

*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

NCLEX IV (8): Physiological Integrity/Physiological Adaptation

Anatomy and Physiology
Normal Structures

* See next page *

Pathophysiology of Disease

* See next page *

NCLEX IV (7): Reduction of Risk

Anticipated Diagnostics

Labs

- GFR ↓, BUN > 20, Cr > 3
- Cr Clearance (more accurate) ↑
- Metabolic Acidosis (pH < 7.35, HCO₃ ↓)
- Electrolyte Imbalances: K⁺ > 4.5, Na ↑, N, or ↓ (135-145)
- Mg ↑ (ex: absent DTR, ↓LOC, dysrhythmias)

Additional Diagnostics

Renal U/S, renal scan, CT scan
 Renal biopsy, CXR

- Hct & Hgb ↓
- pH ↓
- albumin ↓
- serum calcium, phosphate, pTH, alkaline phosphatase
- hypotension, Resp Failure
- UA:
- Persistent proteinuria (hese)
- albuminuria
- RBC, WBC, protein, Glucose

NCLEX II (3): Health Promotion and Maintenance

Contributing Risk Factors

- Family hx
- Renal artery stenosis
- Pyelonephritis
- Age > 60
- Systemic Lupus
- Nephrotoxic Agents
- Hyperglycemia
- Increased Cholesterol levels
- Obesity
- HTN
- Smoking
- Diabetes
- Heart Disease

Signs and Symptoms

Psychologic: Anxiety + Depression
 CV: HTN, HF, CAD, Pericarditis, PAD
 GI: anorexia, nausea, vomiting, GI bleeding, gastritis
 Endocrine/Reproductive: Hyperparathyroidism, Amenorrhea, erectile dysfunction
 Metabolic: carb intolerance, Hyperlipidemia
 Hematologic: anemia, bleeding, infection
 Neurologic: Fatigue, HA, sleep disturbances
 Ocular: HTN retinopathy
 Pulmonary: pulm edema, SOB, CP
 Musculoskeletal: osteomalacia, CKD-MBD

NCLEX IV (7): Reduction of Risk

Possible Therapeutic Procedures

Non-surgical

- Hemodialysis
- Peritoneal Dialysis

Surgical

- Dialysis Access
- Kidney Transplant

Prevention of Complications

(What are some potential complications associated with this disease process)

- Malnutrition
- Anemia
- Heart Failure
- pulmonary edema
- Hyperglycemia/Hypoglycemia
- Electrolyte Imbalances

* Uremia → kidney function affects multiple body systems

NCLEX IV (6): Pharmacological and Parenteral Therapies

Anticipated Medication Management

- IV glucose & insulin (Hyperkalemia)
- Sodium Polystyrene sulfonate (Hyperkalemia)
- REHESCA
- Epoetin alfa
- Anti-HTN drugs
- Iron supplement
- ACE Inhibitors
- ARBs
- Atorvastatin
- Cinacalcet
- calcium carbonate
- Loop diuretics

NCLEX IV (5): Basic Care and Comfort

Non-Pharmacologic Care Measures

- Restrict high potassium foods
- Therapeutic lifestyle changes: wt loss, exercise, avoidance of alcohol, smoking cessation
- Limit dietary phosphorus, give phosphate binders
- Fluid restriction

NCLEX III (4): Psychosocial/Holistic Care Needs

What stressors might a patient with this diagnosis be experiencing?

- Impaired Body Image
- Impaired Health Maintenance
- Financial Stressors
- Anxiety
- Depression

Client/Family Education

List 3 potential teaching topics/areas

- Educate about therapeutic lifestyle changes like exercise, avoiding alcohol & cessation of smoking
- Educate about the importance of restricting protein sodium, and potassium in diet
- Educate on restricting fluids (unless on diuretic)

NCLEX I (1): Safe and Effective Care Environment

Multidisciplinary Team Involvement

(Which other disciplines do you expect to share in the care of this patient)

- Nephrologist
- Nutritionist
- pharmacist
- Dialysis Team
- Cardiologist
- Diabetic Counseling
- U/S tech
- MD

