Hadley Jones

Lakeview College of Nursing

N431: Adult Health II

Care Plan #1

Professor Jami Dowell, MSN, APRN, FNP-C

21 February 2026

Demographics

Date of Admission 02/11/2026	**Client Initials** A.H.	**Age** 61 years old	**Biological Gender** Male
Race/Ethnicity White/Caucasian	**Occupation** U.S. Federal Government	**Marital Status** Divorced	**Allergies** Cephalexin: client states they get a rash all over their body Tetanus and Diphtheria Toxoids (Td): client states swelling of their extremities and face occur.
Code Status Full code	**Height** 5ft 6in	**Weight** 160lbs	

Medical History

Past Medical History: The client has a history of congestive heart failure (CHF), chronic obstructive pulmonary disease (COPD), depression, diabetes mellitus, eczema, peripheral artery disease (PAD), and hypertension**.**

Past Surgical History: The client has had an anterior cruciate ligament repair, arthrotomy, and a knee arthroscopy

Family History: Not on file, patient stated he was not sure of his family history.

Social History (tobacco/alcohol/drugs including frequency, quantity and duration of use): The client stated that they smoke cigarettes with a frequency of 3 cigarettes a day, every day, and they have been for about a year. The client stated that they have never used smokeless tobacco, and has no current alcohol use, but used to drink 252 ounces per week in the past. The client has a current drug use of marijuana and stated, “I don’t know how much, honey, no one measures that” when asked the quantity. He has been smoking marijuana for as long as he can remember.

Education: The client stated that he has graduated from high school but has no further education.

Living Situation: The client lives in a house with a roommate in Danville, Illinois.

Assistive devices: N/A

Admission History

Chief Complaint: Nausea and vomiting

History of Present Illness (HPI)– OLD CARTS

The client began an onset of nausea and vomiting on February 10, the night before they came into the hospital. The location of their complaint was in their stomach and traveled up to their chest. The client first went to the VA to seek treatment but was later sent to the ED in the hospital due to not seeing any improvement, along with elevated lab values. The client characterized their pain as uncomfortable and caused them shortness of breath. Aggravating factors included lying down, and there were no relieving factors. The client did not get any treatment before coming to the hospital, as the VA sent him straight there. The client rated the severity a 7 on a scale from 0-10 but said that the pain was a 0 and got better as the day went on.

Admission Diagnosis

Primary Diagnosis: Acute kidney injury (AKI)

Secondary Diagnosis (if applicable): N/A

Pathophysiology

In acute kidney injury, azotemia, elevated serum creatinine, and fluid retention result from decreased glomerular filtration of the blood (Capriotti, 2024). Initially, oliguria, diuresis, and recovery are the four stages of AKI (Capriotti, 2024). The initial phase, which often lasts

hours or days, is defined as the period of time from the precipitating and soul to the AKI's first manifestations (Capriotti, 2024). During the oliguric phase, urea, potassium, sulfate, and creatinine are retained, and GFR significantly declines (Capriotti, 2024). During this period, there are typically signs of fluid overload and reduced urine output (Capriotti, 2024). White blood cells overflow the nephrons, and inflammation happens during the diuretic phase (Capriotti, 2024). The kidneys start to bounce back following the first setback. In areas of injured nephrons, fibrotic tissue may develop as healing progresses (Capriotti, 2024). Urine production is high, yet it cannot be diluted or concentrated enough (Capriotti, 2024). It is possible for urine to be isothyanuric, which means that its osmolarity matches that of the blood (Capriotti, 2024). This suggests that some waste products from the circulation are not being eliminated by the kidneys (Capriotti, 2024).

The recovery phase, which often begins with increased urine production, is the period required for complete healing of renal injury (Capriotti, 2024). Nephrons in good condition make up for those in poor health during this stage. Healthy nephrons can normally remove solutes from the circulation and exhibit alterations in hyperfiltration and hypertrophy (Capriotti, 2024). Urine is suitably concentrated, inflammation is reduced, and renal function returns to normal throughout the recuperation period (Capriotti, 2024). Scar tissue and areas of kidney injury are visible at this stage, which can remain for a month (Capriotti, 2024).

Reduced glomerular filtration rate (GFR) is a marker of acute kidney injury (AKI), a severe deterioration in kidney function that occurs over hours to days. The kidneys are unable to efficiently filter waste products from the blood, such as creatinine and blood urea nitrogen (BUN), when the GFR decreases (Mayo Clinic, 2024). Uremia, an accumulation of toxins in the body, results from this. AKI can rapidly lead to fluid overload, electrolyte abnormalities

(particularly hyperkalemia), and metabolic acidosis, as the kidneys also regulate fluid, electrolyte, and acid-base balance (Mayo Clinic, 2024). Based on the cause, AKI is divided into three primary categories. When there is less blood flow to the kidneys, as happens with dehydration, bleeding, or heart failure, prerenal AKI develops (Mayo Clinic, 2024). Decreased perfusion reduces GFR and, if it persists, can cause renal tissue ischemia (Mayo Clinic, 2024). Acute tubular necrosis (ATN) is the most common cause of intrinsic (intrarenal) AKI, resulting from direct injury to kidney components (Mayo Clinic, 2024).

Prolonged ischemia, nephrotoxic drugs, contrast dye, or sepsis can all result in this damage (Mayo Clinic, 2024). Kidney function deteriorates, and filtration is further reduced when damaged tubular cells shed off and block the tubules (Mayo Clinic, 2024). Urine flow blockage, such as that caused by kidney stones, an enlarged prostate, or tumors, is the cause of postrenal AKI (Mayo Clinic, 2024). If the blockage is not removed, it can eventually harm the nephrons, lower GFR, and raise intrarenal pressure (Mayo Clinic, 2024).

