

## Module Report

Simulation: HealthAssess 3.0

Module: Cardiovascular



Individual Name: **Madalyn Goble**

Institution: **Lakeview CON**

Program Type: **BSN**

### Overview Of Most Recent Use

	Date	Time Use	Score
Lesson	11/13/2024	16 min 50 sec	N/A
Test	11/13/2024	8 min	100.0%

### Lesson Information:

#### Lesson - History:

	Date/Time (ET)	Time Use	Total Time Use: 17 min
Lesson	11/13/2024 4:57:12 PM	16 min 50 sec	
Lesson	11/13/2024 4:38:54 PM	0 min 7 sec	







## Individual Performance Profile

### Skills Module 3.0: Diabetes Mellitus Management Posttest



Individual Name: **MADALYN GOBLE**      Composite Score: **100.0%**  
Institution: **Lakeview CON**      Practice Time: **4 min**  
Program Type: **BSN**  
Group Size: **35**  
Test Date: **12/7/2024**  
# of Questions: **8**

#### Scores

	Individual Score											
	Score	1	10	20	30	40	50	60	70	80	90	99
<b>COMPOSITE SCORES</b>	<b>100.0%</b>											▲
Diabetes Mellitus Management Posttest	100.0%											▲

#### Topics To Review

#### Outcomes

Individual Score	Descriptions
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**Individual Performance Profile**  
**Pharmacology Made Easy 5.0 The Cardiovascular System Test**



Individual Name: <b>MADALYN GOBLE</b>	<b>Individual Score:</b>	<b>100.0%</b>
Student Number: <b>7833208</b>	Practice Time:	<b>41 min</b>
Institution: <b>Lakeview CON</b>		
Program Type: <b>BSN</b>		
Test Date: <b>12/7/2024</b>		

<b>Individual Performance in the Major Content Areas</b>				<b>Individual Score (% Correct)</b>										
Sub-Scale	# Items	# Points	Individual Score	1	10	20	30	40	50	60	70	80	90	100
Pharmacology Made Easy 5.0 The Cardiovascular System Test	25	52	100.0%											

**Individual Performance Profile**  
**Dosage Calc 4.0 Oral Medications Test**



Individual Name: <b>MADALYN GOBLE</b>	<b>Individual Score:</b>	<b>100.0%</b>
Student Number: <b>7833208</b>	Practice Time:	<b>20 min</b>
Institution: <b>Lakeview CON</b>		
Program Type: <b>BSN</b>		
Test Date: <b>12/7/2024</b>		

**Outcomes**

	No of Points	Individual Score	Description
Oral Dosage	25	100.0%	Correctly calculates oral medication dosages.



ACTIVE LEARNING TEMPLATE: *Medication*

STUDENT NAME Madalyn Goble

MEDICATION Insulin Lispro (Humalog)

REVIEW MODULE CHAPTER 37

CATEGORY CLASS Antidiabetic

**PURPOSE OF MEDICATION**

**Expected Pharmacological Action**

Promotes cellular uptake of glucose (decreases glucose levels)  
Converts glucose into glycogen and promotes energy storage  
Moves potassium into cells (along with

**Therapeutic Use**

Insulin is used for glycemic control of diabetes mellitus (type 1, type 2, gestational) to prevent complications.  
Clients who have type 2 diabetes mellitus can require insulin when:

**Complications**

Hypoglycemia, hypokalemia, and lipohypertrophy.

**Medication Administration**

Adjust the insulin dosage to meet insulin needs. Ensure adequate glucose is available at the time of onset of insulin and during all peak times. Administer lispro by subcutaneous injection, continuous subcutaneous infusion, and IV route. Instruct clients to

**Contraindications/Precautions**

Pregnancy: Use with caution; the requirements for insulin can be increased.  
Lactation: Use with caution; can inhibit milk production.  
Reproductive: Notify the provider if pregnancy is planned or suspected.

**Nursing Interventions**

Monitor blood glucose levels for hypoglycemia (less than 70 mg/dL) and adjust insulin or oral antidiabetic dosages accordingly. Monitor blood glucose levels for hyperglycemia and adjust insulin doses accordingly. Higher insulin doses can be indicated.

