

\*Complete and submit to the corresponding dropbox by 1600 on the assigned clinical day.

**To Be Completed Before the Simulation**

\*\* Blue boxes should be completed using textbook information. What do you expect to find? This information should be collected before you start the ATI simulation.

Medical Diagnosis/ Disease: Chronic Kidney Disease (CKD)

NCLEX IV (8): Physiological Integrity/Physiological Adaptation  
Reduction of Risk

NCLEX IV (7):

Anatomy and Physiology Normal Structures	Pathophysiology of Disease	Anticipated Diagnostics
<p><u>Kidney</u></p> <ul style="list-style-type: none"> <li>capsule</li> <li>renal pelvis</li> <li>medulla</li> <li>cortex</li> <li>minor calyx</li> <li>major calyx</li> </ul> <ul style="list-style-type: none"> <li>pyramid</li> <li>papilla</li> <li>renal column</li> <li>glomerulus</li> <li>renal hilum</li> <li>Bowman's capsule</li> <li>nephron</li> <li>proximal/distal convoluted tubule</li> <li>loop of henle</li> <li>collecting tube</li> </ul>	<p>Extensive kidney damage or estimated GFR <math>&lt; 60 \text{ mL/min/1.73m}^2</math> for greater than 3 months</p> <p>Blood is not filtered and <u>excess fluid and waste remains in the body.</u></p> <p>Gradual onset. Progressive and irreversible.</p>	<p><u>Labs</u></p> <ul style="list-style-type: none"> <li>dipstick</li> <li>urine analysis</li> <li>bilirubin</li> <li>WBC, RBC, casts</li> <li>glucose</li> <li>lipid profile</li> <li>LDL</li> <li>creatinine</li> <li>albumin</li> </ul> <p><u>Additional Diagnostics</u></p> <ul style="list-style-type: none"> <li>US</li> <li>CT scan</li> <li>MRI</li> <li>biopsy</li> </ul>

NCLEX II (3): Health Promotion and Maintenance

NCLEX IV (7): Reduction of Risk

Contributing Risk Factors	Signs and Symptoms	Possible Therapeutic Procedures	Prevention of Complications
<ul style="list-style-type: none"> <li><math>&gt; 60</math> yo</li> <li>cardiovascular disease</li> <li>Diabetes</li> <li>ethnic</li> <li>exposure to nephrotoxic drugs</li> <li>family hx</li> <li>HTN</li> <li>obesity</li> </ul>	<ul style="list-style-type: none"> <li>fatigue</li> <li>HA</li> <li>anorexia</li> <li>vomiting</li> <li>depression</li> <li>pruritus</li> <li>osteomalacia</li> <li>pulmonary edema</li> <li>proteinuria</li> </ul>	<p><u>Non-surgical</u></p> <ul style="list-style-type: none"> <li>dialysis (R/T)</li> </ul> <p><u>Surgical</u></p> <ul style="list-style-type: none"> <li>transplantation</li> </ul>	<p>(What are some potential complications associated with this disease process?)</p> <ul style="list-style-type: none"> <li>organ failure (rate of progression)</li> <li>osteomalacia (Ca supplements)</li> <li>fluid &amp; electrolyte imbalance (teach reportable S&amp;S)</li> </ul>

NCLEX IV (6): Pharmacological and Psychosocial/Holistic Parenteral Therapies

NCLEX IV (5): Basic Care and Comfort

NCLEX III (4):

Care Needs

Anticipated Medication Management	Non-Pharmacologic Care Measures	What stressors might a patient with this diagnosis be experiencing?
<ul style="list-style-type: none"> <li>Ca supplements</li> <li>phosphate binders</li> <li>ACE inhibitors</li> <li>ARBs</li> <li>erythropoietin therapy</li> <li>lipid lowering drugs</li> </ul>	<ul style="list-style-type: none"> <li>nutrition therapy</li> <li>correct fluid overload or deficit (fluid restriction)</li> <li>↓ potassium</li> <li>suck on ice cubes</li> <li>daily wt</li> </ul>	<ul style="list-style-type: none"> <li>anxiety</li> <li>feat</li> <li>poverty</li> <li>depression</li> <li>ineffective coping</li> </ul>

Client/Family Education

NCLEX I (1): Safe and Effective Care Environment

Physiology cont. - functioning units called nephrons remove waste products and extra fluid from body. Each nephron is composed of a glomerulus and tubule. Urine produced from glomerular filtration, reabsorption, and secretion. Wastes include  $\text{Na}^+$ ,  $\text{K}^+$ ,  $\text{Ca}^{2+}$ , creatinine, urea, and  $\text{NH}_3$ .