The client's AKI was confirmed by his lab results, including elevated creatinine and BUN levels, indicating that the kidneys were not properly filtering waste products from the blood. He also had a decreased GFR, showing reduced kidney function. In addition, electrolyte abnormalities such as elevated phosphorus and possible metabolic acidosis further supported the diagnosis of acute kidney injury (Mayo Clinic, 2024). The client showed no specific signs and symptoms of AKI, but his laboratory results gave the information needed to diagnose. The treatment for this client is hemodialysis, as he is getting a tunneled catheter placed and will receive dialysis three times a week. The client could get a renal biopsy to evaluate the internal origin of the AKI, as he has not gotten one yet (Capriotti, 2024).

Pathophysiology References (2) (APA):

Capriotti, T. (2024). Pathophysiology, Introductory Concepts and Clinical Perspectives. (3rd Edition). Davis Advantage.

Mayo Foundation for Medical Education and Research. (2024, July 10). *Acute kidney injury*. Mayo Clinic. https://www.mayoclinic.org/diseases-conditions/kidney-failure/symptoms-causes/syc-20369048

Laboratory/Diagnostic Data

Lab Name	Admission Value	Today's Value	Normal Range	Reasons for Abnormal
Sodium	134 mmol/L	137 mmol/L	136-145 mmol/L	The client's admission sodium value is low and could be related to his AKI and CHF. The kidneys are unable to excrete extra water, which can lead to dilution of sodium (Pagana et al., 2021).
CO2, Venous	13 mmol/L	19 mmol/L	22-30 mmol/L	The client's admission and current CO2, Venous value is low and could be

				related to his AKI and COPD trying to compensate. In AKI, the kidneys cannot excrete hydrogen or reproduce bicarbonate, causing a low bicarbonate and diagnosis of COPD making the body harder to compensate (Pagana et al., 2021).
Anion Gap	19 mmol/L	15.0 mmol/L	< 18.0 mmol/L	The client's admission Anion Gap value is high and could be due to his renal failure (Pagana et al., 2021).
BUN	118 mg/dL	99 mg/dL	8-26 mg/dL	The client's admission and current value of BUN are very elevated. This could be due to his kidneys not excreting urea because of his AKI (Pagana et al., 2021).

Creatinine, blood	5.99 mg/dL	6.08 mg/dL	0.70-1.30 mg/dL	The client's admission and current value of Creatinine, blood are extremely elevated and could be due to his kidneys not being able to clear it from his blood, (Pagana et al., 2021).
GFR, Estimated	10	10	>=60	The client's glomerular filtration rate (GFR) is severely low due to his AKI decreasing filtration capacity (Pagana et al., 2021).
Glucose	137 mg/dL	103 mg/dL	70-99 mg/dL	The client's Glucose is elevated due to his diagnosis of diabetes mellitus (Pagana et al., 2021). The client's glucose decreased once treatment was given.
Calcium	6.8 mg/dL	8.1 mg/dL	8.7-10.5 mg/dL	The client's calcium level is very low and can be due

				to his kidneys not being able to activate vitamin D (Pagana et al., 2021).
Procalcitonin	2.91 ng/mL	N/A	<=0.25 ng/dL	The client's Procalcitonin level was increased on admission and could have been due to his multiorgan failure (Pagana et al., 2021). The client's kidneys and left lung are very weak.
Troponin I, High Sensitivity - Abbott	64.9	N/A	<=35.0	The client's Troponin level was elevated on admission and was not rechecked for an unknown reason. This elevation could have been due to multiple factors such as his congestive heart failure, hypertension, and the reduced renal clearance from the kidneys (Pagana et al.,

				2021).
NT PROBNP	25,857.4 pg/mL	N/A	<450.0 pg/mL	The client's NT PROBNP level was extremely elevated on admission and was not rechecked for an unknown reason. This could have been due to his kidneys retaining fluid and causing the heart to stretch and strain (Pagana et al., 2021).
INR	1.2	N/A	0.8-1.1	The client's INR was slight elevated on admission and was not rechecked due to an unknown reason. This could be due to the client's AKI causing inflammation and promoting blood clotting (Pagana et al., 2021).
Protime- patient	13.8 secs	N/A	10.1-13.1 secs	The client's Protime was elevated on admission and

				was not rechecked due to an unknown reason. This could be due to the client's AKI causing quicker clotting and elevated INR (Pagana et al., 2021).
RBC	3.21 10(6)mcL	2.97 10(6)mcL	4.40-5.80 10(6)mcL	The client's RBC value was low on both admission and current dates. This could be due to his renal disease (Pagana et al., 2021).
Hemoglobin	7.7 g/dL	7.2 g/dL	13.0-16.5 g/dL	The client's Hemoglobin value was low on admission and current dates. This could be due to the client's kidney disease (Pagana et al., 2021).
Hematocrit	23.4%	21.8%	38.0-50%	The client's Hematocrit value was low on admission and current

				dates. This could be due to his renal disease (Pagana et al., 2021).
MCV	72.9 fL	73.4 fL	82.0-96.0 fL	The client's MCV levels were low on admission and current dates. This could be due to his chronic diseases such as congestive heart failure, diabetes mellitus, and hypertension causing possible anemia (Pagana et al., 2021).
MCH	24.0 pg	24.2 pg	26.0-32.0 pg	The client's MCH levels were low on admission and current dates. This could be due to his chronic diseases such as congestive heart failure, diabetes mellitus, and hypertension causing possible anemia (Pagana et al., 2021).

