Medications
(see attached)

IV Sites/Fluids/Rate

Right subclavian triple lumen

Dopamine 6.1ml/hr
Insulin Regular 1.2ml/hr
NS 30 ml/hr
NS 10ml/hr
NS 10ml/hr

Student Name Christina Grable Client Initials RM Date 2/11/2013

Age 56 Gender Male Room # SCU08 Admit Date 2/8/2013

CODE Status Full Allergies NKDA

Diet NPO Activity Bed Rest due to IABP Braden Score 16

State lab values and identify trends.

145	109	8	120
3.8	30	0.666	

7.4		10.4	
2.1	6.9		70
3.2		30.2	

State other appropriate lab results

ABG: pH 7.39 Normal
HCO3 27.8 High
PCO2 47.4 High
PO2 104 High
INR 1.1 normal
PT 12.3 normal
aPTT 33.7 normal

Troponin 0.92 on admission, second 11.9
Finger stick blood sugar 107

State diagnostic test results

12 lead EKG revealed no ST segment elevation

Chest radiograph revealed a non-acute nodule in right hilar area of lung.

Monitoring: Invasive/Non-Invasive
State specific monitoring device and specific values with each device

Swan-Ganz catheter in right subclavian: Measures CO, CI, SV, SVO_2, PA, PAOP, CVP, SVR, PVR
Arterial Line left radial: Measures continuous blood pressure, lab and ABG access
5 lead EKG with continuous heart monitoring
Pulse oximeter
Urimeter: Temperature hourly urine output.
3 Chest tubes hooked up to 3 chamber water drainage systems with suction
Temporary pacemaker present but set to off at this time.

Chief Complaint/Admitting Diagnosis(es):

Chest pain with elevated Troponin

Medical/Surgical Diagnosis(es):

Acute NSTEMI
History of remote subdural hematoma
Coronary Artery Disease (CAD) with 3 cardiac vessels occluded, and ejection fraction of 50%

ECG Interpretation (see attached) Normal Sinus Rhythm	1. Patient arrived via EMS to emergency department following awaking up in early morning with midsternal chest pain that radiated to back. Patient denied nausea, vomiting, and being short of breath. 2.Briefly describe the pathophysiology related to the patient's diagnosis and current medical/surgical condition. 3.Describe the patient's head to toe assessment findings and explain how they relate to the pathophysiology. Include the vital signs. 4.Integrate the current laboratory, diagnostic test results, hemodynamic parameters medications, medical and nursing interventions, and other treatments into the pathophysiology and explain how it is affecting this patient's outcome/current condition. Complete this on a separate sheet of paper. Cite references.	Cardiac catherization revealed 3 vessels occluded with ejection fraction 50
Past Medical/Surgical History Relevant to this admission Subdural hematoma (1980) Brain stem infarct (1980) 40 year smoking habit (1pk/day- 1 ½ pack/day) Family history: CAD (Mother and Father)		Treatments/ Medical and Nursing Interventions Daily weight Bed rest Keep HOB ≥ 30° I&O every hour Diet: NPO Monitor pulses especially radial Flush arterial line every hour DVT prophylaxis GI Prophylaxis

Primary Nursing Diagnosis with Relational Statement Impaired gas exchange related to ventilation/perfusion mismatch.	Short Term Goal Relevant to Nursing Diagnosis Patient will have adequate gas exchange as evidenced by PaCO2 <35 mmHg, and maintains oxygen saturation >90% with max of 2 liters of oxygen via nasal cannula within two days after extubation.	6 Nursing Diagnosis with Relational Statement Risk for falls related to medication side effects, and weakness in legs Risk for infection related to multiple invasive procedures Risk for imbalanced nutrition, less than body requirements related to diet order Risk for constipation related to medication side effects and decrease exercise, decrease
Definition (State definition and source) Impaired gas exchange is when an actual or potential decrease exchange of oxygen and carbon dioxide occur between the alveoli and vascular system (Carpenito-Moyet, 2008).	Outcome Criteria (Must be specific and measurable) Patient will be able to move pulmonary secretions after receiving education and performing deep breathing, coughing, and incentive spirometer correctly every hour.	