List 3 potential teaching topics/areas	Multidisciplinary Team Involvement (Which other disciplines do you expect to share in the care of this patient)
<ul style="list-style-type: none"> <li>• Hard candy to reduce thirst.</li> <li>• Report weight gain &gt;4.</li> <li>• Modify diet to decrease K<sup>+</sup></li> </ul>	<ul style="list-style-type: none"> <li>• PCP</li> <li>• radiology</li> <li>• pharmacy</li> <li>• RN</li> <li>• nephrologist</li> <li>• case writer</li> <li>• lab</li> <li>• cardiologist</li> <li>• Nutrition / RD</li> </ul>

### Anticipated Patient Problems, Goals, & Interventions Based on Medical Diagnosis

\*\* This worksheet should be completed before you begin the ATI simulation.

#### Problem #1:

#### Excess Fluid Volume

##### Patient Goals:

1. Patient will maintain clear lung sounds in all 5 lobes and show no evidence of dyspnea or orthopnea during my care.
2. Patient will maintain normovolemic status with urino output  $\geq 30$  mL/hr and greater than intake during my care.

Assessments: monitor wt daily, strict I&O q shift, Assess lung sounds q4h.  
 • labs (BUN, creatinine, <sup>urine osmolality</sup> GFR), electrolytes q shift or prn. Vitals q4h.  
Assess lung sounds, SOB, resp pattern q4h.

##### Interventions (In priority order):

- Institute and instruct regarding fluid restriction as appropriate during my care.
- Administer diuretics as prescribed during my care.
- Position HOB in a semi-fowler's or high-fowler's position when appropriate during my care (ie eating, resting, SOB).
- Elevate edematous extremities to promote venous return during my care.
- Instruct to avoid medications that cause fluid retention such as NSAIDs during my care.
- Educate S & Sp of fluid excess (ie >4lbs wt gain in 1 day) to report during my care.

**Problem #2:**

Ineffective Coping (Stage V - CKD irreversible, progressive)

**Patient Goals:**

1. Patient will verbalize at least one effective coping strategy during my care.
2. Patient will verbalize at least one resource to prevent ineffective coping during my care.

**Assessments:**

- Evaluate stressors and coping mechanisms, complaints & concerns sleep patterns, fatigue, lack of appetite, ADLs, mood, use of drugs or alcohol, ability to problem solve, defensive speech, manipulation, excuses, chronic illness during my care prn.

**Interventions (In priority order):**

- Utilize therapeutic communication to build rapport during my care.
- Educate on <sup>chronic kidney</sup> disease processes and establish goals with patient during my care.
- Educate/provide stress-relieving and relaxation techniques such as MBSR, during my care.
- Refer to counseling or support groups during my care. (CKD - irreversible, devastating disease)
- Offer treatment choices (in time preference) and encourage participation during my care.
- Determine how patient successfully handled stressful hurdles in past and relate to current stressors during my care.

**At this time, complete assigned ATI Real Life Simulation**

**Actual Patient Problems & Goals**

\*\* The following should be completed after the ATI simulation.

**Problem #1:**

Excess Fluid Volume (Fluid overload r/t CVD)

Patient Goals:

Patient will maintain clear lung sounds in all 5 lobes during my care. 1.

Patient will achieve normovolemic status with urine output  $\geq 30\text{ mL/hr}$  and greater than intake during my care. 2.

Met  
Unmet ✓  
Met ✓  
Unmet

**Problem #2:**

Decreased Cardiac Output (r/t hypertension)

Patient Goals:

Patient will maintain BP  $< 140/90$  during my care. 1.

Patient will maintain HR WNL 60-100 bpm during my care. 2.

