Departmental Rotations
Post-Anesthesia Care Unit

Using the objectives listed below as a guide will help you to have a successful rotation in this department. Remember that you are a visitor in an actual work environment and that patient safety and comfort are the priority of your preceptors. Your visit may be interrupted if they become very busy, so wait patiently until they are free to resume working with you.

The post-anesthesia care unit (PACU) is a critical care unit located just outside the surgical suite area of the operating room. The beds are all fully monitored, enabling nurses to continuously track heart rate, blood pressure, and respirations. The nursing care in this unit is one to one. This refers to the fact that every patient is assigned a specific nurse. Individual care is necessary in patients recovering from anesthesia due to the cardiovascular and respiratory depressant effects of the drugs used.

The purpose of nursing in the PACU is to observe the patient and provide nursing care preceding surgery, during the critical period immediately following anesthesia and/or surgery, or a specialty procedure with a physician’s order. The objective is to provide a safe and efficient environment conducive to patient recovery, minimizing the negative physical and psychological effects of disease processes. The high level medical and nursing management of care is delivered with a focus on a collaborative, multi-disciplinary approach.

OBJECTIVES

At the end of this rotation each student will be able to:

- Define the term anesthesia.
- Describe some of the equipment used in the management of post-anesthesia care.
- Give an account of the recovery course for a post-operative patient while in PACU.
- List some of the complications of anesthesia.
- List the methods for the delivery of oxygen to post-anesthesia patients.
- Describe the methods used in determining vital signs in PACU.
- Define medical terminology used in PACU.

During this rotation the students will observe:

- A pulse oximeter in use
- Equipment used in PACU
- CCRN and PACU technicians working as a care delivery team in PACU
- The results of various surgical procedures
- The assessment of vital signs, consciousness, and the recovery of patients from anesthesia

During this rotation the student will have an opportunity to ask questions about:

- The educational requirements for workers in PACU
- The job responsibilities for workers in PACU
- The equipment used in PACU
- The complications of anesthesia
- The types of anesthesia used
1. Why do the patients seen in the post-anesthesia care unit (PACU) need specialized care?

   Patients need to have specialized care in PACU because they have had a compromised airway, and they may have the potential for bleeding after surgery. Recovery time is essential to make sure the patient is stable enough to go to their room.

2. List the major (or common) complications that may be seen as the result of receiving anesthesia.

   The common complications seen as a result of anesthesia are respiratory arrest, hemorrhage (bleeding), nausea, vomiting, and low blood pressure.

3. What is a pulse oximeter? Why is it an important tool in the PACU?

   A pulse oximeter is a device that measures the oxygen content in the patient's blood via a probe that is placed on a finger. It is important because it measures how well the patient is oxygenated. If a patient stops breathing or is not breathing adequately, the pulse oximeter will sense it and additional oxygen can be given.

4. How is respiratory status assessed in PACU?

   Respiratory status can be assessed by counting the rate of breathing, the depth of breathing, and pulse oximeter readings of 92-100% oxygen saturation.

5. List three methods of delivering oxygen to patients recovering from anesthesia.

   There are three methods of delivering oxygen to patients recovering from anesthesia. Oxygen can be delivered by nasal cannula, by face mask, or by mechanical ventilation.

6. List five pieces of equipment used in PACU.

   Answers may vary. The following is a list of some of the equipment used in PACU.
   • Pulse oximeter
   • Blood pressure cuff
   • Thermometer
   • Warming blanket
   • ECG monitor

7. What is the difference between spinal anesthesia and general anesthesia?

   General anesthesia is a combination of gas, a pain killer, and an amnesiac (to forget), given through the respiratory system. Spinal anesthesia is given in the spinal column to numb a region of the body where the surgeon will be performing surgery.
8. How do you determine the correct dosage of pain medication for a pediatric patient? (Realize that many pediatric patients are too young to be able to talk and tell you that they hurt!)

All medications are calculated by the patient's weight.

9. Define the following terms:

- **Hysterectomy (Hyst):** Removal of the uterus in a woman.
- **Coronary artery bypass and graft (CABG):** Artificial grafting of veins to replace clogged arteries in the heart.
- **Carotid endarterectomy:** Removal of plaque deposits in the carotid arteries in the neck.
- **Appendectomy (Appy):** Removal of an infected appendix.
- **Myringotomy:** Placement of small tubes in the ear drum to remove fluid and improve hearing.
- **Cleft palate:** A birth defect where the roof of the mouth is not joined and is split in half.
- **Anesthesia:** The process of losing feeling or sensation in the body.

10. In your own words, give an account of a post-operative care procedure. Include in this account:

- Respiratory status assessment
- Vital sign assessment
- Pain management
- Assessment of level of consciousness
- The purpose of the surgical procedure
- The type of anesthesia the patient received during the procedure

Answers may vary depending on the experience of each student that rotates through the department. Post-operative care begins with the patient's admission to PACU after surgery. The patient will be connected to monitors, placed on oxygen, their respiratory status assessed and their O₂ saturation levels will be checked. Initial vital signs will be completed and pain level will be assessed. Dressings and/or surgical site will be checked for bleeding. The patient's level of consciousness will also be checked. The nurses will get a report from the anesthesiologist as to the type of anesthesia given and the medical history of the patient.

11. Compare and contrast the terms hypotension and hypertension. Give a situation in which each might be observed in patients while in PACU.