AEB: Defining characteristics specifically exhibited by your patient that support primary nursing diagnosis POX: 94% on 4 liters via nasal cannula PCO2 47.4 PO2 104 Diminished lung sounds bilaterally Rhonchi bilaterally Albuterol treatments	Educate and perform frequent position changes in order to prevent atelectasis, skin breakdown, and to assist with moving pulmonary secretions every hour. Patient will make progress toward decreasing the amount of supplemental oxygen that he requires by end of shift.	fluid intake Knowledge deficit related to chronic disease management secondary to CAD and smoking Anxiety related to unknown reason for hospitalization

Identify nursing interventions that you implemented with this patient. **Evaluate** patient progress towards achieving outcome criteria as a result of nursing interventions.

1) Monitored oxygen saturation via a pulse oximeter hourly. Oxygen saturation remained above 90% throughout my shift.

R.M.'s oxygen saturation went from 94% via nasal cannula on 4 liters to 99% on 4 liters of oxygen; therefore we were able to decrease the amount of supplemental oxygen to 3 liters during my shift.

Objective not met by end of shift. In order for patient to continue to strive toward this objective, they will need to continue using the incentive spirometer and deep breath and cough.

2) Educated on deep breathing, coughing, and using the incentive spirometer every other hour.
3) Encouraged using the incentive spirometer every hour.

Objective met. Patient verbalized and performed deep breathing, coughing, and incentive spirometer correctly, which helped to expel secretions within the lungs. Upon auscultation during last assessment, the client's lungs had zero to minimal rhonchi present.

4) Turned patient every 2 hours while in bed, and got patient up in chair.

This helped to move secretions in R.M.'s lungs and it promoted ventilation. R.M. did not have or develop any areas on his skin that would have indicated skin breakdown. He did not develop atelectasis during my shift.

Objective met. Patient did not develop or complain of skin breakdown or atelectasis during my shift. R.M. moved secretions often.

5) Kept HOB elevated >35° at all times.

This helped to make it easier for R.M. to expand his lungs and breath, which increases oxygenation.
This was shown by his oxygen saturation of 99% on 4 liters via nasal cannula, which we were able to change to 3 liters per nasal

cannula during my shift. R.M. showed no signs of cyanosis, and did not complain of dyspnea or short of breath during my shift.

Objective met. Patient was able to improve oxygenation by decreasing the amount of supplemental oxygen that he needed.

Secondary Nursing Diagnosis with Relational Statement	Short Term Goal Relevant to Nursing Diagnosis	What I Would Do Differently
Acute pain related to tissue trauma secondary to surgical intervention.	Patient will a report a decrease in pain within one hour of administration of analgesia after reporting a pain rating of 4 or greater on the VAS pain scale.	I wish that I would have been on the floor at 0700, in order to see him be extubated. This would have given me a fantastic opportunity to ask and learn how a client responds to the procedure, especially from a respiratory therapist. Unfortunately, this was just a luck type of situation. Even though I missed him being extubated, I was able to see a Swan-Ganz catheter and an arterial line. I also had the opportunity to discontinue these two lines with my nurses' help and supervision, which was awesome. I do wish that I would have spent more time with the Swan-Ganz catheter, and to prepare it for removal. I know that we went over them two weeks prior in clinical at school, but wow. For my morning report the nurse took me into the room, and went over everything, but I was so overwhelmed trying to figure out which color is what, and what numbers I get from which machine. I just spent my morning trying to remember what numbers I needed and trying to look up what they indicate. In the end I was grateful for the experience
Definition (State definition and source) Acute pain is defined as a state that an individual experiences and reports the "presence of severe discomfort or uncontrollable sensation" lasting between 1 second to 6 months (Carpenito-Moyet, 2008, p. 69).	Outcome Criteria (Must be specific and measurable) Assess for presence of pain. Help client to identify and quantify pain every hour or as indicated. Administer pain medications as ordered and when indicated by client's pain rating. Encourage relaxation techniques as indicated by client, when pain medications are not available for administration.	
AEB: Defining characteristics specifically exhibited by your patient that support primary nursing diagnosis CABG Saphenous vein harvesting Pain 5/10 on VAS pain scale Elevated pulse, 113		

		and was very confident the following clinical on that unit.