Platelet Count	137 10(3)mcL	174 10(3)mcL	140-440 10(3)mcL	The client's Platelet Count value was low on admission but then was normal when rechecked on the current date. It could have been low on admission due to inflammation or his acute stress he encountered. The levels were normal and could have leveled out after the client was calm and relaxed (Pagana et al., 2021).
RDW	17.6%	17.2%	11.8-15.5 %	The client's RDW count was elevated on admission and the current date. This could be due to his congestive heart failure and/or renal dysfunction (Pagana et al., 2021).
Neutrophils	85.1%	74.9%	40.0-68.0%	The client's Neutrophil count was elevated on

				both admission and the current date. This could be due to the possible inflammation and damage to the kidneys (Pagana et al., 2021).
Lymphocytes	5.0%	9.9%	19.0-49.0%	The client's Lymphocyte count was low on both admission and the current date. This could be due to the possible inflammation and damage tissues of the kidneys (Pagana et al., 2021).
Immature Granulocytes	0.5%	1.0%	0.0-0.4%	The client's Immature Granulocytes count was elevated on both admission and the current date. This could be due to the possible inflammation, as these serve as a marker (Pagana et al., 2021).
Absolute neutrophils	7.06	4.71	1.40-5.30	The client's Absolute

	10(3)mcL	10(3)mcL	10(3)mcL	Neutrophil count was elevated on admission and was within therapeutic range on the current date. The elevation on admission could be due to the possible inflammation and damage to the kidneys, whereas his immune system later activated and allowed for normal levels to stabilize (Pagana et al., 2021).
Absolute Lymphocytes	0.41 10(3)mcL	0.62 10(3)mcL	0.90-3.30 10(3)mcL	The client's Absolute Lymphocyte count was low on both admission and the current date. This could be due to the possible inflammation and damage tissues of the kidneys (Pagana et al., 2021).
Absolute Immature	0.04	0.06	0.00-0.03	The client's Absolute

Granulocyte	10(3)mcL	10(3)mcL	10(3)mcL	Immature Granulocytes count was elevated on both admission and the current date. This could be due to the possible inflammation, as these serve as a marker (Pagana et al., 2021).
Phosphorus	N/A	6.2 mg/dL	2.5-4.5 mg/dL	The client's Phosphorus level was not taken on admission for an unknown reason but was elevated on the current date. This could be due to his AKI, causing filtration to be impaired and phosphorus retained (Pagana et al., 2021).
Uric Acid	N/A	8.2 mg/dL	3.5-5.0 mg/dL	The client's Uric acid level was not taken on admission for an unknown reason but was elevated on the current date. This

				can be caused by his AKI reducing his filtration and not allowing the uric acid to be excreted, therefore it collects in the bloodstream (Pagana et al., 2021).
Albumin	3.5 g/dL	3.1 g/dL	3.7-7.7 g/dL	The client's Albumin level was normal on admission, but low on the current date. This could be due to his kidney disease and inflammation (Pagana et al., 2021).

Laboratory Reference (1) (APA):

Pagana, K. D., Pagana, T. J., & Pagana, T. N. (2025). *Mosby's Diagnostic & Laboratory Test Reference*. Elsevier.

Previous diagnostic prior to admission (ER, clinic etc.) if	Previous diagnostic results and correlation to client admission	Current Diagnostic Test & Purpose	Clients Signs and Symptoms	Results and correlate to client diagnosis and condition

pertinent to admission diagnosis				
N/A	N/A	XR Chest Single View Portable: This comprehensive assessment of the cardiac and pulmonary systems is significant. Among other things, it can detect calcification, heart enlargement, thoracic bone or vertebral fractures, and fluid buildup in the pleura. It can check for pulmonary congestion or edema in this client, rule out other reasons for dyspnea, and track the effectiveness of therapy (Pagana et al., 2021).	Client was experiencing shortness of breath and has a history of congestive heart failure and COPD.	Due to the client's congestive heart failure, fluid is backing up in the lungs and increasing pressure into the pleural space causing the findings of a moderate left pleural effusion, lingular airspace disease, and left lung volume loss (Pagana et al., 2021). With his history of COPD, the lungs are becoming hyperinflated, causing the finding of his hyperinflated right lung (Pagana et al., 2021).
N/A	N/A	CT Chest Without Contrast: It is frequently used to assess lung	Client was experiencing shortness of	Findings: - Thyroid: Small nodule which

		diseases such trauma, interstitial lung disease, pneumonia, pleural effusions, lung nodules, tumors, and atelectasis (Pagana et al., 2021). Additionally, it can be used to evaluate air trapping, hyperinflation, enlarged lymph nodes, and lung volume decrease (Pagana et al., 2021). When the lung tissue itself is the primary focus, or when the patient has renal issues, a contrast allergy, or no requirement for vascular imaging, contrast is not used (Pagana et al., 2021).To assist identify the origin of respiratory symptoms like coughing, shortness of breath, or	breath and had findings of pleural effusions, lingular airspace disease, left lung volume loss, hyperinflated right lung, and has a history of COPD.	could be related to an acute condition, unknown correlation to the client's current status. - Heart and great vessels: Four chamber cardiomegaly, main pulmonary artery is dilated up to 4cm which can be related to this client's congestive heart failure and hypertension (Pagana et al., 2021). - Lymph nodes: Several

		abnormal x-ray results, it is often done to obtain better imaging of the lungs and nearby tissues (Pagana et al., 2021).		borderline enlarged mediastinal lymph nodes, right upper lymph node 1.3cm, right lower 1.6cm related to the client's inflammation (Pagana et al., 2021). - Pleura: Moderate left lung pleural effusion which can be reacted to the client's congestive heart failure, AKI, high BNP, or low albumin levels (Pagana et al.,

				2021). Also, circumferential pleural thickening which can be related to the client's enlarged lymph nodes (Pagana et al., 2021). - Lung parenchyma: Round consolidations in left upper and left lower lobe with overall left lung volume loss related to the compression from the left pleural effusion that the client has encountered

				(Pagana et al., 2021).

Diagnostic Test Reference (1) (APA):

Pagana, K. D., Pagana, T. J., & Pagana, T. N. (2025). *Mosby's Diagnostic & Laboratory Test Reference*. Elsevier.