Met  
Unmet ✓  
Met  
Unmet ✓

SOAP Notes Based on Priority Problems

Priority Patient Problem #1: Excess Fluid Volume

<p><b><u>Subjective:</u></b></p> <p><i>This section explains the client symptoms. Include a narrative of the patient's complaints/concerns and/or information obtained from secondary sources.</i></p>	<p><b>Chief Complaint:</b> SOB and Edema. 6.6lb wt gain over last 2 days. Decreased appetite. Dry <sup>non-productive cough</sup> scattered rhonchi, all fields bilat. Respirations tachypneic and labored with activity.</p> <p><b>PMH:</b> CKD, DM II, HTN, uremic pruritis</p> <p><b>Allergies:</b> No Known Allergies</p> <p><b>Current Medications:</b> see attached</p>
<p><b><u>Objective:</u></b></p> <p><i>This section is your clinical observations. Include, pertinent vital signs, pertinent labs and diagnostics related to priority problem.</i></p>	<p><b>Vital Signs:</b> see attached</p> <p><b>Labs:</b> see attached</p> <p><b>Diagnostics:</b> CXR- bilat. pulmonary venous congestion w/ infiltrates          EKG #14 peaked T waves, widened QRS tachycardia, sinus HR 114/min</p>
<p><b><u>Assessment:</u></b></p> <p><i>Focused assessment on your priority problem.</i></p>	<ul style="list-style-type: none"> <li>- general fatigue and malaise</li> <li>- edema to lower extremities 2+, pitting</li> <li>- shortness of breath and nonproductive cough</li> <li>- decreased appetite</li> <li>- scattered rhonchi to all fields <sup>anterior</sup> bilat, regular, labored with activity</li> <li>- pedal pulse +3 bilat</li> </ul>
<p><b><u>Plan</u></b>  <b>*Based on priority problem only</b></p> <p><i>Include what your plan is for the client. What treatments or medications are needed. You can include procedures, consults, labs/diagnostics, etc. What nursing interventions are being performed?</i></p>	<p><b>Plan:</b></p> <ul style="list-style-type: none"> <li>- continue meds. furosemide, BP meds Losartan labetalol w</li> <li>- monitor BP (hypervolemia)</li> <li>- diuresis with meds &amp; hemodialysis</li> <li>- peritoneal dialysis then discontinue. Start hemodialysis.</li> <li>- fluid restrictions - supplement O<sub>2</sub></li> <li>- monitor electrolytes - elevate HOB</li> </ul> <p><b>Teaching/Resources:</b></p> <ul style="list-style-type: none"> <li>- Nat restriction</li> </ul> <p>Educated on process of hemodialysis          Nutrition consult</p>

# Problem # 1

## current medications

Glipizide XL 20mg PO daily

Aspirin 81mg PO daily

Losartan 50 mg PO daily

Furosemide 20 mg PO twice daily

Ferric citrate 1g PO three times daily with meals

Lingagliptrin 5mg PO daily

Tramadol 50 mg PO every 6 hours PRN pain or discomfort

Sevelamer carbonate 800mg PO three times daily with meals

Docusate sodium 100mg PO twice daily

Tacrolimus 0.1% ointment apply topically to affected area twice daily

Gentamicin 0.1% ointment apply topically to peritoneal dialysis catheter site daily

Gabapentin 100 mg PO three times daily

Atorvastatin 20mg PO daily

## Vitals - Day 1

1830	1845	1940	2040	2100	2125
WT 72.1 kg	96% 2L NC	HR 116/min	HR 110/min	HR 114/min	HR 110/min
94% O <sub>2</sub> RA	BP 178/96	RR 22/min	RR 20/min	RR 18/min	RR 20/min
BP 174/94	Intake 122ml	96% O <sub>2</sub> 2L NC	BP 170/84	BP 178/88	BP 178/86
RR 24/min	output 150ml urine	BP 170/90	96% O <sub>2</sub> 2L NC	96% O <sub>2</sub> 2L NC	96% O <sub>2</sub> 2L NC
HR 118/min		Intake 12ml	Intake 30ml	Intake 40ml	Intake 100ml
			output 100ml urine	output 60ml urine	

Vitals - Day 1 continued

2240

HR 112/min

BP 182/90

Vitals - Day 2

0000

HR 108/min

RR 20/min

BP 156/80

96% O<sub>2</sub> 2LNC

Intake 62 mL

0020

BP 152/80

0055

HR 96/min

RR 16/min

BP 154/80

97% 1LNC

0400

HR 96/min

RR 16/min

BP 150/80

97% O<sub>2</sub> 2LNC

wt. 72.6 kg

0715

HR 94/min

RR 18/min

BP 154/84

96% 1LNC

wt 71.5 kg

Intake 120 mL

output 100 mL  
urine

1210

HR 88/min

RR 18/min

BP 134/76

97% RA

wt 71.5 kg

Intake 2 mL

output 30 mL  
urine

5 mL  
emesis

1400

HR 80/min

RR 20/min

BP 140/80

96% O<sub>2</sub> RA

Intake 100 mL

Output 60 mL  
urine

Problem # 1 (diluted electrolytes & blood)

labs

Potassium 6.0 (WNL 3.5-5.0)

Sodium 132 mEq/L (WNL 135-145) Na/K<sup>+</sup> pump

chloride 100 mEq/L (WNL 98-106)

BUN 42 mg/dL (WNL 10-20)

Creatinine 8.0 mg/dL (WNL 0.5-1.2 female > 61yo)

Calcium 7.8 mg/dL (WNL 9-10.5)