Identify nursing interventions that you implemented with this patient. **Evaluate** patient progress towards achieving outcome criteria as a result of nursing interventions.

Assessed pain, position, and bathroom needs every hour.

This helped to identify the specific needs of R.M. By asking about pain, we were able to control his pain more effectively. Asking about positional comfort, helps to identify uncomfortable positioning prior to causing pain. Even though he has a urimeter, I still addressed bathroom needs, in case the urimeter was not draining properly, he felt like he was going to have a bowel movement, or his abdomen was just uncomfortable.

Objective met. Client's pain was maintained at 5 or less on the VAS pain scale. We used comfort measures, such as position changes, and deep breathing. Client was encouraged and did brace his chest with a pillow to decrease pain when coughing and leaning forward.
.

I administered oxycodone approximately 0845 when client stated a pain level of 5/10 during my initial assessment.

Objective met. Administration of analgesics as ordered and as indicated per the client was completed. The client was able to control his pain for the rest of my shift and did not want any more pain medication.

Educated R.M. on relaxation techniques in order to reduce pain and help control the need for pain medications during my initial assessment and throughout the day.

We discussed deep breathing techniques, bracing the chest with a pillow, imagery, and distraction with the television. This along with comfortable positioning allowed the client to require less pain medications.

Objective met. Patient did not indicate he wanted any or require any additional pain medication after the administration of oxycodone in the morning. He was able to learn and ask questions regarding different techniques to reduce pain.

NURS 40010
Nursing of the Critically Ill
Nursing Process Paper Grading Criteria

Student's Name _____ **Semester** _____

	NPP #1	
Page 1		
Demographic, Diagnostic, Treatment and other Relevant Information (see left and right columns) (4)		
Integration/Synthesis (6)		
Page 2	**Primary Dx**	**Secondary Dx**
6 Nursing Diagnoses with Relational Statement-please refer to pages 29 and 30 of the syllabus for appropriate nursing diagnoses. (2)		
Selection of Appropriate N.D. and Definition (cite source) (1/1)		
Relational Statement (1/1)		
Defining Characteristics (AEB) (2/2)		
STG and specific and measureable Outcome Criteria (3/3)		
Interventions		
Nursing Interventions (NI) (5/5)		
Evaluation of NI (2/2)		
WIWDD (1)		
EKG Interpretation (1)		
Medication Sheet (minimum of 6 meds) (8)		
Late Points Deducted minus five (5) points per day		
Total Points Earned (50)		

1. Describe the patient's condition including signs/symptoms that led to this admission.

Patient arrived via EMS to emergency department following awaking up in early morning with midsternal chest pain that radiated to back. Patient denied nausea, vomiting, and being short of breath on admission.

2. Briefly describe the pathophysiology related to the patient's diagnosis and current medical/surgical condition.

This patient does not have a known history of hyperlipidemia. He does have a genetic predisposition to coronary artery disease (CAD), due to both of his parents having CAD. This patient's other risk factor for developing CAD is that he is a long term smoker of a pack to one and a half packs per day. Cigarette smoking alters lipid levels, including decreasing HDL, increasing LDL, increasing triglycerides, and increasing cholesterol (Urden, Stacey Lough, 2010). Cigarette smoking also increases his risk for a myocardial infarction (MI) and for a stroke. This patient presented to the emergency department with midsternal chest pain that radiated to the back. His chest pain was a result of ischemia to the heart muscle. The pain occurs from cardiac muscle not receiving adequate oxygen due to decreased blood supply from an occlusion in the cardiac vessel (Urden, Stacey, & Lough, 2010). In this patient it was an occlusion in three cardiac vessels that caused his chest pain. Damage or necrosis of the affected cardiac muscle occurred due to lack of blood supply and oxygenation. This causes cardiac biomarkers, such as his troponin level (0.92 and 11.9) to increase, and resulted in a diagnosis of NSTEMI (non-ST elevation myocardial infarction).