Anatomy

- Kidneys have 3 layers → renal cortex, medulla & pelvis
- Blood enters the kidneys through the renal artery, nephrons enter through the pelvis layer of kidney. Part of nephron is made up of the glomerulus and bowmans capsule. Part of the nephron is made up of the glomerulus and bowmans capsule. Main function is the infiltration of blood, which then goes to the renal tubule. The renal tubule has 3 parts. First, the filtrate reaches the proximal convoluted tubule and 80% of electrolytes & water are reabsorbed. Then, the filtrate reaches the ascending limb where Na and Cl are reabsorbed while in the descending, water is absorbed (Loop of Henley). This prevents excretion of all water which would lead to dehydration. The renal tubule is the distal part of the convoluted tubule. The reabsorption of water, the regulation of sodium and potassium, and the secretion of ammonia. The filtrate enters the collecting duct for urea cycling along w/ the tubular secretions. Waste enters the ureter and the bladder, then goes down the urethra and finally excreted out.

Pathophysiology

- Progressive, irreversible loss of kidney function. The two main causes are HTN & Diabetes. This results in a decreased GFR, retention of urea and other nitrogenous waste products. It also disrupts the regulation of electrolytes and extracellular fluid. There are 5 stages that are categorized by the glomerular filtration rate. Stage 1 = GFR \geq 90. Stage 2 = GFR 60-89. Stage 3 = GFR 45-59 and 30-44, Stage 5 (kidney failure) $<$ 15. Stage 1 is kidney damage w/ normal or \uparrow GFR, stage 2 is kidney damage w/ mild \downarrow in GFR. Stage 3 moderate \downarrow GFR. Stage 4 is severe \downarrow GFR, and Stage 5 kidney failure.

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. Pt will have decreased fluid volume as evidenced by diminished edema
2. a + pulse in extremities and a daily weight less than previous during my care.

Assessments:

- of adventitious breath sounds w/o evidence of dyspnea by the end of my care.
- UO qhr, strict I&O qhr, assess for edema q4hr, assess wt daily, assess lung sounds & resp. status q4hr or pm.
assess for JVD q4hr or pm.

Interventions (In priority order):

1. Administer prescribed diuretics as ordered throughout my shift.
2. Restrict fluid intake to less than 1L per day during care.
3. Prepare and transfer to scheduled dialysis during my care.
4. Elevate LE'S bil using a pillow or recliner q2hr during my time of care.
5. Weigh pt daily at same time each day during care.
6. Educate on importance of maintaining sodium and fluid restriction at least twice during care.

Problem #2: Risk for Electrolyte Imbalance

Patient Goals:

1. Will maintain a potassium level within 3.5 - 4.5 and will be free of abnormal cardiac rhythms by the end of my care.
2. Will maintain a calcium level of 8.7 - 10.3 and a phosphorus level of 2.8 - 4.5

Assessments:

- during my time of care.
3. Will maintain a Na level of 135 - 145 throughout care.

- Sx of electrolyte imbalance prn, continuous cardiac rhythm Mg, Ca, K, Na, Phos levels q daily

Interventions (In priority order):

- VS q4hr or pm, assess respiratory status q4hr, assess musculoskeletal status q4hr.
1. Administer Regular Insulin, D50 & Calcium gluconate prn hyperkalemia during my care.
 2. Administer loop diuretics as ordered during care.
 3. Restrict potassium rich foods each meal during care.
 4. Restrict sodium intake to < 2g per day during shift.
 5. Administer phosphate binder as ordered throughout my shift.
 6. Educate about s/sx of high K, low Ca, low Na at least twice throughout shift.

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

Patient Goals:

1. Pt will have decreased fluid volume as evidenced by diminished LE edema to +1 to 0, a 2+ pulse in extremities and a daily weight less than previous during my care. Met ✓
Unmet
2. Pt will demonstrate adequate fluid volume management by being clear of adventitious breath sounds w/o evidence of dyspnea by the end of my care. Met ✓
Unmet

Problem #2: Risk for Electrolyte Imbalance

Patient Goals:

1. Will maintain a potassium level within 3.5 - 4.5 and will be free of abnormal cardiac rhythms by the end of my care. Met ✓
Unmet
2. Will maintain a calcium level of 8.7 - 10.3 and a phosphorus level of 2.8 - 4.5 during my time of care. Met ✓
Unmet