**Interactions**

Sulfonylureas, meglitinides, beta blockers, and alcohol have additive hypoglycemic effects with concurrent use. Concurrent use of thiazide diuretics and glucocorticoids can raise blood glucose levels and thereby counteract the effects of insulin. Beta blockers can mask SNS response to hypoglycemia (tachycardia, tremors), making it difficult

**Client Education**

Monitoring glucose levels is important when taking this medication, and do not rely on SNS manifestations as an alert to developing hypoglycemia. Maintain a regular eating schedule to ensure adequate glucose during times of hypoglycemic action.

**Evaluation of Medication Effectiveness**

This medication can be proven effective through the use of insulin level tests, A1C tests, and self-blood glucose monitoring.

ACTIVE LEARNING TEMPLATE: *Medication*

STUDENT NAME Madalyn Goble

MEDICATION Clopidogrel

REVIEW MODULE CHAPTER 23

CATEGORY CLASS Anticoagulant

PURPOSE OF MEDICATION

Expected Pharmacological Action

Antiplatelets prevent platelets from clumping together by inhibiting enzymes and factors that normally lead to arterial clotting. Antiplatelet medications inhibit platelet aggregation at the onset of the clotting

Therapeutic Use

Primary prevention of acute myocardial infarction  
Prevention of reinfarction in clients following an acute myocardial infarction  
Prevention of ischemic stroke or transient

Complications

Bleeding, GI effects (diarrhea, dyspepsia, pain)

Medication Administration

Clopidogrel is sometimes prescribed concurrently with aspirin, which increases the risk for bleeding. Clopidogrel should be discontinued 5 to 7 days before an elective surgery.

Contraindications/Precautions

Pregnancy: Use only if needed.  
Lactation: Contraindicated.  
Reproductive: Notify provider if pregnancy is planned or suspected.  
Contraindications include clients who have thrombocytopenia, or history of bleeding due to genetic

Nursing Interventions

If used concurrently, monitor carefully for indications of bleeding. If needed for GI effects, pantoprazole interferes the least with platelet inhibition.

Interactions

Concurrent use of other medications that enhance bleeding (NSAIDs, heparin, warfarin, thrombolytics, antiplatelets) increases risk for bleeding. Proton pump inhibitors or other medications that inhibit CYP2C19 (fluoxetine, fluconazole, etravirine, felbamate) decrease effectiveness.

Client Education

Prevention of strokes, myocardial infarctions, and reinfarction can be accomplished with low-dose aspirin (81 mg). Notify the provider regarding aspirin use.

Evaluation of Medication Effectiveness

Depending on therapeutic intent, effectiveness can be evidenced by absence of arterial thrombosis, adequate tissue perfusion, and blood flow without occurrence of abnormal bleeding.

# System Disorder

STUDENT NAME **Madalyn Goble**

DISORDER/DISEASE PROCESS **Myocardial Infarction**

REVIEW MODULE CHAPTER **32**

**Alterations in Health (Diagnosis)**

Acute myocardial infarction

**Pathophysiology Related to Client Problem**

An acute onset of ischemia to myocardium that can result in myocardial death. An abrupt interruption of oxygen

**Health Promotion and Disease Prevention**

Maintain exercise routine to remain physically active. Consult provider before

**ASSESSMENT**

**Risk Factors**

Male sex assigned at birth or postmenopausal clients, ethnic background, sedentary lifestyle, hypertension, tobacco use, hyperlipidemia, BMI greater than

**Expected Findings**

Anxiety, feeling of impending doom, chest pain: substernal or precordial, reports of tight squeezing, crushing, heavy/aching pressure, or constricting feeling in

**Laboratory Tests**

Myoglobin, creatinine kinase-MB, troponin I or T.

**Diagnostic Procedures**

Electrocardiogram, stress test, thallium scan, cardiac catheterization.

**SAFETY CONSIDERATIONS**

**PATIENT-CENTERED CARE**

**Nursing Care**

Monitor vital signs every 5 minutes until stable, then every hour, serial ECG, continuous cardiac monitoring, location,

**Medications**

Nitroglycerin, morphine sulfate, metoprolol, alteplase, aspirin, clopidogrel, heparin, enoxaparin, and eptifibatide.

