Adult and geriatric health nursing clinical 1
NRS 243

Procedure 1	Obtaining an electrocardiogram (ECG)
Procedure 2	Applying a cardiac monitor
Procedure 3	Caring for a gastrostomy tube
Procedure 4	Changing and emptying an ostomy appliance
Procedure 5	Irrigating a colostomy
Procedure 6	Administration of parenteral nutrition
Procedure 7	To change central venous catheter dressing
Procedure 8	Peritoneal lavage
Procedure 9	Administering oxygen by simple face mask with or without aerosol
Procedure 10	Chest tube insertion
Procedure 11	Manual resuscitation bag, administering oxygen
Procedure 12	Administering oxygen by nasal canula
Procedure 13	Nasotracheal suctioning
Procedure 14	Administering nebulizer therapy
Procedure 15	Administering oxygen by simple face mask with or without aerosol
Procedure 16	Administering oxygen by venturi mask (high air fl oxygen entrainment system
Procedure 17	Teaching self-injection of insulin
Procedure 18	Foot care guidelines
Procedure 19	Pre operative preparation
Procedure 20	Implementation for providing early post-operative and convalescent phase recovery
Procedure 21	Deep breathing exercises, coughing, splinting
Procedure 22	Leg exercises

Procedure 1
Obtaining an Electrocardiogram (ECG)

1. Verify the order for an ECG on the patient's medical record.
2. Gather all equipment and bring to bedside.
3. Perform hand hygiene and put on PPE, if indicated.
4. Identify the patient.
5. Close curtains around bed and close the door to the room,
6. explain the procedure to the patient.
7. Place the ECG machine close to the patient's bed, and plug the power cord into the wall outlet.
8. If the bed is adjustable, raise it to a comfortable working height, usually elbow height of the caregiver
9. Have the patient lie supine in the center of the bed with the arms at the sides. Raise the head of the bed if necessary to promote comfort.
10. Expose the patient's arms and legs, and drape appropriately.
11. Encourage the patient to relax the arms and legs.
12. . Make sure the feet do not touch the bed's footboard.
13. Select flat, fleshy areas on which to place the electrodes. Avoid muscular and bony areas. If the patient has an amputated limb, choose a site on the stump.
14. If an area is excessively hairy, clip the hair. Do not shave hair. Clean excess oil or other substances from the skin with soap and water and dry it completely.
15. Apply the limb lead electrodes.
16. Connect the limb lead wires to the electrodes. Make sure the metal parts of the electrodes are clean and bright.
17. Expose the patient's chest.
18. Apply the precordial lead electrodes.: • V1: Fourth intercostal space at right sternal border • V2: Fourth intercostal space at left sternal border • V3: Halfway between V2 and V4 • V4: Fifth intercostal space at the left midclavicular line • V5: Fifth intercostal space at anterior axillary line (halfway between V4 and V6) • V6: Fifth intercostal space at midaxillary line, level with V4
19. Connect the precordial lead wires to the electrodes. Make sure the metal parts of the electrodes are clean and bright.
20. After the application of all the leads, make sure the paperspeed selector is set to the standard 25 m/second and that the machine is set to full voltage.
21. If necessary, enter the appropriate patient identification data into the machine.
22. Ask the patient to relax and breathe normally. Instruct the patient to lie still and not to talk while you record the ECG.
23. Press the AUTO button.
24. When the machine finishes recording the 12-lead ECG, remove the electrodes and clean the patient's skin
25. Return the patient to a comfortable position. Lower bed height and adjust the head of bed to a comfortable position.
26. Clean ECG machine per facility policy. If not done electronically from data entered into the machine, label the ECG with the patient's name, date of birth, location, date and time of recording, and other relevant information, such as symptoms that occurred during the recording

27. Remove additional PPE, if used.
28. Perform hand hygiene

Procedure 2

Applying a Cardiac Monitor

1. Verify the order for cardiac monitoring on the patient's medical record.
2. Gather all equipment and bring to bedside.
3. Perform hand hygiene and put on PPE, if indicated.
4. Identify the patient.
5. Close curtains around bed and close the door to the room
6. Explain the procedure to the patient.
7. Connect an electrode to each of the lead wires, carefully checking that each lead wire is in its correct outlet.
8. If the bed is adjustable, raise it to a comfortable working height, usually elbow height of the caregiver
9. Expose the patient's chest and determine electrode positions, (If necessary, clip the hair from an area about 10 cm in diameter around each electrode site).
10. Remove the backing from the pre gelled electrode.
11. Apply the electrode to the site and press firmly to ensure a tight seal. Repeat with the remaining electrodes to complete the three-lead or five lead system.
12. When all the electrodes are in place, connect the appropriate lead wire to each electrode. Check waveform for clarity, position, and size.
13. Set the upper and lower limits of the heart rate alarm, based on the patient's condition or unit policy
14. For telemetry, place the transmitter in the pouch in the hospital gown.
15. To obtain a rhythm strip, press the RECORD key either at the bedside for monitoring or at the central station for telemetry.
16. Label the strip with the patient's name and room number, date, time, and rhythm identification.
17. Place the rhythm strip in the appropriate location in the patient's chart.
18. Return the patient to a comfortable position.
19. Lower bed height and adjust the head of bed to a comfortable position.
20. Remove additional PPE, if used.
21. Perform hand hygiene.