SOAP Notes Based on Priority Problems

Priority Patient Problem #1: Excess Fluid Volume

<p>Subjective:</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>Chief Complaint: c/o difficulty completing peritoneal dialysis, recent wt gain of 6.6lbs over in 2 days, reports SOB and edema to lower extremities.</p> <p>PMH: CKD, DMA, HTN, Uremic pruritis, peripheral neuropathy to LE's, Hyperlipidemia, AV fistula placement,</p> <p>Allergies: NKDA</p> <p>Current Medications: Glipizide, ASA, Lisartan, Furosemide, Ferric citrate, Linagliptin, tramadol, Sevelamer carbonate, Docusate, Tacrolimus, Gentamicin, Atorvastatin, Gabapentin</p>
<p>Objective:</p> <p><i>This section is your clinical observations. Include, pertinent vital signs, pertinent labs and diagnostics related to priority problem.</i></p>	<p>Vital Signs: T: 37.2°C, HR: 110 bpm, RR: 22/min, BP: 170/92, SpO₂: 92% on RA</p> <p>Labs: Na: 132, K⁺: 6, BUN: 42, Cr: 8, BUN: 42, Co: 8, Phos: 7.5, GFR: 8, UA: urine amber, cloudy, sp. gravity 0.998, pH 5.6, protein +1.80, Hyaline casts: 1.3</p> <p>PD eval: KT/Vurea: on 2/5 = 1.4, on 1/5 = 1.7, on 10/5 = 2.0, on 6/5 = 2.5</p> <p>Diagnostics: CXR: b/l pulm venous congestion w/ infiltrates, no cardiomegaly,</p>
<p>Assessment: (continued on bottom)</p> <p><i>Focused assessment on your priority problem.</i></p>	<p>General Fatigue + malaise, edema to LE's, SOB w/ non productive cough, + 3 pedal pulses</p> <p>Still has urine production. AO x4, lips dry, skin warm + dry, turgor w/o tenting, AV fistula to L forearm intact, bruit + thrill present, scattered ronchi in all lobes b/l, RR 24/min, dyspnea w/ exertion, weakness upon ambulation, apical HR 118/min, bladder non-distended, denies dysuria, states able to void, peritoneal catheter site clean dry + intact, muscle cramping, Fatigue and chills after HD.</p>
<p>Plan</p> <p>*Based on priority problem only</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>Plan: Administer furosemide, Strict Intake + Output, Restrict fluids to 1L/day, obtain daily weights in AM, Hemodialysis in AM, Apply O₂ pm titrate to keep sats >95%, Notify provider if SBP < 100 or > 180 mmHg, monitor for disequilibrium syndrome after HD (fatigue, nausea, vomiting, HA, chills)</p> <p>Renal diet,</p> <p>Teaching/Resources: Educate about fluid restriction, educate about hemodialysis, educate about diuretics, nephrology consult, dialysis, case manager</p>

Assessment cont :

Intake: 1845 - 122mL, 1940 - 12mL, 2040 - 30mL, 2100 - 40mL, 2125 - 10mL, 0600 - 62mL, 0730 120mL

Output: 1830 UO 150mL, 2040 UO 100mL, 2100 UO 60mL, 0730 UO 100mL, 1210 UO 30mL

--	--

Priority Patient Problem #2: Risk for Electrolyte Imbalance

<p>Subjective:</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>Chief Complaint: c/o difficulty w/ peritoneal dialysis catheter. Admitted directly from nephrology clinic for hyperkalemia. Hx of CKD</p>
<p>Objective:</p> <p><i>This section is your clinical observations. Include vital signs, pertinent labs and diagnostics related to priority problem.</i></p>	<p>Vital Signs: HR 110, RR 20, BP 178/80, SpO₂ 96% @ 2L/min</p> <p>Labs: K⁺: 6 ↑, Na 132 ↓, Chloride 100, Calcium 8 ↓, Phosphorus 7.5 ↑, Magnesium 2 Ca ↓ to 7.8 @ 2045</p> <p>Diagnostics: EKG: Sinus tachy w/ peaked T waves 114 bpm</p>
<p>Assessment:</p> <p><i>Focused assessment on your priority problem.</i></p>	<p>AOx4, speech clear & appropriate, capillary refill brisk, AV fistula intact to L forearm w/ palpable thrill and audible bruit, electronic monitor intact to chest, apical HR 110, sinus tachycardia w/ peaked T waves, moves all extremities symmetrically, pedal pulses +3 b/l, weakness w/ gait</p>
<p>Plan *Based on priority problem only</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>Plan: Renal diet w/ 1.8 gram of sodium, VS q4hr, prn, apply telemetry for continuous monitoring, Obtain BMP 1hr after administering IV furosemide, Hold AM medications prior to dialysis, Notify provider if SBP <100 or >180 mmHg, Administer AM meds that were withheld prior to dialysis after client returns, Administer calcium gluconate, regular insulin, and 50% dextrose monitor for development of tetany, muscle strength & administer phosphate binder between meals.</p> <p>Teaching/Resources: Purpose of cardiac monitoring, Importance of maintaining diet, importance of medication compliance, S/Sx of electrolyte imbalance, Flu w/ nephrologist, dialysis team & PCP, case manager, dietician</p>