CO<sub>2</sub> 28 mEq/L (WNL 23-30 mEq/L)

eGFR 8 mL/min (WNL > 90 mL/min)

RBC 3.1 million/mm<sup>3</sup> (WNL 4.2-5.4 female)

Hgb 10.2 g/dL (WNL 12-16 female)

Hct 32% WNL 37%-47% female

Phosphorus 7.5 mg/dL (WNL 3-4.5)

Magnesium 2.0 mEq/L (WNL 1.3-2.1)

ALT 20 units/L (WNL 4-36)

AST 25 units/L (WNL 0-35)

specific gravity - 0.998 (diluted)

**Priority Patient Problem #2: Decreased Cardiac Output**

Assessment continued:  
 skin warm, dry  
 scattered rhonchi to all fields, bilat. anterior, regular, tachypneic, labored with activity  
 tachycardia  
 S<sub>1</sub>, S<sub>2</sub> regular rhythm  
 AV fistula thrill and bruit noted  
 abdomen soft nondistended, nontender  
 wear gait

<p><b>Subjective:</b>          This section explains the client symptoms. Include a narrative of the patient's complaints/concerns and/or information obtained from secondary sources.</p>	<p><b>Chief Complaint:</b> SOB and Edema. 6 lbs weight gain over 2 days. SBP &gt; 140  <i>→ 2 pitting lower extremities</i></p>
<p><b>Objective:</b>          This section is your clinical observations. Include vital signs, pertinent labs and diagnostics related to priority problem.</p>	<p><b>Vital Signs:</b> see attach for problem 1  <b>Labs:</b> see attached for problem 1  <b>Diagnostics:</b> CXR - No cardiomegaly, bilat. pulmonary venous congestion with infiltrates          tele # 14 peaked T waves, widened QRS, tachycardia</p>
<p><b>Assessment:</b>          Focused assessment on your priority problem.</p>	<p>sinus HR 114/min          - active weekly          - denies tobacco, alcohol, drugs          - maternal Hx of MI          - +2 pitting edema LE          - +3 pedal pulses          - PMH HTN, stage V CKD          - general fatigue &amp; malaise          - SOB at non-product cough          - cardiac no murmur or defect          - denies HA          - decreased appetite</p>
<p><b>Plan</b>  <b>*Based on priority problem only</b>          Include what your plan is for the client. What treatments or medications are needed. You can include procedures, consults, labs/diagnostics, etc. What nursing interventions are being performed?</p>	<p><b>Plan:</b> continue meds @ meds 1 asartan, labetalol, IV, ASA, furosemide, atorvastatin          - GCG          - monitor BP, HR, I&amp;Os, O<sub>2</sub>          - monitor edema, pedal pulses, <i>→ peripheral all pulses</i>          sounds, electrolytes esp K<sup>+</sup>, respirations, lung          - fluid restriction, Na<sup>+</sup> restriction          - telemetry          - cardiac monitoring          - bedrest          - Supplement O<sub>2</sub>          - elevate HOB          - dialysis  <b>Teaching/Resources:</b>          Cardiology consult          Educate BP med compliance</p>

\* heart cannot pump adequate oxygen to meet body's need. Diluted blood and diluted electrolytes. Increased potassium (hyperkalemia) leads to weak flaccid muscles. Low calcium leads to tetany. Increased blood volume = increase demand of heart

**Reflection:**

- Go back to your Preconference Template:
  - Indicate (circle, star, highlight, etc.) the components of your preconference template that you saw applied to the care of this virtual patient.
- What was your biggest “take-away” from participating in the care of this patient? How did this impact your nursing practice?

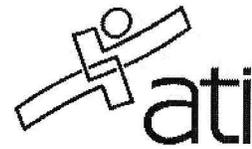
My biggest take away is that it is important to address critical needs first. Use the nursing process to diagnose and plan care. Apply principles of A, B, C's, Maslow's hierarchy of needs, acute vs. chronic, and urgent vs non-urgent when carrying out care plan intervention. The problems with diet and nutrition were addressed last. The fluid in the lungs and controlling the Bp was priority. This impact my nursing practice because I will remember that it is important to get a thorough history and assessment to make appropriate decisions for care. The nurse on ATI got a thorough report from the hemodialysis clinic, assessment including vitals, current med list and history. This allowed him to give safe and quality care.