Hypertension is a blood pressure greater than 140/90 and hypotension is a blood pressure less than 90. Acute pain can cause hypertension and excessive blood loss can cause hypotension.

12. Define the term *Ambu-Bag.* How is it used? Why would you use one?

An Ambu Bag is an artificial means of causing the lungs to fill with air by forcing air in with a bag. It is used to aid patients who are unable to breathe on their own by placing a mask over the nose and mouth and squeezing the bag to force air into the lungs.
13. What is a defibrillator? When would a defibrillator be used?

A defibrillator is a machine that delivers an electrical shock, at a pre-set voltage, to the heart through the chest wall. It is used to restore normal rate and rhythm to a heart that has irregular electrical activity.

14. Why do patients go to PACU instead of back to their room after a surgical procedure?

The patient's respiratory status is compromised after anesthesia. The patient's breathing status must be watched closely for respiratory arrest.

15. Give the job responsibilities and educational requirements for each of the following workers within PACU:

Anesthesiologist (MD): Job responsibilities include giving anesthesia and monitoring patients during and after surgery until the patients are awake and vital signs are normal. Educational requirements include a bachelor of science degree and medical school to become a physician. Further specialized training and residency in anesthesiology are required.

Critical care registered nurse (CCRN): Job responsibilities include patient care throughout the patient's process in the recovery room. The educational requirement is graduation from an accredited school of nursing. Registered nursing programs require two years of college for a certificate and four years of college for a baccalaureate degree. They must pass the test for critical care nursing and receive a certificate of accomplishment.

PACU technician: Job responsibilities include assisting the nurses as needed with getting supplies and transporting patients. The educational requirement is a high school diploma.

16. What high school courses should you take if you want to work in the PACU?

The high school courses a person should take if they want to work in PACU are anatomy and physiology, biology, math, chemistry, and physics. Answers may vary.

17. If you have taken one of the courses listed above, give an example of how something you learned in the class was used in PACU.

Answers may vary.
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2. List the major (or common) complications that may be seen as the result of receiving anesthesia.

3. What is a pulse oximeter? Why is it an important tool in the PACU?

4. How is respiratory status assessed in PACU?

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9. Define the following terms:
   - Hysterectomy (Hyst):
   - Coronary artery bypass and graft (CABG):
   - Carotid endartectomy:
   - Appendectomy (Appy):
   - Myringotomy:
   - Cleft palate:
   - Anesthesia:

10. In your own words, give an account of a post operative care procedure. Include in this account:
    - Respiratory status assessment
• Vital sign assessment
• Pain management
• Assessment of level of consciousness
• The purpose of the surgical procedure
• The type of anesthesia the patient received during the procedure

11. Compare and contrast the terms hypotension and hypertension. Give a situation in which each might be observed in patients while in PACU.

12. Define the term Ambu-Bag. How is it used? Why would you use one?

13. What is a defibrillator? When would a defibrillator be used?

14. Why do patients go to PACU instead of back to their room after a surgical procedure?

15. Give the job responsibilities and educational requirements for each of the following workers within PACU:

   Anesthesiologist (MD):

   Critical care registered nurse (CCRN):

   PACU technician:

16. What high school courses should you take if you want to work in the PACU?

17. If you have taken one of the courses listed above, give an example of how something you learned in the class was used in PACU.
Post-Anesthesia Care Unit
Student Evaluation of Rotation

Student Name ___________________ School _________ Date ____________

Facility ___________________ Department ___________________

1. How would you rate your overall visit to this department? (Circle the number that most closely represents your opinion.)

1 Poor  2  3  4  5  6  7  8 Excellent

2. To what degree did your career exploration supervisor/mentor make you feel welcome? (Circle the number that most closely represents your opinion.)

1 Poor  2  3  4  5  6  7  8 Excellent

3. To what degree was your career exploration supervisor/mentor prepared to answer your questions? (Circle the number that most closely represents your opinion.)

1 Poor  2  3  4  5  6  7  8 Excellent

4. What part of the rotation was most interesting?

__________________________________________________________________________

__________________________________________________________________________

5. Write down one interesting lesson, or new fact you learned, while at this visitation site.

__________________________________________________________________________

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6. Write down the name of the class at school in which you might learn more about the interesting lesson in Question 5 above.

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7. Comments:

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Post-Anesthesia Care Unit
Staff Evaluation of Rotation

Student Name ___________ Supervisor/Mentor ___________ Date ___________

Facility ___________ Department ___________

1. Would you want this student back at your site? Yes ___ No ___ Briefly Describe ___
   (circle one)

________________________________________________________________________

2. How would you rate the student’s overall visit to this site? (Circle the number that most closely
   represents your opinion.)

1 Poor 2 3 4 5 6 7 8 Excellent

3. The student’s attitude during this visit was: (Circle the number that most closely represents
   your opinion.)

1 Poor 2 3 4 5 6 7 8 Excellent

4. How would you rate the student’s interest in your presentation? (Circle the number that most
   closely represents your opinion.)

1 Poor 2 3 4 5 6 7 8 Excellent

5. Did the student ask questions that showed they were engaged with your presentation? (circle one) Yes ___ No ___

6. Was the student cooperative? (circle one) Yes ___ No ___ Briefly Describe ___

________________________________________________________________________

________________________________________________________________________

7. Would you like to continue to have students rotate through in your site? (circle one) Yes ___ No ___
   Briefly Describe ___

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________________________________________________________________________

8. Comments:

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