3. Describe the patient's head to toe assessment findings and explain how they relate to the pathophysiology. Include the vital signs.

General: Patient Name: Patient name is R.M. He is a 56 year old male, who weighs 184 lbs.
Temperature 99.4°F urimeter Blood pressure 143/59 (77), Pulse 113 beats per minute, respirations 17, Pulse oximeter reading is 94% on 4 liters via nasal cannula, Pain 5/10 on the VAS pain scale, patient
Neuro: A&O x 3 to his name, birth date, and hospital. Eyes were clear, with pupil's round, and reactive to light with + 3 in right eye and plus 4 in left eye
Respirations regular rate and rhythm with diminished with rhonchi in all lobes. Productive cough present.
Skin: Skin is dry and intact with surgical wounds on chest (4), and saphenous vein harvested from left leg. Skin turgor was under 3 seconds, with nail beds pink and cap refill less than 3 seconds. No edema present in upper or lower extremities. Radial and pedal pulses were strong and equal bilaterally (+2). Upper extremities strong and equal. Lower extremities weak and equal.
GI/GU: His abdomen was soft and non-tender, with hypoactive bowel sounds present in all four quadrants. R.M.'s last bowel movement was the day of admission (2/8/2013). Urine is dark yellow with output of 100-165 per hour throughout shift. Speech was clear, and mucous membranes were pink and moist, with no upper or lower dentures. R.M.'s Braden score was 16/23, which means that there is moderate risk for a pressure ulcer to develop.

4. Integrate the current laboratory, diagnostic test results, hemodynamic parameters medications, medical and nursing interventions, and other treatments into the pathophysiology and explain how it is affecting this patient's outcome/current condition.

Lopressor was to be given due to patient having tachycardia throughout the day. Tachycardia is a heart rate above 100. In this particular case it may be caused by patient having a myocardial infarction that affected the anterior myocardium (Urden, Stacy & Lough, 2010). This type of infarction impairs the ability for the left ventricle to pump correctly. This in turns decreases the ejection fraction (50% for R.M.) and his stroke volume.

R.M.'s CVP was 2 mmHg and 1mmHg. The normal CVP is 2-5 mmHg, so R.M.'s CVP is low, which

indicates a decrease in the right atrium filling pressure and the preload of the right ventricle (Urden, Stacy. & Lough, 2010). This is caused by a decrease in blood volume. R.M.'s heart hate may be increased due to it trying to compensate for the decrease volume. That is why he is tachycardic, which causes an increase in cardiac output, which his is elevated at 6.7 L/min and 8.5 L/min. R.M.'s cardiac index is normal at 3.3 L/min/m^2 and 4.1 L/min/m^2. The difference in a high cardiac output but a normal cardiac index can be accounted for because the cardiac index is patient specific to his height and weight; therefore his heart is compensating for the decrease volume by increasing his heart rate. The client's chloride level is increased (109 mmol/L), and may be due to dehydration.

ABG analysis: R.M.'s arterial blood gases (ABG's) are pH 7.39, HCO3 27.8, PCO2 47.4, and PO2 104. His pH is within the normal range, and his HCO3, PCO2, and PO2 are high. He is in full compensation respiratory acidosis.
R.M. ABG's are from the previous day, and occurred while he was intubated. Reasons for respiratory acidosis to occur are from decrease respirations due to things such as medications; however since he was on a ventilator the settings could have been adjusted to help compensate. In order for him to be totally compensated, the nurses may have increased his tidal volume, and PEEP in order to decrease the pCO2. The increase in PEEP would have prevented the alveoli from collapsing, giving more time for the oxygen and carbon dioxide to cross the alveolar-capillary membrane (Urden, Stacy. & Lough, 2010).

R.M.'s has a low hemoglobin of 10.4, a low hematocrit of 30.2%, and a low platelet count of 70 /mm^2. All three of these lab values could be decreased due to blood loss during the coronary artery bypass graft procedure. The platelet count may be attributed to the heparin therapy that R.M. is receiving every 8 hours. This is caused by an immune response to the heparin, resulting in thrombocytopenia. However I believe that the decrease in the platelet count is more likely to be caused by the blood loss during surgery.