

# Module Report

Tutorial: Real Life RN Maternal Newborn 3.0

Module: Preeclampsia



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Institution: Lakeview CON

Program Type: BSN

## Standard Use Time and Score

	Date/Time	Time Use	Score
Preeclampsia	9/7/2023 9:27:43 PM	18 min	Strong

## Reasoning Scenario Details

Preeclampsia - Use on 9/7/2023 9:10:06 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%		
Oxygenation	100%		
Reproduction	100%		

NCLEX RN	Strong	Satisfactory	Needs Improvement
RN Management of Care	100%		
RN Safety and Infection Control	100%		
RN Pharmacological and Parenteral Therapies	100%		
RN Reduction of Risk Potential	100%		
RN Physiological Adaptation	100%		

QSEN	Strong	Satisfactory	Needs Improvement
Safety	100%		

### Decision Log:

<b>Scenario</b>	Nurse Alex performed a focused assessment and is preparing to transfer Ms. Kline to the maternal newborn unit.
<b>Question</b>	Nurse Alex is reviewing the EMRs in preparation to transfer Ms. Kline to the maternal newborn unit. Use the SBAR format to prepare a transfer report. (Enter your response, then click on the submit button at the bottom of the screen. Compare your response to the one provided.)
<b>Selected Option</b>	S : Ms. Kline is a 25 year old female that is 27 weeks gestation. she is G1, P0 she came into the ER this morning. B: Ms. kline reports sudden weight gain and a new onset of N/V, also with blurred vision and headache. Says she had breakfast earlier this morning but states she vomited soon after eating. A: VS - BP 162/88, HE 92, Temp 37, O2 97%, urine protein 1+, deep tendon reflexes 3+, reports right upper quadrant pain, N/V and blurred vision with a headache. R: Transfer to Maternal newborn unit.
<b>Rationale</b>	SBAR:S = Situation: 25 year-old female, gravida 1 para 0, at 27 weeks gestation. Came to the ED this morning at 0800.B = Background: Reports sudden weight gain, and a new onset of nausea & vomiting, also blurred vision and headache. Says she had breakfast earlier this morning but that she vomited soon after eating.A = Assessment: Vital Signs: T 37.0, P 92, R 22, BP 162/88, O2 sat 97%, urine protein 1 +, deep tendon reflexes 3+, reports right upper quadrant pain, nausea and vomiting and blurred vision with a headache.R = Recommendation: transfer to maternal newborn unit.

#### Optimal Decision

<b>Scenario</b>	Nurse Morgan completes the admission assessment and selects the appropriate nursing interventions.
<b>Question</b>	Nurse Morgan completes an admission assessment for Ms. Klein. Based on the assessment, which of the following is the priority nursing intervention at this time?
<b>Selected Option</b>	Initiate seizure precautions.
<b>Rationale</b>	The greatest risk to the client and fetus is injury from seizures and resulting hypoxemia. The priority intervention is to initiate seizure precautions.

#### Optimal Decision

<b>Scenario</b>	Nurse Morgan prepares to call Dr. Hunt and give a report.
<b>Question</b>	Nurse Morgan prepares to call Dr. Hunt and give a report. Which of the following is the most important clinical data for Morgan to include in the SBAR report?
<b>Selected Option</b>	Elevated blood pressure

<b>Rationale</b>	The elevated blood pressure is the priority clinical finding to include in the SBAR report. The greatest risk to the client and her fetus is impaired tissue perfusion to the placenta and vital organs secondary to arteriolar vasospasm.
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Optimal Decision	
<b>Scenario</b>	Nurse Morgan reviews prescriptions from Dr. Hunt.
<b>Question</b>	Nurse Morgan is reviewing prescriptions from Dr. Hunt. For which of the following manifestations should she plan to monitor following administration of hydralazine (Apresoline)?
<b>Selected Option</b>	Tachycardia
<b>Rationale</b>	Following administration of hydralazine, the nurse should monitor for alterations in blood pressure and tachycardia.