Educate on restricting protein in diet

--	--

Reflection:

1. Go back to your Preconference Template:
 - a. Indicate (circle, star, highlight, etc.) the components of your preconference template that you saw applied to the care of this virtual patient.

2. What was your biggest “take-away” from participating in the care of this patient? How did this impact your nursing practice?

My biggest takeaway from this simulation is that early detection and treatment is the primary method for reducing the complications that come with CKD. It is important to encourage pts to take part in their care by adhering to diet, drugs and follow up medical care. The nurse must take into account that this might be a stressful time in the pts life and needs to assess anxiety as needed. As a nurse, this impacted my nursing practice by allowing me to understand how to treat complications of CKD, the importance of continuous monitoring and initiation of interventions rapidly to prevent fatal outcomes.

--

Module Report

Tutorial: Real Life RN Medical Surgical 4.0

Module: Chronic Kidney Disease



Individual Name: Lillian Lima

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	4/26/2023 1:52:47 PM	1 hr 47 min	Satisfactory

Reasoning Scenario Details Chronic Kidney Disease - Use on 4/26/2023 12:06:09 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	100%		
Integument	100%		
Regulation and Metabolism	57.1%	42.9%	

NCLEX RN	Strong	Satisfactory	Needs Improvement
Reduction of Risk Potential RN 2013	100%		
RN Management of Care	66.7%	33.3%	
RN Basic Care and Comfort	100%		
RN Pharmacological and Parenteral Therapies	100%		
RN Reduction of Risk Potential	100%		

RN Physiological Adaptation	75%	25%	
-----------------------------	-----	-----	--

QSEN	Strong	Satisfactory	Needs Improvement
Safety	100%		
Patient-Centered Care	100%		
Evidence Based Practice	77.8%	22.2%	
Teamwork and Collaboration	50%	50%	

Thinking Skills	Strong	Satisfactory	Needs Improvement
Clinical Application	100%		
Clinical Judgment	83.3%	16.7%	

Decision Log:

Optimal Decision	
Scenario	Nurse Chris is reviewing Ana Sofia Swisher's EMR.
Question	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?
Selected Option	Creatinine level
Rationale	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	
Scenario	Nurse Chris is planning actions following admission.
Question	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?
Selected Option	Apply a limb alert bracelet.
Rationale	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	
Scenario	Nurse Chris is deciding the priority action for client Ms Swisher.
Question	Nurse Chris is reviewing Ms. Swisher's orders. Which of the following actions should Nurse Chris implement first?
Selected Option	Apply a cardiac monitor.
Rationale	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	
Scenario	Nurse Chris is applying telemetry leads to Ms. Swisher.
Question	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.
Selected Option	Clockwise starting from the client's right clavicle: white lead, black lead, red lead, and green lead with the brown lead in the middle.
Rationale	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	
Scenario	Nurse Chris is at the nurses' station looking at Ms. Swisher's cardiac rhythm.
Question	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?
Selected Option	Peaked T waves
Rationale	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	
Scenario	Nurse Chris is Identifying the Adverse Effects of Furosemide
Question	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?
Selected Option	Tinnitus

Rationale	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.
------------------	--

Optimal Decision	
Scenario	Nurse Chris is preparing to provide Ms. Swisher with teaching about hemodialysis.
Question	Nurse Chris is preparing to teach Ms. Swisher about hemodialysis by using an illustration. Which of the following illustrations should Nurse Chris use?
Selected Option	The arterial needle that is inserted in the client's AV fistula carries the client's blood to the dialyzer. The dialysis machine pumps the blood to the dialyzer. In the dialyzer, the client's blood is filtered and cleansed with the dialysate, which enters into the dialyzer from the bottom. The waste from the filtered blood, or used dialysate, is discarded from the top of the dialyzer. The cleansed blood is returned to the client's body via the venous needle that is inserted into the client's AV fistula.
Rationale	Nurse Chris should identify that this illustration correctly represents the hemodialysis process. The arterial needle that is inserted in the client's AV fistula carries the client's blood to the dialyzer. The dialysis machine pumps the blood to the dialyzer. In the dialyzer, the client's blood is filtered and cleansed with the dialysate, which enters into the dialyzer from the bottom. The waste from the filtered blood, or used dialysate, is discarded from the top of the dialyzer. The cleansed blood is returned to the client's body via the venous needle that is inserted into the client's AV fistula.