**Client Education**

Cardiac rehab should be consulted for a specific exercise program related to the heart, nutritional services, such as a dietitian, can be consulted

**Therapeutic Procedures**

Percutaneous transluminal coronary angioplasty and bypass graft.

**Interprofessional Care**

Case manager, social worker, pharmacist, pain management services can be consulted, cardiac rehab care can be consulted, nutritional

**Complications**

Acute MI, heart failure/cardiogenic shock, ischemic mitral regurgitation, and dysrhythmias.

# System Disorder

STUDENT NAME Madalyn Goble

DISORDER/DISEASE PROCESS Diabetes Mellitus Type 2

REVIEW MODULE CHAPTER 83

<p>Alterations in Health (Diagnosis) <b>Type 2 Diabetes Mellitus</b></p>	<p>Pathophysiology Related to Client Problem <b>A progressive condition due to increasing inability of cells to respond to insulin and decreased production of</b></p>	<p>Health Promotion and Disease Prevention <b>Lifestyle modifications can reduce the risk of type 2 diabetes, and minimize the</b></p>					
<p><b>ASSESSMENT</b></p> <table border="1"> <tr> <td data-bbox="266 695 675 909"> <p>Risk Factors <b>Metabolic syndrome, insulin resistance, pancreatitis, Cushing's syndrome, and age.</b></p> </td> <td data-bbox="696 695 1102 909"> <p>Expected Findings <b>Polyuria, polydipsia, polyphagia, Kussmaul respirations, recurrent infections, acetone/fruity breath odor, headache, nausea, vomiting, abdominal pain, inability to</b></p> </td> </tr> <tr> <td data-bbox="266 921 675 1136"> <p>Laboratory Tests <b>Fasting blood glucose, oral glucose tolerance test, glycosylated hemoglobin, urine ketones, lipid profile, c-peptide levels, autoantibodies for insulin, islet</b></p> </td> <td data-bbox="696 921 1102 1136"> <p>Diagnostic Procedures <b>Self-monitored blood glucose</b></p> </td> </tr> </table>		<p>Risk Factors <b>Metabolic syndrome, insulin resistance, pancreatitis, Cushing's syndrome, and age.</b></p>	<p>Expected Findings <b>Polyuria, polydipsia, polyphagia, Kussmaul respirations, recurrent infections, acetone/fruity breath odor, headache, nausea, vomiting, abdominal pain, inability to</b></p>	<p>Laboratory Tests <b>Fasting blood glucose, oral glucose tolerance test, glycosylated hemoglobin, urine ketones, lipid profile, c-peptide levels, autoantibodies for insulin, islet</b></p>	<p>Diagnostic Procedures <b>Self-monitored blood glucose</b></p>	<p><b>SAFETY CONSIDERATIONS</b></p>	
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ACTIVE LEARNING TEMPLATE: *Therapeutic Procedure*

STUDENT NAME Madalyn Goble

PROCEDURE NAME Cardiac Catheterization

REVIEW MODULE CHAPTER 28

**Description of Procedure**  
Insertion of a catheter into a femoral, brachial, or radial vessel and threading it into the right or left side of the heart. Coronary artery narrowings and/or occlusion are identified by the injection of contrast media under fluoroscopy.

**Indications**  
Unstable angina and ECG changes, confirm and determine locations and extent of heart disease.

**Outcomes/Evaluation**  
N/A

**Potential Complications**  
Artery dissection, cardiac tamponade, hematoma formation, allergic reaction related to contrast media, external bleeding at insertion site, embolism, restenosis of treated vessel, retroperitoneal bleeding, and acute kidney injury.

**CONSIDERATIONS**  
**Nursing Interventions (pre, intra, post)**  
Pre: maintain NPO status for at least 4 hours, obtain vitals and assessment data, ensure consent is signed, ensure client and family understand procedure, assess for shellfish allergy, assess renal function prior to introduction of contrast media, administer premedications as prescribed, ask about holding metformin 48 hours before procedure.  
Intra: administer sedatives and analgesics as

**Client Education**  
Leave dressing in place for the first 24 hours after discharge, avoid strenuous exercise for prescribed period of time, immediately report bleeding from the insertion site, chest pain, SOB, and changes in color or temp of extremity, restrict lifting to less than 10 lbs, bending at the waist, or straining for at least 24 hours or for the prescribed period of time if groin was used, restrict to 5 lbs or less if

