><b>Current Diet:</b></p> <p><b>Is Client Tolerating Diet?</b></p> <p><b>Height:</b></p> <p><b>Weight:</b></p>	<p>At home diet is a low sodium, low fat diet regimen with a 1500 mL fluid restriction. Current inpatient diet is a cardiac diet with a 2 gram sodium restriction/day, and a 1500 mL/day fluid restriction. The client is tolerating the diet well with no complaints.</p>

<p><b>Auscultation Bowel sounds:</b></p> <p><b>Last BM:</b></p> <p><b>Palpation: Pain, Mass etc.:</b></p> <p><b>Inspection:</b></p> <p><b>Distention:</b></p> <p><b>Incisions:</b></p> <p><b>Scars:</b></p> <p><b>Drains:</b></p> <p><b>Wounds:</b></p> <p><b>Ostomy:</b> Y <input type="checkbox"/> N <input type="checkbox"/></p> <p><b>Nasogastric:</b> Y <input type="checkbox"/> N <input type="checkbox"/></p> <p><b>Size:</b></p> <p><b>Feeding tubes/PEG tube</b> Y <input type="checkbox"/> N <input type="checkbox"/></p> <p><b>Type:</b></p>	<p>Height: 4'9" (144.8 cm), Weight: 195 lbs (88.9 kg)</p> <p>Bowel sounds are normoactive in all four quadrants.</p> <p>Last bowel movement 02/17/2025.</p> <p>Abdomen is soft, non-tender upon palpation. No organomegaly or masses noted upon palpation in all four quadrants. No tenderness in the costovertebral angle. No abdominal distention.</p> <p>No incisions noted. One scar located in the RUQ from previous gallbladder surgery, one scar located near the umbilicus from hernia repair surgery. No drains present, no wounds present.</p> <p>No ostomy, no nasogastric tube, and no feeding or PEG tube.</p>
<p><b>GENITOURINARY:</b></p> <p><b>Color:</b></p> <p><b>Character:</b></p> <p><b>Quantity of urine:</b></p> <p><b>Pain with urination:</b> Y <input type="checkbox"/> N <input type="checkbox"/></p> <p><b>Dialysis:</b> Y <input type="checkbox"/> N <input type="checkbox"/></p> <p><b>Inspection of genitals:</b></p>	<p>Urine color is yellow, clear, and measured at 800 mL output in the suction canister via female external catheter. There is no pain with urination, no dialysis.</p> <p>Genitals are pink, moist, with redness noted in the thigh folds from excess moisture in incontinence brief. Antifungal powder applied to</p>



	Patient is up with 1 assist, and can tolerate mild/moderate activity. Patient
<p><b>NEUROLOGICAL:</b></p> <p><b>MAEW:</b> Y <input type="checkbox"/> N <input type="checkbox"/></p> <p><b>PERLA:</b> Y <input type="checkbox"/> N <input type="checkbox"/></p> <p><b>Strength Equal:</b> Y <input type="checkbox"/> N <input type="checkbox"/> if no -</p> <p><b>Legs</b> <input type="checkbox"/> <b>Arms</b> <input type="checkbox"/> <b>Both</b> <input type="checkbox"/></p> <p><b>Orientation:</b></p> <p><b>Mental Status:</b></p> <p><b>Speech:</b></p> <p><b>Sensory:</b></p> <p><b>LOC:</b></p>	<p>Patient can move all extremities well. PERRLA is intact. Strength is equal with both upper and lower extremities bilaterally. Patient is oriented to person, time, place, and situation. Mental status is alert, cooperative, calm, with clear speech. Gait is balanced and smooth upon transfer from bed to chair. Sensory function is normal. Level of consciousness is awake, alert, and responsive.</p>
<p><b>PSYCHOSOCIAL/CULTURAL:</b></p> <p><b>Coping method(s):</b></p> <p><b>Developmental level:</b></p> <p><b>Religion &amp; what it means to pt.:</b></p> <p><b>Personal/Family Data (Think about home environment, family structure, and available family support):</b></p>	<p>Patient states reading and music are her main coping mechanisms.</p> <p>Developmental level is formal operational (has abstract reasoning, hypothetical thinking, and the ability to work through and solve complex problems) according to Piaget's Theory.</p> <p>Patient identifies in the Methodist faith, and is currently practicing. She places an emphasis on how important her faith is to her.</p> <p>Patient is comfortable in the home environment.</p> <p>She lives with her daughter in a single-family</p>