Optimal Decision	
Scenario	Nurse Chris explains complications of hemodialysis to Ms. Swisher.
Question	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?
Selected Option	"My blood pressure may decrease during hemodialysis."
Rationale	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.

Optimal Decision

Scenario	Nurse Chris is Identifying medications to treat hyperkalemia.
Question	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.)
Selected Ordering	Calcium gluconateRegular insulin50% dextrose
Rationale	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.

Scenario	Nurse Chris Identifies Interventions to Address the Systemic Effects of Hyperphosphatemia and Hypocalcemia.
Question	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.)
Selected Ordering	Monitor for the development of tetany.Monitor muscle strength.Administer phosphate binder between meals.
Rationale	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.

Scenario	Nurse Chris is reviewing the plan of care with Charge Nurse Rylie.
Question	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?
Selected Option	Monitor for the presence of Chvostek sign.
Rationale	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	
Scenario	Nurse Chris evaluates findings to determine the effectiveness of furosemide.
Question	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?
Selected Option	Urine output

Rationale	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	
Scenario	Nurse Chris prioritizes findings to report to the provider.
Question	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?
Selected Option	Blood pressure
Rationale	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	
Scenario	Description needed
Question	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.)
Selected Option	Bruit
Rationale	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	
Scenario	Nurse Sam is identifying manifestations of disequilibrium syndrome.
Question	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?
Selected Option	Pain rating
Rationale	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.

Optimal Decision	
Scenario	Nurse Sam is reviewing physiologic findings that contribute to anxiety and depression.
Question	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?
Selected Option	Capillary blood glucose
Rationale	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.

Scenario	Nurse Sam reviews factors of SDOH that impact Ms. Swisher's care.
Question	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.)
Selected Ordering	Food security Current living arrangements Ability to attend dialysis sessions
Rationale	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.

Optimal Decision	
Scenario	Nurse Sam is reviewing Ms. Swisher's EMR with Charge Nurse Robbi.
Question	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?
Selected Option	Erythropoietic growth factor
Rationale	Nurse Sam should identify that Ms. Swisher is prescribed an erythropoiesis-stimulating agent to manage anemia.

Optimal Decision	
Scenario	Home Health Nurse Ariel is assessing Ms. Swisher's peritoneal catheter.
Question	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?
Selected Option	2

Rationale	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	
Scenario	Home Health Nurse Ariel and Ms. Swisher are reviewing dietary restrictions.
Question	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?
Selected Option	½ cup raw green peas
Rationale	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	
Scenario	Ms. Swisher is discussing foods that members bring to the weekly potluck interfaith meetings.
Question	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.)
Selected Ordering	Steamed broccoli Roast chicken thighs Sliced radishes
Rationale	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.

Score Explanation and Interpretation

Individual Performance Profile

REASONING SCENARIO INFORMATION

Reasoning Scenario Information provides the date, time and amount of time use, along with the score earned for each attempt. The percentage of students earning a Scenario Performance of Strong, Satisfactory, or Needs Improvement is provided. In addition, the Scenario Performance for each student is provided, along with date, time, and time use for each attempt. This information is also provided for the Optimal Decision Mode if it has been enabled.

If a detrimental decision is made during a Real Life scenario, the scenario will diverge from the optimal path and potentially end prematurely, in which case an indicator will appear on the score report.

REASONING SCENARIO PERFORMANCE SCORES

Strong	Exhibits optimal reasoning that results in positive outcomes in the care of clients and resolution of problems.
Satisfactory	Exhibits reasoning that results in mildly helpful or neutral outcomes in the care of clients and resolution of problems.
Needs Improvement	Exhibits reasoning that results in harmful or detrimental outcomes in the care of clients and resolution of problems.