Time Allocation: 8 hours

## Module Report

Tutorial: Real Life RN Medical Surgical 4.0

Module: Chronic Kidney Disease



Individual Name: Vicky Murat

Institution: Margaret H Rollins SON at Beebe Medical Center

Program Type: Diploma

### Standard Use Time and Score

	Date/Time	Time Use	Score
Chronic Kidney Disease	2/9/2023 8:16:24 PM	1 hr 23 min	Satisfactory

### Reasoning Scenario Details

Chronic Kidney Disease - Use on 2/9/2023 6:52:55 PM

#### Reasoning Scenario Performance Related to Outcomes:

\*See Score Explanation and Interpretation below for additional details.

Body Function	Strong	Satisfactory	Needs Improvement
Cardiac Output and Tissue Perfusion	100%		
Cognition and Sensation	100%		
Excretion		100%	
Ingestion, Digestion, Absorption & Elimination	80%	20%	
Integument	100%		
Regulation and Metabolism	71.4%	28.6%	

NCLEX RN	Strong	Satisfactory	Needs Improvement
Reduction of Risk Potential RN 2013	100%		
RN Management of Care	100%		
RN Basic Care and Comfort	100%		
RN Pharmacological and Parenteral Therapies	100%		
RN Reduction of Risk Potential	60%	40%	

RN Physiological Adaptation	75%	25%	
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QSEN	Strong	Satisfactory	Needs Improvement
Safety	100%		
Patient-Centered Care	71.4%	28.6%	
Evidence Based Practice	77.8%	22.2%	
Teamwork and Collaboration	100%		

Thinking Skills	Strong	Satisfactory	Needs Improvement
Clinical Application	100%		
Clinical Judgment	78.9%	21.1%	

**Decision Log:**

Optimal Decision	
<b>Scenario</b>	Nurse Chris is reviewing Ana Sofia Swisher's EMR.
<b>Question</b>	Nurse Chris is reviewing client Ana Sofia Swisher's EMR. Which of the following findings should Nurse Chris identify as an indication that Ms. Swisher needs acute care at this time?
<b>Selected Option</b>	Creatinine level
<b>Rationale</b>	According to the EMR, Ms. Swisher's creatinine level is elevated, even though she has been receiving peritoneal dialysis. Creatinine is the waste product in the blood that is excreted through the kidneys. Since Ms. Swisher's creatinine level is elevated and she is demonstrating signs of fluid overload, this could be indicative of worsening kidney disease. Therefore, there is a need for an acute care admission.

Optimal Decision	
<b>Scenario</b>	Nurse Chris is planning actions following admission.
<b>Question</b>	Nurse Chris has completed and documented the assessment of Ms. Swisher. Based upon Nurse Chris' findings and the information contained within the EMR, which of the following actions should Nurse Chris take?
<b>Selected Option</b>	Apply a limb alert bracelet.
<b>Rationale</b>	According to the EMR, Ms. Swisher has an AV fistula in her left forearm and, therefore, should not have phlebotomy and blood pressure taken in this arm because these activities can damage the fistula. Nurse Chris should apply a limb alert bracelet to Ms. Swisher's left wrist as a safety precaution. The bracelet provides a reminder to the client and staff to protect the fistula, which would prolong the viability of the fistula.

Optimal Decision	
<b>Scenario</b>	Nurse Chris is deciding the priority action for client Ms Swisher.
<b>Question</b>	Nurse Chris is reviewing Ms. Swisher's orders. Which of the following actions should Nurse Chris implement first?
<b>Selected Option</b>	Apply a cardiac monitor.
<b>Rationale</b>	Nurse Chris should first apply the cardiac monitor to begin monitoring Ms. Swisher's heart rhythm. According to Ms. Swisher's EMR, her potassium level is elevated, which increases the risk for cardiac dysrhythmias.

Optimal Decision	
<b>Scenario</b>	Nurse Chris is applying telemetry leads to Ms. Swisher.
<b>Question</b>	Nurse Chris is preparing to apply telemetry leads to Ms. Swisher. Select the image that correctly displays the pattern in which the leads should be applied.
<b>Selected Option</b>	Clockwise starting from the client's right clavicle: white lead, black lead, red lead, and green lead with the brown lead in the middle.
<b>Rationale</b>	Nurse Chris should ensure that the electrodes are placed in a specific order on Ms. Swisher's chest, as shown in this image. The leads, which are attached to a monitor box, are then connected to the electrodes. Incorrect placement can result in inaccurate display of the waveform.

Optimal Decision	
<b>Scenario</b>	Nurse Chris is at the nurses' station looking at Ms. Swisher's cardiac rhythm.
<b>Question</b>	Nurse Chris is reviewing Ms. Swisher's cardiac rhythm on the telemetry monitor at the nurses' station. Which of the following rhythms should Nurse Chris expect based on Ms. Swisher's potassium level?
<b>Selected Option</b>	Peaked T waves
<b>Rationale</b>	According to Ms. Swisher's EMR, her potassium level is elevated. Nurse Chris should identify that a heart rhythm associated with hyperkalemia has the presence of peaked T waves.