Optimal Decision	
<b>Scenario</b>	Nurse Morgan is reviewing Ms. Klein's laboratory test results.
<b>Question</b>	Nurse Morgan is reviewing Ms. Klein's laboratory test results. Which of the following findings should Morgan discuss with Ms. Klein regarding her worsening condition?
<b>Selected Option</b>	Increased proteinuria
<b>Rationale</b>	Proteinuria increases with the worsening of preeclampsia.

Optimal Decision	
<b>Scenario</b>	Nurse Morgan calculates the dosage of hydralazine.
<b>Question</b>	Nurse Morgan is preparing to administer hydralazine 5 mg IV bolus. Available is hydralazine 20 mg/mL. How many mL should Morgan administer? (Round the answer to the nearest hundredth.)
<b>Selected Option</b>	0.25
<b>Rationale</b>	<p><b>Follow these steps for the Ratio and Proportion method of calculation:</b></p> <p>Step 1: What is the unit of measurement the nurse should calculate? mL</p> <p>Step 2: What is the dose the nurse should administer? Dose to administer = Desired 5 mg</p> <p>Step 3: What is the dose available? Dose available = Have 20 mg</p> <p>Step 4: Should the nurse convert the units of measurement? No</p> <p>Step 5: What is the quantity of the dose available? 1 mL</p> <p>Step 6: Set up an equation and solve for X.</p> $\frac{\text{Have}}{\text{Desired}} = \frac{\text{Quantity}}{X} \Rightarrow \frac{20 \text{ mg}}{5 \text{ mg}} = \frac{1 \text{ mL}}{X \text{ mL}}$ $X \text{ mL} = 0.25 \text{ mL}$ <p>Step 7: Round if necessary.</p> <p>Step 8: Determine whether the amount to administer makes sense. If there is 20 mg/mL and the prescription reads 5 mg, it makes sense to administer 0.25 mL. The nurse should administer hydralazine 0.25 mL IV.</p> <p><b>Follow these steps for the Desired Over Have method of calculation:</b></p> <p>Step 1: What is the unit of measurement the nurse should calculate? mL</p> <p>Step 2: What is the dose the nurse should administer? Dose to administer = Desired 5 mg</p> <p>Step 3: What is the dose available? Dose available = Have 20 mg</p>

Step 4: Should the nurse convert the units of measurement? No

Step 5: What is the quantity of the dose available? 1 mL

Step 6: Set up an equation and solve for X.

$\text{Desired} \times \text{Quantity}X = \text{Have}5 \text{ mg} \times 1 \text{ mL}X \text{ mL} = \text{Have}20 \text{ mg}$

$X \text{ mL} = 0.25 \text{ mL}$

Step 7: Round if necessary.

Step 8: Determine whether the amount to administer makes sense. If there is 20 mg/mL and the prescription reads 5 mg, it makes sense to administer 0.25 mL.

The nurse should administer hydralazine 0.25 mL IV.

**Follow these steps for the Dimensional Analysis method of calculation:**

Step 1: What is the unit of measurement the nurse should calculate? (Place the unit of measure being calculated on the left side of the equation.)

$X \text{ mL} =$

Step 2: Determine the ratio that contains the same unit as the unit being calculated. (Place the ratio on the right side of the equation, ensuring that the unit in the numerator matches the unit being calculated.)

$1 \text{ mL}X \text{ mL} = \text{Have}20 \text{ mg}$

Step 3: Place any remaining ratios that are relevant to the item on the right side of the equation, along with any needed conversion factors, to cancel out unwanted units of measurement.

**Follow these steps for the Ratio and Proportion method of calculation:**

Step 1: What is the unit of measurement the nurse should calculate? mL

Step 2: What is the dose the nurse should administer? Dose to administer = Desired 5 mg

Step 3: What is the dose available? Dose available = Have 20 mg

Step 4: Should the nurse convert the units of measurement? No

Step 5: What is the quantity of the dose available? 1 mL

Step 6: Set up an equation and solve for X.

$\text{HaveDesired} = \text{Quantity}X20 \text{ mg}5 \text{ mg} = \text{Have}1 \text{ mL}X \text{ mL}$

$X \text{ mL} = 0.25 \text{ mL}$

Step 7: Round if necessary.