Active Orders

Active Orders	Rationale
epoetin-alfa EPBX (retacrit) injection 2,000 and 4,000 units	The client has this order for this injection to help reproduce new RBC to help treat his AKI.
folic acid (Folvite) tab 1mg	The client has an order for this tablet to help support the production of RBC, as folic acid is an important nutrient needed to help with the synthesis.
insulin lispro (Humalog) 100 unit/mL injection 2-12 units	The client has this order for this injection because he has diabetes mellitus. This is based off a sliding scale, and the client will get the correct number of units from that.
iron sucrose (Venofer) injection 100mg	The client has an order for this injection to make sure there is adequate iron in the bone marrow to support the growth of new RBC.

glucose (Glutose) 40% gel GEL 15g	The client is diabetic and is given this for low blood sugar levels.
melatonin tablet 6mg	The client is ordered this incase he has trouble sleeping at night.
nicotine (Nicoderm CQ) 21mg/24HR patch 1 patch	The client is ordered this for nicotine dependency while he is staying in the hospital.
ondansetron (Zofran-ODT) disintegrating tablet 4mg **Injection 4mg**	The client is given this tablet or an injection for whenever he feels nauseous.
Sodium chloride 0.9% 250mL IV bolus	The client is given this IV bolus for dialysis preparation and as fluid for a saline lock. The IV must stay maintained to prevent infection or complications.
CPR- Full Treatment	This is the client's code status in case of an emergency.
Diet NPO Effective Midnight, Strict I/O	The client is receiving a dialysis catheter placement and should remain NPO until after the treatment takes place. The client was later ordered for strict I/O after dialysis treatment takes place to monitor for abnormalities and reactions.
IP consult to general surgery and	The client needs the placement of a tunneled

nephrology	dialysis catheter. Nephrology was consulted to further check the client's AKI, acute renal failure, dialysis, and chronic kidney disease.
Hemodialysis Inpatient	The client is starting dialysis within the next day due to his renal failure.
Adult Diet: diet type: general	The client was on a general diet before it later got changed.
Fluoro Guided central venous access device placement	The client is receiving a dialysis catheter placement, and this order confirms it for the team to see.
XR Chest Single View Portable	This was ordered for the client to confirm the placement of the catheter (Pagana et al., 2021). It was confirmed to be placed on the left side.

Insert/maintain peripheral IV, second line large bore, Saline lock IV	The patient received a peripheral saline lock IV to receive fluids and medication if needed. The IV must stay maintained to prevent infection or complications.
BMP AM x1, CBC with Diff AM x1, Mag AM	These are routine orders for this client to receive due to his AKI. Due to his kidneys not filtering and functioning properly, a BMP and CBC with Diff need to be done to show inflammation and electrolyte and fluid

	balance (Pagana et al., 2021). Magnesium is regulated by the kidneys as well (Pagana et al., 2021).
Activity order as tolerated	This client is independent, and his motility goal is as he can tolerate. This ensures that the patient is getting the correct amount of exercise to prevent compilations.
Admission weight for 1 occurrence, Pre and post dialysis weight	The client's baseline weight confirms their diet and fluid categories. Pre and post dialysis weight is done to precisely calculate how much extra fluid should be eliminated to guarantee that the patient reaches their "dry weight," the safe target weight without fluid overload (Pagana et al., 2021).
For a blood sugar of 70mg/dL or less, Posthypoglycemia treatment and blood sugar greater than or equal to 80mg/dL	Administer 15g of carbohydrates with a half cup of orange juice and provide IV dextrose if the client is unable to eat. Posthypoglycemic treatment consists of getting the client a snack with protein and carbohydrates such as a crackers.
Maintain IV while on telemetry; lock with saline when not in use	This order is for the client in case an emergency line is needed for access to reduce the risk of fluid overload or other

	complications.
Notify Physician	If signs of hypoglycemia, symptomatic bradycardia, ventricular arrhythmias, a pulse of <50bpm or >129bpm, temperature <101.5 degrees Fahrenheit, respiratory rate <10 or >30, systolic pressure of <85mm/Hg or >180mm/Hg, diastolic pressure of <50mm/Hg or >105mm/Hg, SpO2 <90, and any new or worsening pain.
Notify Physician -Nephrology	If the client has multiple access for dialysis, notify the physician and see which one should be utilized before treatment.
Perform POC Blood Glucose	4x before meals and at bedtime; the client is diabetic, and it is crucial to check their blood sugar before meals and before they go to sleep for the night in case any abnormal values need to be fixed.
PPD reading 48-72 hours after administration one occurence	This is to ensure that the client does not test for Tuberculosis by a skin test that takes 2-3 days (Pagana et al., 2021).
Verify Informed Consent	The client is scheduled for the insertion of a tunneled dialysis catheter and needs to

	consent to this procedure before the team moves forward with it.
New dialysis patient only, Hemodialysis new patient	The client is a new patient to dialysis and hemodialysis. These orders confirm to the team to help them plan care accordingly.
Vital signs during dialysis, and per routine unit **Pulse Oximetry, SPOT**	This order is to ensure safety for the client and to make sure that he does not react to the treatment. The client is also ordered pulse oximetry to monitor oxygen, due to the shortness of breath he endured when coming in.
Nursing Communication	Discontinue all dialysis orders at the end of dialysis treatment. This ensures that the client is not following orders that are not needed anymore.

Hospital Medications (Must List ALL)

Brand/ Generic	Coreg/ carvedilol	Plavix/ clopidogrel	Apresoline/ hydralazine	Protonix/ pantoprazole	Crestor/ rosuvastatin	Humalog/ insulin lispro
Dose, frequency, route	25mg, BID, oral	75mg, once daily, oral	50mg, TID, oral	40mg, QAM AC, oral	10mg, once nightly, oral	2-12 units, TID WC, subcutaneous injectio
Classification (Pharmacological and therape	Pharmacological: Nonselective beta-blocker and alpha-1 blocker Therapeutic:	Pharmacological: P2Y12 platelet inhibitor Therapeutic:	Pharmacological: Vasodilator Therapeutics: Antihypertensive Action:	Pharmacological: Proton pump inhibitor Therapeutic: Antiulcer	Pharmacological: HMG-CoA reductase inhibitor	Pharmacological: rapid acting insulins Therapeutic: Antidiabetic Action:

utic and action of the drug	Antihypertensive, heart failure treatment adjunct Action: lowers peripheral vascular resistance, lowers cardiac output, and induces vasodilation, all of which lower blood pressure and cardiac strain.	Platelet aggregation inhibitor Action: This drug attaches itself to active platelets' adenosine diphosphate (ADP) receptors. By blocking ADP, this mechanism stops fibrogen from binding to receptors and deactivates surrounding glycoprotein IIb/IIIa receptors. Platelets cannot clump together and form thrombi in the absence of fibrogen.	By immediately relaxing arteries, hydralazine decreases blood pressure and facilitates the heart's ability to pump blood.	Action: By blocking the hydrogen-potassium-adenosine triphosphatase enzyme system or protein pump in the gastric parietal cells, it prevents the production of gastric acid, lessens acid-related discomfort, and promotes healing of the duodenum, stomach, or esophagus.	Therapeutic: Antilipemic Action: decreases cholesterol levels by inhibiting the enzyme 3-hydroxy-3-methylglutaryl-coenzyme A (HMG-CoA) reductase, which increases the amount of hepatic low density lipoprotein (LDL) receptors on the cell surface to promote LDL absorption and catabolism. reduces the overall quantity of very low density lipoprotein (VLDL) and LDL particles	It permits glucose to enter cells for utilization of fuel by binding to insulin receptors on cell membranes, particularly in skeletal muscle and adipose tissue. It lowers blood sugar levels by inhibiting th liver's production of glucose (glycogenolysis and gluconeogenesis). It encourages the live and muscles to conve glucose to glycogen, and encourages the synthesis of fat and protein while suppressing lipolysis, or the breakdown of fat, and protein catabolism.

					by inhibiting the hepatic production of VLDL.	
Reason Client Taking	The client is taking this drug due to his CHF and cardiomegaly.	The client is taking this drug to prevent blood clots related to his cardiomegaly, diabetes, and hypertension. When dialysis is started, he will be at a greater risk for clotting as well.	The client is taking this drug to manage his hypertension.	The client is taking this drug to prevent GI complications like bleeding or ulcers.	The client is taking this drug to reduce the risk for worsening cardiovascular complications.	The client is taking this drug because he has diabetes mellitus and needs his blood sugar controlled.
Two contraindications (pertinent to the client)	1.Hypotension 2.Bradycardia	1. Active bleeding 2. NSAIDs (aspirin)	1. Heart disease 2. Renal failure	1. Chronic kidney disease 2. CHF	1. Renal impairment 2. Chronic dialysis usage	1. Hypoglycemia 2.CKD
Two side effects or adverse effects (Pertinent to the client)	1.Depression 2.Hyperglycemia	1.Hypertension Elevated creatinine level	1.Nausea 2.Dyspnea	1. Hyperglycemia 2. Elevated serum creatinine level	1. Hypertension 2. Hyperglycemia	1. Dyspnea 2. Weight gain
List two teaching needs for the medication pertinent to the client	1. Do not stop the medication suddenly 2.Monitor for low blood pressure or slow heart rate and report it to the provider.	1. Watch for signs of bleeding 2. Teach the importance of lab monitoring and follow-up appointments	1. Encourage the client to take their blood pressure at home and report any signs of low pressure. 2. Notify the provider if any	1. Take before meals 2. Do not crush or chew the tablet	1. Teach the client to repoint any muscle weakness or pain. 2, Teach the client	1.Teach the client signs of hypoglycemia; sweating, confusion, dizziness, etc. 2.Teach the client tha this drug should be taken before meals.

		for that.	swelling or weight gain occur.		the importance of avoid excessive use of alcohol, or alcohol in general.	
Two Key nursing assessment(s) prior to administration	1.Assess client's blood pressure 2.Assess client's heart rate	1. Assess and check the client for active bleeding. 2. Review all medications to ensure no reactions take place.	1. Assess client's blood pressure 2. Assess client's lungs sounds for crackles	1. Assess GI and ask about any nausea, heartburn, and stool characteristics. 2. Check BUN/creatinine labs	1. Review AST/ALT labs 2. Assess musculoskeletal	1. Assess the client's blood glucose levels 2. Make sure the clie ate before administration
Brand/ Generic	Norvasc/ amlodipine	Rocaltrol/ calcitriol	Aspirin/ acetylsalicylic acid	Neut/sodium bicarbonate	Folvite/ folic acid	Calphron/calcium acetate
Dose, frequency, route	10mg, once daily, oral	0.5mcg, once daily, oral	81mg, once daily, oral	1,300ng, 4x daily, oral	1mg, once daily, oral	1,334mg, TID WC, oral
Classification (Pharmacological and therapeutic and action of the drug	Pharmacological: Calcium channel blocker Therapeutic: Antihypertensive Action: Enhances oxygen flow to the heart and lowers blood pressure by preventing calcium from entering vascular smooth muscle.	Pharmacological: Vitamin D analogue Therapeutic: Antihypocalcemic Action: Increases the amount of calcium by binding to certain receptors on the intestinal mucosa. In order to increase the amount of calcium in the body, the	Pharmacological: Salicylate Therapeutic: NSAID Action: Aspirin can produce local vasodilation along with discomfort and edema by inhibiting the activity of cyclooxygenase, an enzyme required for prostaglandin production. By preventing the synthesis of	Pharmacological: Electrolyte Therapeutic: Antacid, electrolyte replenisher, systemic and urinary alkalizer Action: reverses metabolic acidosis by raising blood pH, buffering excess hydrogen ions, and raising plasma bicarbonate	Pharmacological: Antimetabolite Therapeutic: Vitamin, antianemic agent Action: The body transforms folic acid into tetrahydrofolate, which is necessary for the formation	Pharmacological: Calcium salts Therapeutic: Antacid Action: Raises intracellular and extracellular calcium levels, which are essential for preserving homeostasis, particularly in the musculoskeletal and neurological systems. also contributes to breathing, coagulatio proper cardiac and renal function, and capillary and cell membrane

		medication may also control the movement of calcium ions from bone to blood and promote calcium reabsorption in the distal renal tubules.	thromboxane A2 and a chemical that mimics platelet aggregation, aspirin prevents platelet aggregation.	levels. It raises the pH of urine by increasing the excretion of free bicarbonate ions; this may aid in the dissolution of uric acid calculi. Also reduces the symptoms of hyperacidity by raising the pH of the stomach's contents by neutralizing or buffering the stomach acid already present.	of red blood cells and DNA. It avoids megaloblastic anemia brought on by a folate deficit and supports healthy cell division.	permeability. helps control the release of hormones and neurotransmitters fro storage. Additionally, oral versions buffer o neutralize stomach acid to ease the pain brought on by hyperacidity.
Reason Client Taking	The client is taking this drug to help control is hypertension and kidney protection.	The client is taking this drug to help with vitamin D formation that is altered by his AKI.	The client is taking this drug to help prevent blood clots and prevent a heart attack.	The client is taking this drug to prevent GI complications like bleeding or ulcers.	The client is taking this drug to prevent or treat anemia, which is frequent in individuals with chronic renal disease, and to aid in the formation of red blood cells. Supplementation is crucial	The client is taking this drug help reduce elevated phosphorus levels and protect the blood vessels and bones, which is particularly crucial fo dialysis patients or those with chronic renal disease.

