

# Module Report

Tutorial: Real Life RN Medical Surgical 4.0  
 Module: Myocardial Infarction Complications



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 Program Type: **Diploma**

Standard Use Time and Score			
	Date/Time (ET)	Time Use	Score
Myocardial Infarction Complications	2/27/2025 11:58:03 AM	17 min	Needs Improvement <b>!</b>
<b>!</b> This attempt ended prematurely due to a detrimental decision or a series of missteps.			

## Reasoning Scenario Details Myocardial Infarction Complications - Use on 2/27/2025 11:41:45 AM ET

### 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	66.7%		33.3%
Oxygenation	50%		50%

NCLEX RN	Strong	Satisfactory	Needs Improvement
RN Management of Care	100%		
RN Pharmacological and Parenteral Therapies	100%		
RN Reduction of Risk Potential	50%		50%
RN Physiological Adaptation			100%

QSEN	Strong	Satisfactory	Needs Improvement
Safety	100%		

Patient-Centered Care			100%
Evidence Based Practice	66.7%		33.3%

### Decision Log:

Optimal Decision	
<b>Scenario</b>	Mr. Davis has taken an initial dose of nitroglycerin.
<b>Question</b>	Mr. Davis has taken the first dose of nitroglycerin. Which of the following actions should be taken next?
<b>Selected Option</b>	Mrs. Davis should call 911 if her husband's chest pain is not relieved within 5 minutes.
<b>Rationale</b>	Unresolved chest pain with the administration of nitroglycerin can indicate the client is having a myocardial infarction, so Mrs. Davis should call 911 if the pain continues. Mr. Davis should also take another dose of nitroglycerin. For unresolved chest pain, a total of three doses of nitroglycerin should be administered 5 minutes apart. Mr. Davis should also take a 325 mg dose of aspirin to inhibit platelet aggregation, which can reduce cardiac damage from the formation of a thrombus.

Optimal Decision	
<b>Scenario</b>	Nurse Christine reviews Mr. Davis's a 12-lead ECG.
<b>Question</b>	Nurse Christine is reviewing Mr. Davis' ECG strip, which was completed at 1725. Which pattern on the ECG strip is the priority finding? (You will find hot spots to select in the artwork below. Select only the hot spot that corresponds to your answer.)
<b>Selected Option</b>	137,36,147,36,137,49,147,48
<b>Rationale</b>	The priority finding is the ST-segment elevation possibly indicating an acute coronary event, which is the greatest risk to Mr. Davis.

<b>Scenario</b>	Nurse Christine prepares to initiate prescriptions.
<b>Question</b>	Nurse Christine is preparing to initiate the prescriptions for Mr. Davis. Which of the following prescriptions should she expect to initiate? (Select all that apply.)
<b>Selected Ordering</b>	Troponin levelMorphinePotassium and creatinine levels
<b>Rationale</b>	Nurse Christine should expect to initiate a bedside chest x-ray to rule out chest pain resulting from a dissecting aorta. A CAT-scan is ordered if the chest x-ray indicates the client has a dissecting aorta. Troponin is a cardiac enzyme, and when elevated, is an early indicator of myocardial cell damage. Morphine is administered to relieve pain, reduce myocardial oxygen consumption, and facilitate vasodilation. Potassium and creatinine are drawn for a baseline prior to the cardiac catheterization. A client having an ST-segment elevation myocardial infarction (STEMI) will not have an MRI before having a heart catheterization because this would delay the initiation of the cardiac catheterization and thus prohibit the provider meeting the 60-minute time-frame from the arrival to the facility to intervention.

<b>Scenario</b>	Nurse Carl is determining the priority action to take when Mr. Davis is itching.
<b>Question</b>	Mr. Davis is reporting itching over his arms and chest. What is the most appropriate action Nurse Carl should take? (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>	Maintain patent airway
<b>Rationale</b>	The priority action nurse Carl should take is to assess Mr. Davis further for findings of an allergic reaction. Nurse Carl should check the medical record for potential allergies, document the allergy to shellfish, check the client's skin for rash, and notify the provider of the findings. Nurse Carl should also request a prescription for diphenhydramine IV to decrease the severity of the itching. Although Mr. Davis recently reported the shellfish allergy, current evidence-based practice guidelines now suggest that there is no correlation between shellfish allergy and contrast dye allergy. Therefore, the provider can determine if Mr. Davis is having a delayed allergic reaction to contrast media used during the cardiac catheterization.

<b>Optimal Decision</b>	
<b>Scenario</b>	Mr. Davis is having difficulty breathing, and Nurse Carl is assessing breath sounds.
<b>Question</b>	Nurse Carl is assessing Mr. Davis's breath sounds and suspects Mr. Davis is starting to experience a moderate systemic reaction to the contrast dye used for the heart catheterization. Which of the following breath sounds should the nurse expect to hear during auscultation?
<b>Selected Option</b>	Wheezing
<b>Rationale</b>	Nurse Carl should recognize that high-pitched wheezing following a heart catheterization using contrast dye indicates a moderate allergic reaction that can progress into anaphylactic shock. Anaphylactic reaction to the contrast dye requires immediate intervention. Wheezing is a continuous squeaky breath sound that arises from the small airways and is associated with inflammation and edema.

<b>Scenario</b>	Nurse Carl is choosing the correct medication to administer for Mr. Davis's dyspnea and wheezing.
<b>Question</b>	Nurse Carl has listened to Mr. Davis's breath sounds and recognizes the manifestations of Mr. Davis's condition. Nurse Carl should expect a prescription for which of the following medications?
<b>Selected Option</b>	Prednisone PO
<b>Rationale</b>	A client who is experiencing anaphylaxis should not receive prednisone or any other medication orally due to edema in the throat area. Oral corticosteroid therapy is administered to prevent recurrent anaphylaxis if there is a known allergy to contrast dye. Prednisone can be administered as a prophylactic measure.

## 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<sup>®</sup> 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.