Step 8: Determine whether the amount to administer makes sense. If there is 20 mg/mL and the prescription reads 5 mg, it makes sense to administer 0.25 mL.

The nurse should administer hydralazine 0.25 mL IV.

**Follow these steps for the Desired Over Have method of calculation:**

Step 1: What is the unit of measurement the nurse should calculate? mL

Step 2: What is the dose the nurse should administer? Dose to administer = Desired 5 mg

Step 3: What is the dose available? Dose available = Have 20 mg

Step 4: Should the nurse convert the units of measurement? No

Step 5: What is the quantity of the dose available? 1 mL

Step 6: Set up an equation and solve for X.

$\text{Desired} \times \text{Quantity}X = \text{Have}5 \text{ mg} \times 1 \text{ mL}X \text{ mL} = \text{Have}20 \text{ mg}$

$X \text{ mL} = 0.25 \text{ mL}$

Step 7: Round if necessary.

Step 8: Determine whether the amount to administer makes sense. If there is 20 mg/mL and the prescription reads 5 mg, it makes sense to administer 0.25 mL.

The nurse should administer hydralazine 0.25 mL IV.

**Follow these steps for the Dimensional Analysis method of calculation:**

Step 1: What is the unit of measurement the nurse should calculate? (Place the unit of measure being calculated on the left side of the equation.)

$X \text{ mL} =$

Step 2: Determine the ratio that contains the same unit as the unit being

calculated. (Place the ratio on the right side of the equation, ensuring that the unit in the numerator matches the unit being calculated.)  
 $1 \text{ mL} \times \frac{20 \text{ mg}}{1 \text{ mL}} = 20 \text{ mg}$   
 Step 3: Place any remaining ratios that are relevant to the item on the right side of the equation, along with any needed conversion factors, to cancel out unwanted units of measurement.  
 $1 \text{ mL} \times \frac{20 \text{ mg}}{1 \text{ mL}} \times \frac{1 \text{ mL}}{80 \text{ mg}} = 0.25 \text{ mL}$   
 Step 4: Solve for X.  
 $X \text{ mL} = 0.25 \text{ mL}$   
 Step 5: Round if necessary.  
 Step 6: Determine whether the amount to administer makes sense. If there is 20 mg/mL and the prescription reads 5 mg, it makes sense to administer 0.25 mL. The nurse should administer hydralazine 0.25 mL IV.

Optimal Decision	
<b>Scenario</b>	Nurse Morgan calculates the rate of infusion of magnesium sulfate.
<b>Question</b>	Nurse Morgan is preparing to administer magnesium sulfate IV at 2 g/ hr. Available is magnesium sulfate 40 g/1,000 mL lactated Ringer's. Morgan should set the IV pump to deliver how many mL/hr? (Round the answer to the nearest whole number.)
<b>Selected Option</b>	50 mL/hr
<b>Rationale</b>	STEP 1: What is the unit of measurement to calculate? mL/hr STEP 2: What is the volume needed? 2 g STEP 3: What is the total infusion time? 1 hr STEP 4: Should the nurse convert the units of measurement? No STEP 5: Set up the equation and solve for X. Have/Quantity = Desired/X $2 \text{ g} / X \text{ mL} = 40 \text{ g} / 1,000 \text{ mL}$ $X = 50$ STEP 6: Round, if necessary. STEP 7: Reassess to determine the amount to administer makes sense. If the amount prescribed is 2 g/hr and available is 40 g/1,000 mL, it makes sense to administer 50 mL/hr. The nurse should set the IV pump to deliver magnesium sulfate at 50 mL/hr.

Optimal Decision	
<b>Scenario</b>	Nurse Morgan assesses Ms. Klein during the administration of IV magnesium sulfate.
<b>Question</b>	Nurse Morgan is administering IV magnesium sulfate to Ms. Klein. Which of the following manifestations indicates Ms. Klein is experiencing magnesium toxicity?
<b>Selected Option</b>	Respirations 11/min
<b>Rationale</b>	A respiratory rate of less than 12/min is an indication of magnesium toxicity. The nurse should report this manifestation to the provider.