					since folate may be lost during therapy if the patient is receiving dialysis. Folic acid can also help lower homocysteine levels, which benefits cardiovascular health in those with heart failure, diabetes, and high blood pressure like himself.	
Two contraindications (pertinent to the client)	1.Hypotension 2.CHF	1.Hypercalcemia 2. CHF	1. Active bleeding 2.CKD	1. CKD 2. Hypomagnesemia	1. Undiagnosed anemia 2. Untreated pernicious anemia	1. Vitamin D supplements (calcitriol) 2.Severe renal disease
Two side effects or adverse effects (Pertinent to the client)	1.Vomiting 2.Nausea	1.Vomiting 2. High phosphorus	1.Depression 2.Shortened lifespan of RBCs	1. Hyperglycemia 2.Elevated serum creatinine levels	1.Nausea 2.Depression	1. Nausea 2. Vomiting
List two teaching needs	1.Teach the client to monitor for	1.Teach the client to avoid taking any	1. Teach the client to report bleeding	1. Teach the client to take this drug	1.Teach the client to take	1. Teach the client to take this with meals. 2. Teach the client

for the medication pertinent to the client	sudden weight gain or swelling of the feet or ankles. 2. Encourage the client to take their blood pressure at home and report any signs of low pressure.	extra vitamin D supplements 2.Notify the provider if client experiences nausea, vomiting, weakness, confusion, etc.	symptoms like black and tarry stools, bruising, etc. 2. Teach the client to take this drug with food to help prevent GI upset.	before meals, specifically breakfast. 2. Teach the client to swallow whole, do not crush or chew.	this daily and as prescribed. 2. Teach the client that this can be taken with or without food, whatever choice they feel.	high calcium symptoms like nausea vomiting, weakness, etc., and tell them to report to their provider.
Two Key nursing assessment(s) prior to administration	1. Assess the client's blood pressure 2.Assess the client's lung sounds for crackles	1. Assess serum calcium level and monitor if moving forward 2. Assess phosphorus levels and monitor if moving forward	1. Assess for bleeding symptoms 2. Review hemoglobin and hematocrit, and platelet labs.	1. Assess GI and ask about any nausea, heartburn, and stool characteristics. 2. Check and assess BUN/creatinine labs	1.Review client's CBC labs 2.Assess the client for signs of anemia; fatigue, shortness of breath, etc.	1. Assess serum phosphorus and calcium levels. 2. Assess for signs of hypercalcemia; constipation, confusion, etc.

Prioritize Three Hospital Medications

Medications	Why this medication was chosen	List 2 side effects. These must correlate to your client
1. Carvedilol	In patients with heart failure, carvedilol lowers blood pressure and pulse rate, lessens cardiac effort, and	1. Shortness of breath 2. Impaired control of blood glucose

	increases survival. He would be at greater danger of arrhythmias, severe CHF, or possibly cardiac death if his heart didn't have it.	
2. Insulin Lispro	Both acute problems and long-term vascular damage can result from uncontrolled blood glucose. Since glucose levels in dialysis patients frequently fluctuate, insulin control is crucial. Severe hypoglycemia can rapidly become fatal.	1. Hypoglycemia 2. Difficulty breathing
3. Calcium acetate	His kidneys are unable to adequately eliminate phosphorus since he is receiving dialysis. Vascular calcification, heart problems, and bone disease can all result from high phosphorus levels. These issues are avoided with calcium acetate,	1. Nausea 2. Vomiting

	which binds phosphorus in the stomach.	

Medications Reference (1) (APA)

Drugs.com. (n.d.). *Prescription drug information*. Drugs.com. https://www.drugs.com/

Nurse's Drug Handbook (NDH). (2025). *Nurse's Drug Handbook.* Jones & Bartlett Learning

Physical Exam

HIGHLIGHT ALL PERTINENT ABNORMAL FINDINGS

GENERAL: **Alertness: Alert to person, place, situation, and time** **Orientation: Oriented to person, place, date, and birthdate** **Distress: No signs of acute distress** **Overall appearance: Not well-groomed** **Infection Control precautions: None** **Client Complaints or Concerns: Yes**	This client was alert and oriented, showed no signs of acute distress, but was not properly groomed. This client appeared that he has not washed himself or showered for a few days and later confirmed that he has not. The client had concerns about when he was going home, and complaints about him being hungry and unable to order food due to diet restriction.
VITAL SIGNS: **Temp: 97.6 degrees Fahrenheit** **Resp rate: 16 breaths per minute** **Pulse: 68 beats per minute** **B/P: 165/82 mm/Hg** **Oxygen: 94%** **Delivery Method: Room Air**	08:00AM This client had his temperature taken temporally; his pulse taken in his left radial with his blood pressure in the left upper arm, and oxygen was delivered on room air. This client has a history of hypertension, which explains his blood pressure reading.
PAIN ASSESSMENT: **Time: 09:00** **Scale: 0-10 numerical** **Location: N/A** **Severity: N/A** **Characteristics: N/A** **Interventions: N/A**	The client verbally stated that they were in no pain when given a pain scale of 0-10.
IV ASSESSMENT: **Size of IV: 20 gauge** **Location of IV: Right forearm** **Date on IV: 2/14/26** **Patency of IV: No abnormalities** **Signs of erythema, drainage, etc.: N/A** **IV dressing assessment: Well done**	This client had an IV placed in his anterior right forearm. The patency of the IV had no resistance and flushed well with blood return. There were no signs of erythema, drainage, etc. There were no signs of infection, phlebitis, infiltration, or extravasation. The IV was dressed with a transparent dressing and was assessed as clean,