**Nursing Interventions**  
Notify provider immediately, administer fluids to combat hypotension, obtain chest x-ray or ECG to confirm, prepare for pericardiocentesis, monitor hemodynamic pressures, monitor heart rhythms, monitor for reoccurrence of manifestations after the procedure, monitor for dyspnea and provide oxygen as indicated, monitor for sensation, color, cap refill, and peripheral pulses in extremity distal to insertion site, assess groin at prescribed intervals as needed hold



# ATI Swift River Simulations 2.0

## Client Report Sheet

Room Number: 109	Allergies: NKA	Diet: Diabetic	Acuity 1 (2) 3
Client Name: Donald Lyles	Pronouns: He/Him		
Health Alteration/Concept and Exemplar: Type 2 diabetes and Acute myocardial infarction			
Date of Birth/Age: 11/26/1972 52 years old	Code Status: Full		
Medical Record Number: 869116221	Provider:		
SBAR report: Situation: 52 year old male admitted for stabilization of uncontrolled type 2 diabetes. Background: Diagnosed 6 months ago w/ type 2 diabetes. DMH includes an acute MI 1 year ago + refused cardiac rehab. Client does not follow dietary recommendations. Client prescribed antihypertensives. Assessment: BMI is 37. Glucose 370mg/dL. Recommendations: Follow dietary recommendations + monitor blood glucose.			
Client specific considerations that surround diversity and inclusion (culture, religion, age, language):			
		Signature	SpO <sub>2</sub>

Time	Blood Pressure	Heart Rate	Respirations	Temperature	SpO <sub>2</sub>
	146/94 mmHg	88 bpm	22/min	37.3°C (99.2°F)	94% RA

Neurologic Assessment Findings:  
 Alert and oriented times 4.  
 Numbness in toes.

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Cardiovascular (Perfusion) Assessment Findings:

S1 + S2 noted w/ regular rhythm. Pulses equal and +2 in all extremities.

Respiratory (Gas Exchange) Assessment Findings:

Lungs clear bilaterally.

Oxygen Delivery: Room air

Oxygen Amount:

GI/GU (Elimination) Assessment Findings:

Abdomen soft + nontender with normoactive bowel sounds.

Skin (Tissue Perfusion) Assessment Findings:

Skin warm + dry, mucous membranes moist + pink, cap refill 3 sec in bilateral lower extremities + 2 sec in bilateral upper extremities.

Lab Results:

HgA1c 13.2%, Blood glucose 98 mg/dL

Diagnostic Results:

Not given

IV site:

Right forearm, saline locked.

Medications	Dosage	Route	Frequency	Time
Sub Q insulin				
Oral antidiabetic				
Anti-hypertensive				

## Discussion Questions

Is the setting appropriate to care for this client? Why or why not?

Yes, this setting is appropriate for this client as he is experiencing symptoms related to his diabetes and a potential acute myocardial infarction.

- What considerations (culture, literacy, religion, diet, economic, education, pronouns, gender identity, etc.) should you address when caring for this client?

The client's sister has durable power of attorney over the client, so she needs to be consulted before decisions are made.

- What resources or supplies will you need when caring for this client?

We will need a blood glucose monitoring system, vitals machines, and access to the client's electronic medical record.

### Clinical Judgement Questions

#### Recognize Cues (Assessment)

- Was the report effective for you to care for this client?

No, it needed more information.

- What information is missing from the scenario and is needed to effectively care for the client?

Diagnostic results would be really helpful in determining what is wrong with the client. More vital sign values could also help the nurse determine any trends in the client's condition.

- What information was relevant to the client's condition?

The client's blood glucose levels were relevant as he was there for stabilization of uncontrolled type 2 diabetes.

- What subtle changes did you recognize in the client's condition? What conditions were the subtle changes in the client's health status related to?

The client began to experience heartburn, and his pulse and temperature became elevated while his respiration rate and O<sub>2</sub> saturation decreased. Upon assessment, the nurse noted fine crackles in the lungs, an irregular heart rhythm, +2 edema in the bilateral extremities, +1 pulses in the lower extremities, +2 pulses in the upper extremities, capillary refill of 3 seconds in the lower extremities, capillary refill of 2 seconds in the upper extremities, and skin that was cool to the touch and diaphoretic. These changes were related to the client's acute myocardial infarction.