Optimal Decision	
<b>Scenario</b>	Nurse Morgan recognizes a nonreassuring fetal heart rate.
<b>Question</b>	Nurse Morgan recognizes Ms. Klein is experiencing variable decelerations of the fetal heart rate. Which of the following nursing interventions should Morgan take at this time?
<b>Selected Option</b>	Change Ms. Klein's position.

<b>Rationale</b>	The nurse should change the client's position to a lateral or knee-chest position to attempt to improve uteroplacental perfusion.
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<b>Optimal Decision</b>	
<b>Scenario</b>	Nurse Morgan reviews laboratory test results for Ms. Klein.
<b>Question</b>	Nurse Morgan reviews the laboratory test results for Ms. Klein. Which of the following findings confirms a diagnosis of severe preeclampsia?
<b>Selected Option</b>	Aspartate aminotransferase (AST) 75 units/L
<b>Rationale</b>	This liver enzyme is significantly elevated and is consistent with a diagnosis of severe preeclampsia.

<b>Optimal Decision</b>	
<b>Scenario</b>	Nurse Morgan is preparing Ms. Klein for surgery.
<b>Question</b>	Nurse Morgan is preparing to teach Ms. Klein about delivery by cesarean section. Which of the following should Morgan include in the teaching? (Select all that apply.)
<b>Selected Ordering</b>	"You will receive pain medication following the procedure." "Monitoring of the fetal heart will continue." "You will receive antiemetic medications."
<b>Rationale</b>	The nurse should include administration of antiemetic medications in the preoperative teaching.

## Individual Report – Score Explanation and Interpretation

### Reasoning Scenario Information:

Reasoning Scenario Information provides the date, time and duration of use, along with the score earned for each attempt. A Reasoning Scenario Performance score of Strong, Satisfactory, or Needs Improvement is provided for each attempt. This information is also provided for the Optimal Decision Mode if it has been enabled.

### Reasoning Scenario Performance Scores:

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

### Reasoning Scenario Performance Related to Outcomes:

A clinical reasoning performance score related to each outcome is provided. Outcomes associated with student responses are listed in the report. The number across from each outcome indicates the percentage of responses associated with the level of performance of that outcome.

### NCLEX® Client Need Categories:

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

<b>Physiological Adaptation</b>	Providing and directing nursing care for clients experiencing physical illness.
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### Quality and Safety Education for Nurses (QSEN)

<b>Safety</b>	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.
<b>Patient-Centered Care</b>	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
<b>Evidence Based Practice</b>	The use of current knowledge from research and other credible sources, upon which clinical judgment and client care are based.
<b>Informatics</b>	The use of information technology as a communication and information gathering tool that supports clinical decision making and scientifically based nursing practice.
<b>Quality Improvement</b>	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.
<b>Teamwork and Collaboration</b>	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

<b>Cardiac Output and Tissue Perfusion</b>	The anatomical structures (heart, blood vessels, and blood) and body functions that support adequate cardiac output and perfusion of body tissues.
<b>Cognition and Sensation</b>	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.
<b>Excretion</b>	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.
<b>Immunity</b>	The anatomic structures (spleen, thymus, bone marrow, and lymphatic system) and body functions related to inflammation, immunity, and cell growth.
<b>Ingestion, Digestion, Absorption and Elimination</b>	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.
<b>Integument</b>	The anatomical structures (skin, hair, and nails) and body functions related to protecting the inner organs from the external environment and injury.
<b>Mobility</b>	The anatomical structures (bones, joints, and muscles) and body functions that support the body and provide its movement.

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<b>Oxygenation</b>	The anatomical structures (nose, pharynx, larynx, trachea, and lungs) and body functions that support adequate oxygenation of tissues and removal of carbon dioxide.
<b>Regulation and Metabolism</b>	The anatomical structures (pituitary, thyroid, parathyroid, pancreas, and adrenal glands) and body functions that regulate the body's internal environment.
<b>Reproduction</b>	The anatomical structures (breasts, ovaries, fallopian tubes, uterus, vagina, vulva, testicles, prostate, scrotum, and penis) and body functions that support reproductive functions.

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### **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.