Optimal Decision	
<b>Scenario</b>	Nurse Chris is Identifying the Adverse Effects of Furosemide
<b>Question</b>	Nurse Chris is preparing to administer furosemide IV bolus for Ms. Swisher. Based upon the client's medical history, which of the following adverse effects should Nurse Chris monitor for after administering this medication?
<b>Selected Option</b>	Tinnitus

<b>Rationale</b>	Nurse Chris should identify that furosemide is a loop diuretic that is excreted by the kidneys and works by blocking the reabsorption of sodium and chloride at the loop of Henle. Clients who have chronic kidney disease have a decreased ability to clear furosemide from their kidneys, leading to an increased risk for toxicity. Because Ms. Swisher has chronic kidney disease, she is at risk for the development of ototoxicity. Nurse Chris should monitor her for indications of ototoxicity, which is an adverse effect of furosemide. Nurse Chris should ask Ms. Swisher if she is experiencing any findings related to tinnitus, such as ringing noises in her ears or decreased hearing after administering furosemide.
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<b>Scenario</b>	Nurse Chris is preparing to provide Ms. Swisher with teaching about hemodialysis.
<b>Question</b>	Nurse Chris is preparing to teach Ms. Swisher about hemodialysis by using an illustration. Which of the following illustrations should Nurse Chris use?
<b>Selected Option</b>	The arterial needle inserted into the client's AV fistula returns the clean blood to the client's body. The venous needle inserted into the client's AV fistula carries the blood to the dialyzer.
<b>Rationale</b>	Nurse Chris should identify that this illustration does not represent the hemodialysis process. The arterial needle that is inserted into the client's AV fistula should carry the blood to the dialyzer and not return the clean blood to the client's body. Furthermore, the venous needle that is inserted into the client's AV fistula should return the client's clean blood from the dialyzer to their body and not carry their blood to the dialyzer.

<b>Scenario</b>	Nurse Chris is preparing to teach about the process of hemodialysis.
<b>Question</b>	Nurse Chris is preparing to provide teaching to Ms. Swisher about the hemodialysis process. Which of the following statements should Nurse Chris make?
<b>Selected Option</b>	"During hemodialysis, filtration of the blood occurs in the dialyzer."
<b>Rationale</b>	Nurse Chris should inform Ms. Swisher that, during hemodialysis, the dialysate does not mix with the blood in the dialyzer, nor does it enter the body. The dialysate enters the dialyzer, where it filters the blood, removing wastes, toxins, and excess fluid.

<b>Optimal Decision</b>	
<b>Scenario</b>	Nurse Chris explains complications of hemodialysis to Ms. Swisher.
<b>Question</b>	Nurse Chris is evaluating Ms. Swisher's understanding of the teaching. Which of the following statements by Ms. Swisher should indicate to Nurse Chris that the teaching was effective?
<b>Selected Option</b>	"My blood pressure may decrease during hemodialysis."

<b>Rationale</b>	Nurse Chris should identify that teaching was effective because hypotension is a common complication that occurs during hemodialysis. This condition could be related to the concentration or temperature of the dialysate or the dialyzer filtration rate. Nurse Chris should inform Ms. Swisher that her blood pressure will be monitored closely before, during, and after hemodialysis. If her blood pressure decreases, this could be managed by elevating her legs into a Trendelenburg position, adjusting the dialyzer flow rate, or providing her with an IV fluid bolus, depending on the severity of the symptoms.
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<b>Optimal Decision</b>	
<b>Scenario</b>	Nurse Chris is Identifying medications to treat hyperkalemia.
<b>Question</b>	Nurse Chris is monitoring Ms. Swisher's laboratory results and current cardiac rhythm strip. Which of the following medications should Nurse Chris anticipate administering? (Select all that apply.)
<b>Selected Ordering</b>	Calcium gluconateRegular insulin50% dextrose
<b>Rationale</b>	Nurse Chris should identify that Ms. Swisher's potassium level has not changed from the admission value and that her current cardiac rhythm strip indicates peaked T waves. Nurse Chris should further identify that if a widened QRS complex was present on the cardiac rhythm strip, this could be another indication of hyperkalemia, as well. If Ms. Swisher's potassium level increases further and she starts to exhibit findings associated with hyperkalemia, Nurse Chris should anticipate administering medications to decrease the effect of potassium on the cardiac muscle. Nurse Chris should anticipate administering 50% dextrose IV with the regular insulin IV bolus to reduce to risk of hypoglycemia in clients with CKD.