Procedure 3

Caring for a Gastrostomy Tube

Goal :The patient ingests an adequate diet and exhibits no signs and symptoms of irritation, excoriation, or infection at the tube insertion site.

1. Assemble equipment. Verify the medical order or facility policy and procedure regarding site care.
2. Perform hand hygiene and put on PPE, if indicated.
3. Identify the patient.
4. Explain the procedure to the patient and why this intervention is needed. Answer any questions as needed.
5. Assess patient for presence of pain at the tube insertion site.
6. Pull the patient's bedside curtain.
7. Raise bed to a comfortable working position, usually elbow height of the caregiver
8. Put on gloves. If gastrostomy tube is
    a. new and still has sutures holding it in place, dip cotton-tipped applicator into sterile saline solution and gently clean around the insertion site, removing any crust or drainage. Avoid adjusting or lifting the external disk for the first few days after placement except to clean the area
    b. gastric tube insertion site has healed and the sutures are removed, wet a washcloth and apply a small amount of soap onto washcloth. Gently cleanse around the insertion, removing any crust or drainage. Rinse site, removing all soap.
9. Pat skin around insertion site dry.
10. If the sutures have been removed, gently rotate the guard or external bumper 90 degrees at least once a day. Assess that the guard or external bumper is not digging into the surrounding skin. Avoid placing any tension on the feeding tube.
11. Leave the site open to air unless there is drainage. If drainage is present, place one thickness of precut gauze pad or drain sponge under the external bumper and change as needed to keep the area dry. Use a skin protectant or substance such as zinc oxide to prevent skin breakdown.
12. Remove gloves.
13. Lower the bed and assist the patient to a position of comfort as needed.
14. Remove additional PPE, if used. Perform hand hygiene.

Procedure 4

Changing and Emptying an Ostomy Appliance

1. Bring necessary equipment to the bedside stand or over bed table
2. Perform hand hygiene and put on PPE, if indicated.
3. Identify the patient.
4. Close curtains around bed and close the door to the room,
5. Explain what you are going to do and why you are going to do it to the patient. Encourage the patient to observe or participate, if possible
6. Assist patient to a comfortable sitting or lying position in bed or a standing or sitting position in the bathroom.

Emptying an Appliance

1. Put on disposable gloves.
2. Remove clamp and fold end of pouch upward like a cuff
3. Empty contents into bedpan, toilet, or measuring device.
4. Wipe the lower 2 inches of the appliance or pouch with toilet tissue
5. Un cuff edge of appliance or pouch and apply clip or clamp, or secure
6. Remove gloves.
7. Assist patient to a comfortable position.
8. If appliance is not to be changed,
9. Remove additional PPE,
10. Perform hand hygiene.

Changing an Appliance

1. Place a disposable pad on the work surface.
2. Set up the wash basin with warm water and the rest of the supplies.
3. Place a trash bag within reach.
4. Put on clean gloves.
5. Place waterproof pad under the patient at the stoma site.
6. Empty the appliance as described previously.
7. Gently remove pouch faceplate from skin by pushing skin from appliance rather than pulling appliance from skin.
8. Start at the top of the appliance, while keeping the abdominal skin taut.
9. Apply a silicone-based adhesive remover by spraying or wiping with the remover wipe.
10. Place the appliance in the trash bag, if disposable. If reusable, set aside to wash in lukewarm soap and water and allow to air dry after the new appliance is in place.
11. Use toilet tissue to remove any excess stool from stoma.
12. Cover stoma with gauze pad.
13. Clean skin around stoma with mild soap and water or a cleansing agent and a washcloth.
14. Remove all old adhesive from skin; use an adhesive remover, as necessary. Do not apply lotion to peristomal area.

