Student Name __Abbey Derrickson_____
ATI Real Life Scenario_____

*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: ___ Acute MI_____

NCLEX IV *(8)*: Physiological Integrity/Physiological Adaptation

Anatomy and Physiology
Normal Structures

- 4 chambered hollow muscular organ about the size of a fist
- Lies within the thorax in the mediastinal space that separates the right and left pleural cavities
- Composed of 3 layers; the thin inner lining, the endocardium; the myocardium, a layer of muscle; and the epicardium which is the outer layer
- The heart is covered by a fibrous sac called the pericardium
- The septum divides the heart into left and right; the interatrial divides the heart into right and left atria, and the interventricular septum divides the heart into right and left ventricle
- Blood flow through the heart; the RA receives venous blood from the IVC and SVC and the coronary sinus, blood passes through the tricuspid valve into the right ventricle, with each contraction the heart pumps blood through the pulmonic valve into the lungs to become oxygenated, then into the left atrium through the pulmonary vein, blood then passes through the mitral valve and into the left ventricle, from the left ventricle it pumps through the aortic valve to the aorta, and finally to the body

Pathophysiology of Disease

- An abrupt stoppage of blood flow through a coronary artery with a thrombus caused by platelet aggregation
- Causes irreversible cell death in the heart muscle beyond the blockage
- 2 types; STEMI and an NSTEMI
- STEMI: caused by an occlusive thrombus which results in ST elevation in the ECG leads facing the infarction
- ST segment elevation is significant if it is 1 mm or more above the isoelectric line in at least 2 continuous leads
- NSTEMI: caused by a nonocclusive thrombus does not cause ST segment elevation
- The ECG may or may not show ST depression and/or an inverted T wave in the leads in the area facing the infarction
- Most MI's affect the left ventricle

NCLEX IV *(7)*: Reduction of Risk

Anticipated Diagnostics
Labs

- BNP
- Troponins
- Cardiac markers
- EF

Additional Diagnostics

-EKG
- echocardiogram
- CXR

- Coronary Circulation; blood flows into the two major coronary arteries during diastole, the LCA arises from the aorta and divides into 2 main branches (the LAD and the left circumflex artery), these arteries supply the left atrium and ventricle, the septum, and part of the right ventricle, the right coronary also arises from the aorta and its branches supply the right atrium, right ventricle, and part of the posterior wall of the left ventricle
- 90% of people, they receive blood to the AV node and Bundle of His through the right coronary artery
- Blockage of the right coronary artery causes major conduction defects

NCLEX II *(3)*: Health Promotion and Maintenance

Contributing Risk Factors

- Smoking
- Hypertension
- Obesity
- CAD
- Diabetes
- Hyperlipidemia
- Unhealthy diet
- Lack of exercise
- Previous MI

Signs and Symptoms

- Severe chest pain not relieved by rest, position change, or nitrate could indicate an MI
- Heavy, pressure, tight, burning, constricted, or crushing chest feeling
- Pain may radiate to the neck, lower

NCLEX IV *(7)*: Reduction of Risk

Possible Therapeutic Procedures

Non-surgical

- Thrombolytic therapy

Surgical

- Cardiac catheterization with stent placement
- CABG
- Balloon angioplasty
-

Prevention of Complications

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

- Dysrhythmias
- Heart failure
- Cardiogenic shock
- Papillary muscle dysfunction or rupture
- Left ventricular aneurysm
- Ventricular septal wall rupture and

	jaw, arms or back - Weakness - Fatigue - Nausea - Indigestion - Shortness of breath - Change in mental status - Pulmonary edema - Dysrhythmia - Diaphoresis - Increased HR and BP - Fever		left ventricular free wall rupture - Pericarditis - Dressler syndrome

NCLEX IV *(6)*: Pharmacological and Parenteral Therapies

Anticipated Medication Management

- Morphine
- Nitroglycerin
- Aspirin
- ACE inhibitors
- Beta blockers
- Digoxin
- Vasodilators
- Integrillin

NCLEX IV *(5)*: Basic Care and Comfort

Non-Pharmacologic Care Measures

- oxygen

NCLEX III *(4)*: Psychosocial/Holistic Care Needs

What stressors might a patient with this diagnosis be experiencing?