	<p>home and is very close with her daughter. She does not confide too much in her daughter, and chooses to keep most of her thoughts to herself.</p>
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### **Discharge Planning**

**Discharge location:** Skilled Nursing Facility/Nursing Home for physical rehabilitation followed by discharge home.

**Home health needs:** The patient requires set up assistance at home, and pharmacy pick up for her at home medications, but her daughter aids in all of her home health needs.

**Equipment needs:** Patient already has supportive devices and equipment at home from previous hospital admissions.

**Follow up plan:** Patient is to see her primary healthcare team post discharge from the nursing home for follow-up bloodwork, functional status, and medication management.

**Education needs:** Patient needs education on when to hold her at home prazosin, by checking her blood pressures.

### **Nursing Process**

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

<b>Nursing Diagnosis</b> <ul style="list-style-type: none"> <li>● Include full nursing diagnosis with “related to” and “as evidenced by” components</li> <li>● Listed in order by priority – highest priority to lowest priority pertinent to this client</li> </ul>	<b>Rationale</b> <ul style="list-style-type: none"> <li>● Explain why the nursing diagnosis was chosen</li> </ul>	<b>Outcome Goal (1 per dx)</b>	<b>Interventions (2 per goal)</b>	<b>Evaluation of interventions</b>
1. Excess fluid volume related to impaired renal functioning as evidenced by pitting edema 3+ in the bilateral lower extremities.	This diagnosis was chosen due to the fluid retention noted during my assessment and its effect on her respiratory status.	The patient will tolerate restricted fluid intake with no physical or emotional	1. Carefully monitor intake & output every 4 hours to indicate fluid retention or overload (Phelps, 2023).  2. Administer diuretics as	The patient’s fluid intake and output remain within the established limits.  The patient’s vital signs remain within established limits (Phelps,

		discomfort (Phelps, 2023).	ordered to promote fluid excretion, and record effects (Phelps, 2023).	2023).
2. Impaired physical mobility related to activity intolerance as evidenced by decreased respiratory functioning.	This diagnoses was chosen due to her chief complaint of dyspnea, and how it affected her physical functioning.	The patient will achieve the highest level of mobility (Phelps, 2023).	1. Perform ROM exercises at least once every shift (Phelps, 2023). 2. Encourage independence in mobility by helping the patient use her rolling walker to get out of bed and transfer to the chair or bathroom (Phelps,	Observation of patient's mobility status, presence of complications, and response to mobility recommendations will be documented (Phelps, 2023).

			2023)..	
3. Fatigue burden as related to physical deconditioning and non stimulating lifestyle, and as evidenced by stand-by-assistance status for transfers and set-up for activities of daily living (Phelps, 2023).	This diagnosis was chosen due to the patient complaining of exhaustion and difficulty with transfers and completing activities of daily living.	The patient will incorporate as part of daily activities those measures necessary to modify fatigue (Phelps, 2023).	1. Prevent unnecessary fatigue by avoiding scheduling energy-draining procedures on the same day (Phelps, 2023). 2. Structure the patient's environment based on their needs and desires (Phelps, 2023).	The patient reports a reduced level of fatigue, and appropriately understands modifications that are made to help with level of fatigue (Phelps, 2023),

**Other References (APA):**

Phelps, L.L., (2023). *Nursing diagnosis reference manual*. (12th ed.). Wolters Kluwer.