<b>Scenario</b>	Nurse Chris Identifies Interventions to Address the Systemic Effects of Hyperphosphatemia and Hypocalcemia.
<b>Question</b>	Nurse Chris is planning care based on Ms. Swisher's most recent laboratory results. Which of the following interventions should Nurse Chris include? (Select all that apply.)
<b>Selected Ordering</b>	Monitor for the development of tetany.Monitor muscle strength.Administer phosphate binder between meals.
<b>Rationale</b>	Nurse Chris should inform Ms. Swisher to take phosphate binders with meals to increase their effectiveness because they work by binding to some of the phosphate in the food and will decrease the amount of phosphate in the blood.

<b>Scenario</b>	Nurse Chris is reviewing the plan of care with Charge Nurse Rylie.
<b>Question</b>	Nurse Chris is reviewing Ms. Swisher's plan of care with Charge Nurse Rylie. Which of the following interventions should Nurse Chris implement based upon Ms. Swisher's current laboratory results?
<b>Selected Option</b>	Monitor for the presence of Chvostek sign.
<b>Rationale</b>	Nurse Chris should implement monitoring for the presence of manifestations related to electrolyte imbalances. Ms. Swisher's calcium level is less than the expected reference range. Nurse Chris should identify that manifestations of hypocalcemia include tetany, which can be assessed by monitoring the presence of a Chvostek or Trousseau sign.

Optimal Decision	
<b>Scenario</b>	Nurse Chris evaluates findings to determine the effectiveness of furosemide.
<b>Question</b>	Nurse Chris has documented the assessment findings for Ms. Swisher. Nurse Chris should identify that which of the following findings indicates the effectiveness of furosemide?
<b>Selected Option</b>	Urine output
<b>Rationale</b>	According to Ms. Swisher's EMR, there has been a total of 160 mL of urine output since the administration of furosemide. Nurse Chris should identify that this indicates a positive outcome for the use of this medication.

Optimal Decision	
<b>Scenario</b>	Nurse Chris prioritizes findings to report to the provider.
<b>Question</b>	Nurse Chris is preparing to provide a status update on Ms. Swisher to Dr. Lanzo. Which of the following information from the EMR is the priority for Nurse Chris to report?
<b>Selected Option</b>	Blood pressure
<b>Rationale</b>	Nurse Chris should identify that the greatest risk to Ms. Swisher is the continued hypertension, despite the administration of furosemide. The continued elevated blood pressure can negatively affect cardiac and kidney function. Therefore, this is the priority finding for Nurse Chris to report to Dr. Lanzo.

Optimal Decision	
<b>Scenario</b>	Description needed
<b>Question</b>	Nurse Sam is assessing Ms. Swisher's AV fistula prior to hemodialysis. Which of the following sounds should Nurse Sam expect to hear? (Click on the audio button to listen to the clip.)
<b>Selected Option</b>	Bruit
<b>Rationale</b>	Nurse Sam should expect to hear a bruit. A bruit is a sound of turbulent blood flow through the fistula. It is characterized by a low, rumbling pitch or whooshing sound.

Optimal Decision	
<b>Scenario</b>	Nurse Sam is identifying manifestations of disequilibrium syndrome.
<b>Question</b>	Nurse Sam has completed documentation of their assessment in the EMR. Which of the following findings should Nurse Sam identify as an indication that Ms. Swisher could be experiencing disequilibrium syndrome?
<b>Selected Option</b>	Pain rating

<b>Rationale</b>	Nurse Sam should identify that disequilibrium syndrome is a complication that can occur during and after hemodialysis and can be caused by the rate of fluid removal. Nurse Sam should monitor for mild manifestations such as muscle cramping, nausea, vomiting, headache, fatigue, and chills. These can lead to more severe manifestations that can result in a change in the level of consciousness, as well as seizures, cerebral edema, coma, and death. According to Nurse Sam's documentation in the EMR, Ms. Swisher is experiencing a headache and nausea, with a small amount of emesis. She also reported fatigue and chills, which could be indications of disequilibrium syndrome. Ms. Swisher's blood glucose level and pulse are within the expected reference range. The assessment of her AV fistula is unchanged from the assessment prior to dialysis. However, this finding is not associated with disequilibrium syndrome
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<b>Optimal Decision</b>	
<b>Scenario</b>	Nurse Sam is reviewing physiologic findings that contribute to anxiety and depression.
<b>Question</b>	Nurse Sam recognizes that Ms. Swisher's emotional state might also be related to physiological findings and is reviewing Ms. Swisher's EMR. Which of the following findings should Nurse Sam identify as a contributing factor to Ms. Swisher's current psychosocial status?
<b>Selected Option</b>	Capillary blood glucose
<b>Rationale</b>	Nurse Sam should identify that Ms. Swisher's capillary blood glucose level is less than the expected reference range. Hypoglycemia can contribute to feelings of anxiety and depression.