- Fear of dying
- Lifestyle modifications
- Cost
- Surgery

Client/Family Education

List 3 potential teaching topics/areas

- follow the DASH diet
- exercise 3-4x/week
- smoking cessation

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)

- PCP
- Cath lab
- Imaging
- Pharmacy
- Laboratory
- Cardiologist
- PT/OT

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

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

Problem #1:__ Acute Pain: Chest Pain

Patient Goals:

1. _ATI patient will have 0/10 chest pain throughout my time of care.
2. _ _ATI patient will have a heart rate between 60-100 bpm, a blood pressure less than or equal to 120/80, and a respiratory rate of 20 breaths per minute or less during my time of care. _____

Assessments:

- Assess onset, type, quality, duration, and location of pain prn, assess response to pain prn, assess HR, BP, and RR q4hrs, assess level of pain on 0/10 pain scale_ _____

Interventions (In priority order):

1. Administer morphine at onset of chest pain during my time of care.
2. Administer analgesia at onset of chest pain during my time of care.
3. Administer nitroglycerin at onset of chest pain during my time of care.
4. Administer oxygen at onset of chest pain during my time of care.
5. Educate on use of nitroglycerin at home if chest pain develops, during my time of care.
6. Educate on type of pain; heavy and crushing in epigastric area prior to an MI during my time of care.

Problem #2:__ Decreased Cardiac Output

Patient Goals:

1. ATI patient will have a urine output of 30mL/hr during my time of care.
2. _ ATI patient will have strong peripheral pulses, warm and dry skin, and a regular heart rate of 60-100 bpm during my time of care. _

Assessments:

- __ Assess for changes in LOC; assess HR and BP; assess skin color, temperature, and moisture; assess peripheral pulses; assess capillary refill; assess urine output; assess level of energy; assess respiratory pattern, rhythm, and rate

Interventions (In priority order):

1. Continuous cardiac monitoring throughout my time of care
2. _ Administer medications such as digoxin, ACE inhibitors, diuretics, antidysrhythmics, and inotropic agents as prescribed during my time of care.
3. Maintain adequate ventilation and perfusion during my care by administering oxygen therapy prn.
4. __Maintain optimal fluid balance to decrease workload on the heart and to increase cardiac output throughout my care.
5. _Encourage a DASH diet during my time of care.
6. _Promote physical rest by clustering care throughout my 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: __Acute Pain: Chest Pain

_____

Patient Goals:

1. _R.D. will have a 0/10 pain level in relation to chest pain by the end of my care. _____ Met ☐ Unmet ☐
2. _R.D. will perform teach back on ways to improve health maintenance to prevent future myocardial infarctions during my time of care. _ _____ Met ☐ Unmet ☐

Problem #2: ___ Decreased Cardiac Output

_____

Patient Goals:

1. __ R.D. will have a BP greater than or equal to 120/80 by the end of my care.
_____ Met ☐
Unmet ☐

2. __ R.D. will have an oxygenation status of 95% or greater on 2 L NC showing adequate perfusion to vital organs by the end of my care.
_____ Met ☐
Unmet ☐