15. Gently pat area dry. Make sure skin around stoma is thoroughly dry. Assess stoma and condition of surrounding skin.
16. Apply skin protectant to a 2-inch (5 cm) radius around the stoma, and allow it to dry completely, which takes about 30 seconds.
17. Lift the gauze squares for a moment and measure the stoma opening, using the measurement guide. Replace the gauze. Trace the same-size opening on the back center of the appliance. Cut the opening 1/8 inch larger than the stoma size.
18. Remove the backing from the appliance. Quickly remove the gauze squares and ease the appliance over the stoma. Gently press onto the skin while smoothing over the surface. Apply gentle pressure to appliance for 5 minutes.
19. Close bottom of appliance or pouch by folding the end upward and using the clamp or clip that comes with the product, or secure Velcro closure.
20. Ensure the curve of the clamp follows the curve of the patient's body.
21. Remove gloves.
22. Assist the patient to a comfortable position.
23. Cover the patient with bed linens.
24. Place the bed in the lowest position.
25. Put on clean gloves.
26. Remove or discard equipment and assess patient's response to procedure.
27. Remove gloves and additional PPE, if used.
28. Perform hand hygiene.

Procedure 5

Irrigating a Colostomy

1. Verify the order for the irrigation.
2. Bring necessary equipment to the bedside stand or over bed table.
3. Perform hand hygiene and put on PPE, if indicated.
4. Identify the patient.
5. Close curtains around bed and close the door to the room
6. Explain what you are going to do and why you are going to do it to the patient. Plan where the patient will receive irrigation. Assist patient onto bedside commode or into nearby bathroom.
7. Warm solution in amount ordered and check temperature with a bath thermometer,
8. Add irrigation solution to container.
9. Release clamp and allow fluid to progress through tube before reclamping.
10. Hang container so that bottom of bag will be at patient's shoulder level when seated.
11. Put on nonsterile gloves.
12. Remove ostomy appliance and attach irrigation sleeve.
13. Place drainage end into toilet bowl or commode.
14. . Lubricate end of cone with water-soluble lubricant.
15. Insert the cone into the stoma.
16. Introduce solution slowly over a period of 5 to 6 minutes.

17. Hold cone and tubing (or if patient is able, allow patient to hold) all the time that solution is being instilled.
18. Control rate of flow by closing or opening the clamp.
19. Hold cone in place for an additional 10 seconds after the fluid is infused
20. Remove cone. Patient should remain seated on toilet or bedside commode.
21. After majority of solution has returned, allow patient to clip (close) bottom of irrigating sleeve and continue with daily activities.
22. After solution has stopped flowing from stoma, put on clean gloves.
23. Remove irrigating sleeve and cleanse skin around stoma opening with mild soap and water. Gently pat peristomal skin dry.
24. Attach new appliance to stoma or stoma cover
25. Remove gloves.
26. Return the patient to a comfortable position.
27. Make sure the linens under the patient are dry, if appropriate. Ensure that the patient is covered.
28. Raise side rail. Lower bed height and adjust head of bed to a comfortable position, as necessary.
29. Remove gloves and additional PPE, if used.
30. Perform hand hygiene.

Procedure 6

Administration of Parenteral Nutrition

EQUIPMENT

a) Volume control infuser
b) Bag of total parenteral nutrition (TPN)
c) Bag of I.V. lipids (if not using 3-in-1 total nutrient admixture [TNA])
d) Administration tubing with luer-lock connections
e) 1.2-_m filter
f) Hypoallergenic tape, 1 inch
g) Clean gloves
h) Sterile dressing kit to include:
    a. Alcohol swab sticks (3)
    b. Povidone-iodine sticks (3)
    c. Sterile gloves
    d. Transparent dressing

To change bag and bottle:

Preparatory phase

1. Remove TNA from refrigerator at least 1 hour before hanging. Check date and patient's name.
2. Inspect fluid for cracking or creaming. Verify that TPN/TNA matches current orders.

3. Wash hands.

Performance phase

1. Using strict sterile technique, attach I.V. tubing (with filter) to TNA bag and purge of air.
2. Close all clamps on new tubing. Insert tubing into volume control infuser.
3. If venous access device (VAD) has a clamp at proximal end, clamp tubing.
4. If no clamp is available on central VAD, instruct patient to perform Valsalva's maneuver (bear down and hold breath) while new tubing is connected.
5. Sterilely connect tubing to hub of VAD, making sure the connection is securely fastened using luer-lock connections.
6. Open all clamps and regulate flow through volume control infuser.

Follow-up phase

1. Monitor administration hourly, assess integrity of fluid and administration system and patient tolerance and complications.
2. Document tubing change and rate of fluid administration، presence of complications, and any treatment given.

Patient education

1. Teach patient signs and symptoms of complications، including sepsis, phlebitis, extravasation, and to report changes to nursing personnel.
2. If patient is to be discharged to home with TNA, begin instruction regarding proper storage, handling, and administration of TNA. Include family members as appropriate.