Fluid Type/Rate or Saline Lock: 0.9% sodium chloride at 125 mL/hour	dry, and intact. The client had fluid running at 125mL per hour, and the IV raised no concern.
INTEGUMENTARY: **Skin color: Pale** **Character: Dry, intact** **Temperature: Warm throughout** **Turgor: Less than 3 seconds** **Rashes: N/A** **Bruises: N/A** **Wounds: N/A** **Braden Score: 21** **Drains present: Y☐ N ☒** **Type: N/A**	The client's skin was well developed for their age, and was pale, dry, but intact. Temperature was warm throughout when palpated, and there were no signs of rashes, bruises, or wounds when assessed. Turgor was normal. The patient has a Braden score of 21, which puts him at a low risk for pressure injuries or skin breakdown.
HEENT: **Head/Neck:** Symmetrical and nontender **Ears:** Normal size, color, shape and no lesions or lumps noted. Hearing is intact. **Eyes:** Patient followed commands well **Nose:** Septum is midline, moist, and pink. No bleeding or drainage noticed from bilateral nostrils. **Teeth:** Unhealthy, mouth and speech intact.	Head and neck are symmetrical. Trachea is midline without deviation, carotid pulses bilaterally 2+ when palpated. Bilateral sclera white, bilateral cornea clear, bilateral conjunctiva pink. No drainage noted from eyes. Bilateral lids are moist and pink without drainage or lesions. PERLA intact bilaterally with pupil size being around a 6, along with EOMs intact bilaterally. This client's teeth looked rotted, and unhealthy. Speech was intact, mucous membranes were normal; moist and pink, and the uvula was midline. When assessed, the patient's hard and soft palate were intact and there was no signs of bleeding or drainage noted at all within the mouth. .
CARDIOVASCULAR: **Heart sounds: Normal sinus rhythm, abnormal sounds** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable): Sinus rhythm** **Peripheral Pulses: 3+** **Capillary refill: Less than 3 seconds** **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☐ N ☒** **Location of Edema: N/A**	This client had no sound of Afib, and no murmurs were heard throughout, but there was a confirmed pericardial friction rub heard. Client had normal sinus rhythm, pulses normal and strong to palpate, capillary refill normal, and no edema was inspected or palpated throughout bilaterally.
RESPIRATORY: **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	This client had bilateral posterior crackles, along with faint wheezing heard bilaterally anteriorly. There was no accessory muscle usage displayed by the client.
GASTROINTESTINAL:	The client stated that he eats a normal diet at

Diet at home: Normal **Current Diet:** NPO **Is Client Tolerating Diet?** Somewhat **Height:** 5'6in **Weight:** 160lbs **Auscultation Bowel sounds:** Active in all four **Last BM:** 2/15/26 **Palpation: Pain, Mass etc.:** N/A **Inspection:** Normal **Distention:** N/A **Incisions:** N/A **Scars:** N/A **Drains:** N/A **Wounds:** N/A **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Size:** N/A **Feeding tubes/PEG tube Y ☐ N ☒** **Type:** N/A	home. Currently, the client was NPO due to a procedure that was happening later in the day. The client was upset about this diet, because he was hungry, but understood why it was happening. Client's bowel sounds were active in all four quadrants, no pain or masses were palpated throughout. Client had no bruising, incisions, or scars noted during inspection of the abdomen. Abdomen was soft and non-tender in all four quadrants. The client verbally stated that his last bowel movement was on the 15th and characterized it as a "normal" stool.
GENITOURINARY: **Color: Yellow** **Character: Normal** **Quantity of urine: Voids on own** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals: Normal** **Catheter: Y ☐ N ☒** **Type: N/A** **Size: N/A**	This client's voids on his own and described no pain with urination and normal character and color. The client is not on dialysis yet but was planning on getting started on it within the next day.
Intake (in mLs) N/A **Output (in mLs)** N/A	The client was NPO and voids on his own and stated he has not used the bathroom in awhile.
MUSCULOSKELETAL: **Neurovascular status:** Normal **ROM:** Moved all well **Supportive devices:** None **Strength:** Equal **ADL Assistance: Y☐ N ☒** **Fall Risk: Y ☒ N☐** **Fall Score: 24; low risk**	The client's extremities and temperature were all normal, and nail beds showed no signs of cyanosis or clubbing. When ROM were assessed, patient moved all well and had no supportive devices. The client's strength was equal along with his activity status and tolerance being that he was independent. The client is a low risk for falls with a score of 24.

Activity/Mobility Status: Equal **Activity Tolerance:** Normal **Independent (up ad lib)** **Needs assistance with equipment:** No **Needs support to stand and walk:** No	
NEUROLOGICAL: **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐** **Strength Equal: Y ☒ N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation:** Oriented to person, place, location, complaint **Mental Status:** Well for developmental age **Speech:** Well, but hard to understand at some points **Sensory: Reacts to light and sharp touch** **LOC: Alert**	The client MAEW and PERLA was intact bilaterally. Hand grips and pushes and pulls were bilaterally equal along with pedal pushes and pulls. The client is oriented, and his mental status is appropriate for age. This client had normal cognition and was well developed for his age, he even had humor and made sly comments about his AKI. His speech is slightly hard to understand. This client was very alert and answered all of the questions asked of him. This client was very cooperative.
PSYCHOSOCIAL/CULTURAL: **Coping method(s):** None **Developmental level:** Formal operational stage **Religion & what it means to pt.:** None **Personal/Family Data (Think about home environment, family structure, and available family support):** Preferred to not talk about it.	When asked coping methods, the client said that he had none, and did not have any religion that he followed. Client stated that he preferred not to talk about his family but considers his roommate family. The client is in the formal operational stage where he acquires complex logical reasoning, hypothetical reasoning, and abstract thinking.