SOAP Notes Based on Priority Problems

Priority Patient Problem #1: __Acute Pain_____

Subjective: *This section explains the client symptoms. Include a narrative of the patient's complaints/concerns and/or information obtained from secondary sources.*	**Chief Complaint:** Chest pain starting at 16:55 Pain 8/10 **PMH:** HTN, CAD with angina, asthma, quit smoking 1 month ago and occasionally chews tobacco **Allergies:** PCN, peanuts, and sulfa **Current Medications:** Nitroglycerin sublingual tablets, lisinopril, albuterol inhaler
Objective: *This section is your clinical observations. Include, pertinent vital signs, pertinent labs and diagnostics related to priority problem.*	**Vital Signs:** 17:15→ HR- 96; BP- 110/82; RR- 28; SpO2- 92%; EKG with prolonged P wave, PVC's and ST elevation 17:18→ HR- 98; BP- 104/78; RR- 24; SpO2- 94%; EKG with prolonged P wave, PVC's and ST elevation 17:20→ HR- 104; BP- 100/68; RR- 24; SpO2- 95%; EKG with prolonged P wave, PVC's and ST elevation 17:22→HR- 104; RR- 26; BP-96/56; SpO2- 94% on 4L NC; temp 37.2 17:25→ HR- 106; RR- 24; BP- 100/66 SpO2- 96% on 4L NC 17:30→ HR- 102; BP- 98/60; RR- 22; SpO2- 96% on 4L NC

	17:35→ HR- 104; BP- 102/68; RR- 22; SpO2 97% on 4L NC **Labs:** 1745 Troponin T: 0.2 ng/mL Troponin I: 0.06 ng/mL 2145 Troponin T: 0.4 ng/mL Troponin I: 0.07 ng/mL 0100 Troponin T: 0.6ng/mL Troponin I: 0.08 ng.mL 0400 Troponin T: 0.8 ng/mL Troponin I: 0.09 ng/mL 0800 Troponin T: 0.6 ng/mL Troponin I: 0.07 ng/mL **Diagnostics:** EKG with ST segment elevations CXR demonstrates no fluid or pneumothorax, aortic arch has calcifications and appears intact with no dilation of the artery
Assessment: *Focused assessment on your priority problem.*	Ashen skin Pain 8/10 EKG shows ST segment elevation Telemetry monitor showing tachycardia with PVC's
Plan ***Based on priority problem only** *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*	**Plan:** - Cardiac catheterization to open blocked artery within 90 minutes - Continuous cardiac monitoring - Femoral site monitoring - Transfer to ICU following procedure

being performed?	**Teaching/Resources:** - Educated on exercise, limiting fast food, losing weight, proper diet, adding in fish or chicken, DASH diet. - Educated on cardiologist follow up - Educated on use of nitroglycerin

Priority Patient Problem #2: _Decreased Cardiac Output
_____

Subjective: *This section explains the client symptoms. Include a narrative of the patient's complaints/concerns and/or information obtained from secondary sources.*	**Chief Complaint:** SOB, dyspnea "I feel like I can't catch my breath"
Objective: *This section is your clinical observations. Include vital signs, pertinent labs and diagnostics related to priority problem.*	**Vital Signs:** 2100→ temp 36; HR- 96; RR- 14; BP- 112/66; SpO2- 98% 2L NC; arterial blood pressure 114/70; CVP- 10 2110→ HR- 98; RR- 20; SpO2- 96% 2L NC; arterial BP 118/72; CVP; 10 2115→ HR- 112; RR- 32; SpO2- 94% 2L NC; arterial BP 148/94; CVP 10 2120→ HR-116; RR- 32; SpO2- 87% non-rebreather; arterial BP 155/98; CVP- 10 2125→ HR- 118; RR- 32; SpO2; 88% non re-breather; arterial BP 156/96; CVP-8 2130→ HR- 118; RR- 36; SpO2- 89% non re-breather; arterial BP 158/98; CVP- 8 2135→ HR- 124; RR- 36; SpO2- 92% non re-breather; arterial BP 162/98; CVP- 9 2140→ HR- 120; RR- 32; SpO2- 94% non re-breather; arterial BP 148/92; CVP- 10 2145→ HR- 112; RR- 28; SpO2- 98% non re-breather; arterial BP 134/82; CVP-9