<b>Optimal Decision</b>	
<b>Scenario</b>	Nurse Sam reviews factors of SDOH that impact Ms. Swisher's care.
<b>Question</b>	Nurse Sam is reviewing Ms. Swisher's EMR. Which of the following findings should Nurse Sam identify as having a negative impact on Ms. Swisher's health outcome? (Select all that apply.)
<b>Selected Ordering</b>	Food security Cost of medication Ability to attend dialysis sessions
<b>Rationale</b>	Ms. Swisher will require hemodialysis three time per week, and she does not have a vehicle or access to public transportation. She identified that she needs assistance with transit and will likely require transportation to and from dialysis.

<b>Optimal Decision</b>	
<b>Scenario</b>	Nurse Sam is reviewing Ms. Swisher's EMR with Charge Nurse Robbi.
<b>Question</b>	Nurse Sam is reviewing Ms. Swisher's EMR with Charge Nurse Robbi. Which of the following classes of medications should Nurse Sam identify as being prescribed to manage Ms. Swisher's anemia?
<b>Selected Option</b>	Erythropoietic growth factor
<b>Rationale</b>	Nurse Sam should identify that Ms. Swisher is prescribed an erythropoiesis-stimulating agent to manage anemia.

Optimal Decision	
<b>Scenario</b>	Home Health Nurse Ariel is assessing Ms. Swisher's peritoneal catheter.
<b>Question</b>	Home Health Nurse Ariel has assessed Ms. Swisher's peritoneal catheter site. Based upon Home Health Nurse Ariel's notes in the EMR, what total score should be documented in the assessment tool regarding Ms. Swisher's peritoneal site?
<b>Selected Option</b>	2
<b>Rationale</b>	Nurse Ariel should identify that Ms. Swisher reported slight discomfort when the peristomal area was palpated, but that the area looked fine other than a few areas of crusting that were easily removed. Each of these items would receive 1 point on the peritoneal dialysis (PD) catheter exit site assessment tool. The color was congruent with the surrounding skin color and there was no drainage externally or within the sinus area. The skin is intact, so no granulation is present externally or within the sinus. The sinus tract shows that the epithelium is strong and covers the area fully. Each of these areas should receive a "0" on the assessment tool. Therefore, the total score for Ms. Swisher's PD catheter exit site is 2.

Optimal Decision	
<b>Scenario</b>	Home Health Nurse Ariel and Ms. Swisher are reviewing dietary restrictions.
<b>Question</b>	Home health Nurse Ariel and Ms. Swisher are discussing some of the ingredients contained in some of her favorite recipes that would align with her prescribed diet. Based upon Ms. Swisher's EMR, which of the following items should Home Health Nurse Ariel recommend?
<b>Selected Option</b>	½ cup raw green peas
<b>Rationale</b>	Home Health Nurse Ariel should recognize that one of Ms. Swisher's favorite foods is sauteed peas, onions and chilies made with vegetable broth. Home Health Nurse Ariel should recommend a serving size of ½ cup of raw peas as a good food choice for Ms. Swisher based upon her restrictions on potassium and sodium intake. Home Health Nurse Ariel should inform Ms. Swisher that ½ cup of raw peas has 177 mg potassium and 3.6 mg of sodium per serving. Additionally, it contains 4.11 g of sugar, which makes this a good vegetable selection to manage diabetes mellitus.

Optimal Decision	
<b>Scenario</b>	Ms. Swisher is discussing foods that members bring to the weekly potluck interfaith meetings.
<b>Question</b>	Home Health Nurse Ariel is assisting Ms. Swisher with selecting appropriate food choices to eat during Ms. Swisher's weekly potluck interfaith meetings. Based upon Dr. Lanzo's prescription in the EMR, which of the following food choices should Home Health Nurse Ariel identify as correct selections by Ms. Swisher? (Select all that apply.)
<b>Selected Ordering</b>	Steamed broccoli Roast chicken thighs Sliced radishes

<b>Rationale</b>	Home Health Nurse Ariel should recommend that Ms. Swisher select food choices that would meet her current dietary restrictions and allow her to attend her weekly interfaith potluck. Home Health Nurse Ariel should encourage Ms. Swisher to choose vegetables that are low in potassium, such as sliced radishes.
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