Discharge Planning

Discharge location: The client plans to return home, where he will live with his roommate.

Home health needs: The client will need a dialysis facilitator to help confirm appointments and arrange reliable transportation, if needed.

Equipment needs: The client will need home oxygen for his COPD, and potential supplies to manage his dialysis catheter and make sure it stays clean, dry, and no signs of complications occur.

Follow up plan: The client will continue with scheduled follow-up appointments to help manage and monitor his hypertension, CHF, AKI, and any other concerns he has for the providers. The client will have dialysis 3 times a week and will be responsible to show up to those as well. The provider will want to have him check back and test his abnormal lab values to see if treatment is working or if conditions are worsening. Cardiology and nephrology will be expecting him, and it is important that the client attends.

Education needs: The client needs to be educated on the importance of attending dialysis treatments, how to care for the catheter, keeping it dry and clean, possible fluid restriction due to his CHF, and symptom monitoring for any diagnosis he has. The client has had home oxygen for a few years now, but still, educating on the importance of storing it in a dry place away from flames is crucial. The medications he is continuing after discharge will also be included. The nurse will educate the patient on infection symptoms as well as encourage him to come back if he feels worse or notices abnormalities.

Nursing Process
Must be NANDA approved nursing diagnosis and listed in order of priority

Nursing Diagnosis • Include full nursing diagnosis with "related to" and "as evidenced by" components • Listed in order by priority – highest priority to lowest priority pertinent to this client	**Rationale** • Explain why the nursing diagnosis was chosen	**Outcome Goal (1 per dx)**	**Interventions (2 per goal)**	**Evaluation of interventions**
1. Impaired Gas Exchange	The client's diagnostics	The client will maintain a	1.Assess respiratory	The client maintained an

related to left pleural effusion as evidenced by abnormal CT scan discoveries (Phelps, 2021).	showed a left pleural effusion, and the client also has COPD. Both results can alter the gas exchange and compromise lung expansion that the client maintains daily, which is crucial.	stable oxygen saturation level of greater than or equal to 95% with improved breath sounds before they are discharged.	rate, lung sounds and effort, along with oxygen saturation every 2 hours. 2.Position the client in high Fowler's position to help expand the lungs and help with lung expansion.	oxygen saturation of 95% and showed improved lung sounds before discharge. The client remained in high Fowler's position and demonstrated an improved gas exchange.
2. Decreased Cardiac Output related to client's CHF diagnosis as evidenced by four-chamber enlargement shown on CT chest scan (Phelps, 2021).	The client has CHF and showed on a diagnostic a four-chamber enlargement. The client also has hypertension and will eventually have dialysis. As it is enlarged, the heart may not pump effectively.	The client will show signs of improved cardiac output and stable blood pressure within 24 hours.	1. Regularly check oxygen saturation, heart rate, blood pressure, and urine production. **2.**Promote high-Fowler or semi-Fowler posture to enhance breathing and reduce preload, and shortness of breath.	The client remained within normal limits for oxygen saturation, heart rate, blood pressure, and urine production. The client reported decreased shortness of breath.
3. Electrolyte Imbalance related to renal failure as evidenced by abnormal lab values of calcium and phosphorus	The client showed lab values of low calcium and high phosphorus. This is crucial because low calcium may	Throughout hospitalization, the client will maintain electrolyte levels within normal ranges (calcium and phosphorus	1.Review and assess serum calcium and phosphorus labs as ordered. 2Administer calcium	The patient's phosphate and calcium levels returned to normal, and there were no signs of imbalance, such as arrhythmias,

(Phelps, 2021).	cause seizures and potential cardiac arrythmias, whereas high phosphorus may worsen the hypocalcemia.	within the recommended range) and avoid imbalance-related signs and symptoms.	acetate and calcitriol as ordered.	disorientation, or cramping in the muscles.
4. Excess Fluid Volume related to AKI diagnosis and dialysis treatment as evidenced by elevated BUN and creatinine values (Phelps, 2021).	The client's kidneys are not filtering properly, causing extra fluid volume. Starting dialysis and having AKI can increase the cardiac workload and worsen his CHF condition.	Within 24 hours, the patient will show signs of better fluid balance, including stable weight, clear lung sounds, and balanced intake and output.	1.Assess daily weight and assess for crackles in the lungs. 2.Monitor the client before and after dialysis treatment.	The lack of crackles in the lungs, steady or reduced daily weight, and improved respiratory status both before and after dialysis treatments will all be demonstrated.

Other References (APA):

Phelps, L. (2021). *Nursing Diagnosis Reference Manual*. (12th edition). Wolters Kluwer.

Nursing Process Prioritization	Rationale
1. Impaired Gas Exchange related to left pleural effusion as evidenced by abnormal CT scan discoveries (Phelps, 2021).	The client's diagnostics showed a left pleural effusion, and the client also has COPD. Both results can alter the gas exchange that the client maintains daily, which is crucial.
2. Decreased Cardiac Output related to client's CHF diagnosis as evidenced by	The client has CHF and showed on a diagnostic a four-chamber enlargement. The client also has hypertension and will

four-chamber enlargement shown on CT chest scan (Phelps, 2021).	eventually have dialysis. As it is enlarged, the heart may not pump effectively.
3. Electrolyte Imbalance related to renal failure as evidenced by abnormal lab values of calcium and phosphorus (Phelps, 2021).	The client showed lab values of low calcium and high phosphorus. This is crucial because low calcium may cause seizures and potential cardiac arrythmias, whereas high phosphorus may worsen the hypocalcemia.
4. Excess Fluid Volume related to AKI diagnosis and dialysis treatment as evidenced by elevated BUN and creatinine values (Phelps, 2021).	The client's kidneys are not filtering properly, causing extra fluid volume. Starting dialysis and having AKI can increase the cardiac workload and worsen his CHF condition.

Other References (APA):

Phelps, L. (2021). *Nursing Diagnosis Reference Manual*. (12th edition). Wolters Kluwer.