	2150→ HR- 110; RR- 24 SpO2- 99% non re-breather; arterial BP 132/80; CVP- 9 2155→ HR- 98; RR-18; SpO2- 100% non re-breather; arterial BP 128/78; CVP- 10; EKG- RSR with PVC's 2200→ HR- 88; RR- 14; BP- 108/74; SpO2- 100% non re-breather; arterial BP 108/74; CVP 10; EKG- RSR with PVC's 2205→ HR- 88; RR- 14; BP- 112/74; SpO2- 100% 3L NC; arterial BP 110/72; CVP-10 2215→ HR- 85; RR- 12; BP- 110/72; SpO2- 100% 3L NC; arterial BP 108/72; CVP- 10 2230→ HR- 78; RR- 12; BP- 112/74; SpO2- 99% 3L NC; arterial BP 110/74; CVP- 10 2245→ HR- 76; RR- 12; BP- 110/72; SpO2- 98% 3L NC; arterial BP 110/74; CVP- 10 2300→ HR- 74; RR- 12; BP- 112/72; SpO2- 99% 3L NC; arterial BP 111/72; CVP- 10 Next night VS prior to cardiogenic shock BP- 2000- 64/42; 2005- 82/60; 2010- 78/56 **Labs:** 2230 Potassium: 3.2 mEq/L 0800 Potassium 3.4 mEq/L 1745 Troponin T: 0.2 ng/mL Troponin I: 0.06 ng/mL 2145 Troponin T: 0.4 ng/mL Troponin I: 0.07 ng/mL 0100 Troponin T: 0.6ng/mL Troponin I: 0.08 ng.mL 0400 Troponin T: 0.8 ng/mL Troponin I: 0.09 ng/mL 0800 Troponin T: 0.6 ng/mL Troponin I: 0.07 ng/mL **Diagnostics:** EKG with ST segment elevations CXR demonstrates no fluid or pneumothorax, aortic arch has calcifications and appears intact with no dilation of the artery

Assessment: *Focused assessment on your priority problem.*	Ashen skin, cough, nasal congestion, SOB, dyspnea, dusky nail beds, stridor Telemetry monitor showing tachycardia with PVC's
Plan ***Based on priority problem only** *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?*	**Plan:** - Cardiac catheterization with stent placement to open up the blocked coronary artery within 90 minutes - Administer ACE inhibitors and beta blockers - Administer potassium to prevent dysrhythmias - Administer norepinephrine to increase blood pressure due to cardiogenic shock - Administer dobutamine to increase blood pressure **Teaching/Resources:** - Educated on exercise, limiting fast food, losing weight, proper diet, adding in fish or chicken, DASH diet. - Educated on purpose of combination medication of aspirin and clopidogrel.

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?

_____The biggest takeaway from participating in care of this patient was that multiple things can go wrong at the same time. In addition, I learned the importance of being able to recognize a problem quickly to then identify the correct treatment. Rodney Davis came in complaining of chest pain and ended up being diagnosed with a STEMI. Throughout his hospital stay, he developed an anaphylactic reaction from the contrast used during his procedure, a hematoma at the site of the catheterization, and cardiogenic shock all following his cardiac catheterization procedure. Not all of these complications could have been anticipated, but because of the nurses critical thinking skills, the patient had a good outcome. From this, I learned the importance of good assessments and how crucial it is to ask the right questions and to pick up on key points that will let you know there is something wrong with the patient. I also learned that as a nurse, I should always be anticipating certain complications that can follow certain procedures. While a cardiac catheterization procedure usually goes well with little complications, it is still vital that as the nurse I am prepared for an unexpected complication so I can provide the best care to my patient. This will impact my nursing practice because I will be sure to perform good assessments, always ask about allergies, listen to my patient when they are telling me they do not feel right, and listen for key symptoms that could lead to a bigger complication than what they originally presented
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Time Allocation: 8 hours