#### Analyze Cues (Analysis)

- Compare the client findings to the evidence-based resources and standards of care.

Common findings of clients experiencing an acute MI include cool, clammy skin, tachycardia with heart palpitations, diaphoresis, and indigestion/heartburn (Assessment Technologies Institute, n.d.). This client experienced all of these.

- What are the specific needs of this client?

The client needs to be treated immediately for his MI, but he also needs to be treated for his type 2 diabetes and provided education on treating this condition, medication/diet compliance, as well as preventing another MI.

- What are the potential complications this client may experience?

This client could develop heart failure as well as diabetic ketoacidosis.

- What findings are of immediate concern for this client?

The client's oxygen saturation level of 88% on room air, the crackles heard in the lungs, and the irregular heart rhythm.

### Prioritize Hypotheses (Analysis)

- Identify and rank the top three problems for this client. Provide a rationale for your decision on the rank order.

1. Acute myocardial infarction

- a. I put this as number one because if left untreated, the client will die.

2. Uncontrolled type 2 diabetes

- a. I put this as number two because untreated diabetes can cause a lot of other health issues and puts the client more at risk for infection.

3. Dietary non-compliance

- a. I put this at number three because the client refuses to eat a healthier diet. The client has a history of an acute MI, and having a poor diet increases the risk of recurrence as well as worsening the client's diabetes.

### Generate Solutions (Planning)

- What interprofessional healthcare team member will need to be included in establishing a plan of care?

Cardiac rehabilitation, dietitians, and social work will need to be included in planning care for this client.

#### Take Actions (Implementation)

- Identify the nursing actions that should be taken based on the prioritized client problems.

The client needs to be taken in for a cardiac catheterization immediately to treat his MI. All pre-, intra-, and post-operative nursing interventions should be implemented. The nurse should also monitor the client's blood glucose levels and administer insulin as needed to correct abnormal values. The nurse needs to also enforce a cardiac and diabetic diet for the client while hospitalized.

- Identify the potential impact the nursing action has on the client outcomes.

The cardiac catheterization will hopefully reverse any damage to the heart that can be reversed while preventing any further damage or death from occurring. Monitoring blood glucose levels and administering corrective insulin could help the client get his type 2 diabetes under control. The enforcement of a cardiac and diabetic diet will help the client receive the proper nutrients that he needs while keeping him away from the fats and other nutrients that are causing him harm.

#### Evaluate Outcomes (Evaluation)

- What responses by the client would indicate that the nursing actions were effective?

Relief from all MI symptoms, maintenance of blood glucose levels in the normal reference range, and strict consumption of foods aligned with the prescribed diets.

- What are the safety concerns you identified caring for the client(s)?

The client is not compliant with his diets or medications, and he refused cardiac rehabilitation following his previous MI. The client may not be able to make his own medical decisions. His uncontrolled diabetes also puts him at risk for serious health complications.

## Reflection Questions

Evaluate your ability to care for the client(s). What did you do well, and what could have been improved?

I was able to identify the client's condition quickly and prioritize what needed to be done for him. However, there were times that I had to go back and reference other sources to make decisions as I did not know what choices to make.

- Discuss what information you would need to know prior to caring for this client if you could do this over.

I would need to know more about the client's past medical history, past social history, and more about his past and current mental state. I would also like to know why his sister has power of attorney over him.

- What do you know now that you did not know prior to completing this case?

How noncompliance can really impact a client's health and how uncontrolled diabetes can reach havoc on the body.

- How will this experience change the way you care for clients in the future?

This showed me that I need to dive deeper into a client's past medical and social history as these can have a major impact on the client's health.

- Describe what you learned and how you will learn from this experience.

I learned that clients could come in for treatment of one condition and develop another issue while admitted. This client developed symptoms of an acute MI while in the hospital. This experience showed me that I need to have a baseline assessment, vitals, and labs on all clients as having them to reference can quickly show a change in a client's status.

## References

Assessment Technologies Institute. (n.d.). *RN adult medical surgical nursing* (12th ed.).