REASONING SCENARIO PERFORMANCE RELATED TO NURSING COMPETENCY OUTCOMES

A performance indicator is provided for each outcome listed within the nursing competency outcome categories. Percentages are based on the number of questions answered correctly out of the total number of questions that were assigned to the given outcome. Outcomes have varying numbers of questions assigned to them. Also, due to divergent paths within the branching simulation, the outcomes encountered and the number of questions for each outcome can vary. The above factors cause limitations related to comparing scores across students or groups of students.

NCLEX® CLIENT NEED CATEGORIES

Management of Care	Providing integrated, cost-effective care to clients by coordinating, supervising, and/or collaborating with members of the multi-disciplinary health care team.
Safety and Infection Control	Incorporating preventative safety measures in the provision of client care that provides for the health and well-being of clients, significant others, and members of the health care team.
Health Promotion and Maintenance	Providing and directing nursing care that encourages prevention and early detection of illness, as well as the promotion of health.
Psychosocial Integrity	Promoting mental, emotional, and social well-being of clients and significant others through the provision of nursing care.
Basic Care and Comfort	Promoting comfort while helping clients perform activities of daily living.
Pharmacological and Parenteral Therapies	Providing and directing administration of medication, including parenteral therapy.
Reduction of Risk Potential	Providing nursing care that decreases the risk of clients developing health-related complications.
Physiological Adaptation	Providing and directing nursing care for clients experiencing physical illness.

Score Explanation and Interpretation

Individual Performance Profile

QUALITY AND SAFETY EDUCATION FOR NURSES (QSEN)

Safety	The minimization of risk factors that could cause injury or harm while promoting quality care and maintaining a secure environment for clients, self, and others.
Patient-Centered Care	The provision of caring and compassionate, culturally sensitive care that is based on a client's physiological, psychological, sociological, spiritual, and cultural needs, preferences, and values.
Evidence Based Practice	The use of current knowledge from research and other credible sources, upon which clinical judgment and client care are based.
Informatics	The use of information technology as a communication and information gathering tool that supports clinical decision making and scientifically based nursing practice.
Quality Improvement	Care related and organizational processes that involve the development and implementation of a plan to improve health care services and better meet the needs of clients.
Teamwork and Collaboration	The delivery of client care in partnership with multidisciplinary members of the health care team, to achieve continuity of care and positive client outcomes.

BODY FUNCTION

Cardiac Output and Tissue Perfusion	The anatomical structures (heart, blood vessels, and blood) and body functions that support adequate cardiac output and perfusion of body tissues.
Cognition and Sensation	The anatomical structures (brain, central and peripheral nervous systems, eyes and ears) and body functions that support perception, interpretation, and response to internal and external stimuli.
Excretion	The anatomical structures (kidney, ureters, and bladder) and body functions that support filtration and excretion of liquid wastes, regulate fluid and electrolyte and acid-base balance.
Immunity	The anatomic structures (spleen, thymus, bone marrow, and lymphatic system) and body functions related to inflammation, immunity, and cell growth.
Ingestion, Digestion, Absorption, and Elimination	The anatomical structures (mouth, esophagus, stomach, gall bladder, liver, small and large bowel, and rectum) and body functions that support ingestion, digestion, and absorption of food and elimination of solid wastes from the body.
Integument	The anatomical structures (skin, hair, and nails) and body functions related to protecting the inner organs from the external environment and injury.
Mobility	The anatomical structures (bones, joints, and muscles) and body functions that support the body and provide its movement.
Oxygenation	The anatomical structures (nose, pharynx, larynx, trachea, and lungs) and body functions that support adequate oxygenation of tissues and removal of carbon dioxide.
Regulation and Metabolism	The anatomical structures (pituitary, thyroid, parathyroid, pancreas, and adrenal glands) and body functions that regulate the body's internal environment.
Reproduction	The anatomical structures (breasts, ovaries, fallopian tubes, uterus, vagina, vulva, testicles, prostate, scrotum, and penis) and body functions that support reproductive functions.

DECISION LOG

Information related to each question answered in a scenario attempt is listed in the report. A brief description of the scenario, question, selected option and rationale for that option are provided for each question answered. The words "Optimal Decision" appear next to the question when the most optimal option was selected.

The rationale for each selected option may be used to guide remediation. A variety of learning resources may be used in the review process, including related ATI Review Modules.

If a detrimental decision that could result in grave harm to the client is made during a Real Life scenario, the scenario ends immediately and an indicator that a detrimental decision has been made appears in the score report. A detrimental decision indicates the need to remediate the related topic area to prevent detrimental outcomes in the future.