To change central venous catheter dressing:

Preparatory phase

1. Obtain equipment.

2. Explain procedure to patient.

3. Place patient in a comfortable supine position and turn head away from site.

4. Wash hands.

5. Put on mask (optional).

Performance phase

1. Put on clean gloves and carefully remove old dressing.

2. Inspect insertion site for complications.

3. Clean insertion site with each alcohol swab beginning at insertion site and moving outward in a circular pattern.

4. Repeat using each povidone-iodine swab.

5. Allow to dry.

6. Remove adhesive backing of transparent dressing. Center dressing over site.

7. Loop and tape tubing to skin using hypoallergenic tape. Do not tape over dressing.

Follow-up phase

1. Document dressing change and observation of insertion site.

2. Observe insertion site frequently for signs of complications.

Patient education

1. Teach patient signs and symptoms of infection, phlebitis, and fluid extravasation and to report changes to nursing personnel.

2. If patient is to be discharged to home with TNA, begin instruction regarding sterile dressing change. Include family members as appropriate.

Procedure 7

To change central venous catheter dressing

Preparation

1. Verify the medical order or facility policy and procedure regarding site care.
2. Gather equipment
3. Provide comfortable environment with good light
4. Explain procedure to client.
5. Assess patient for presence of pain at the tube insertion site.
6. Provide privacy
7. Wash hands

Procedure

1. Put on clean gloves and carefully remove old dressing.
2. Inspect insertion site for complications.
3. Clean insertion site with each alcohol swab beginning at insertion site and moving outward in a circular pattern.
4. Repeat using each povidone-iodine swab
5. Allow to dry.
6. Remove adhesive backing of transparent dressing. Center dressing over site.
7. Loop and tape tubing to skin using hypoallergenic tape. Do not tape over dressing
8. **Follow-up phase**

   Document dressing change and observation of insertion site.
9. Observe insertion site frequently for signs of complications
10. **Patient education**

    Teach patient signs and symptoms of infection, phlebitis, and fluid extravasation and to report changes to nursing personnel.

11. If patient is to be discharged to home with TNA, begin instruction regarding sterile dressing change. Include family members as appropriate
12. Remove gloves
13. Return the patient to a comfortable position.
14. Make sure the linens under the patient are dry, if appropriate. Ensure that the patient is covered.
15. Remove gloves and additional PPE, if used.
16. Perform hand hygiene
17. Raise side rail.
18. Lower bed height and adjust head of bed to a comfortable position, as necessary

Procedure 8

Peritoneal Lavage

PURPSE

Peritoneal lavage is a technique of irrigation of the peritoneal cavity and examination of the irrigating fluid to evaluate the effects of trauma to the abdomen.

EQUIPMENT

1. Peritoneal dialysis tray
2. Sterile solution (lactated Ringer's solution)
3. I.V. tubing; I.V. pole
4. Peritoneal dialysis catheter (multiple perforations)
5. Local skin anesthetic
6. sterile gloves

PROCEDURE GUIDELINES 35-5

PROCEDURE

Preparatory Phase

1. Explain the procedure to the patient; ensure that an informed consent form has been signed.
2. Insert indwelling catheter into the bladder.
3. Prepare the abdomen as for surgery.
4. Place the patient in a supine position.
5. Fill the I.V. tubing with solution using aseptic technique.

Performance phase (by physician)

1. The skin is infiltrated 3⁄4 to 1 1⁄4 inches (2-3 cm) below the umbilicus in the midline with local anesthetic.
2. A small vertical incision is made at the chosen site.
3. Bleeding vessels are carefully ligated.
4. The peritoneum is opened under direct vision and the peritoneal catheter is inserted into the peritoneal cavity,

OR

5. A needle is passed intra-abdominally, a flexible wire is passed through the needle, and a catheter is guided over the wire.
6. A syringe is attached to the catheter, and the peritoneal cavity is aspirated.
7. If no blood (or less than 10 mL) is present, the catheter is attached to the I.V. tubing; 500-1,000 mL of solution is infused into the peritoneal cavity through the I.V. tubing

Attached to the dialysis catheter.

8. After the solution is infused, the empty I.V. bag is removed from the pole and lowered below the abdominal level (near the floor).
9. The peritoneal dialysis catheter is removed, and the wound is closed (unless laparotomy is necessary).
10. The fluid recovered from the peritoneal cavity is examined visually and is usually sent to the laboratory for cell counts and microscopic inspection of spun-down sediment.

Procedure 9

Administering Oxygen by Simple Face Mask with or without Aerosol

A Preparation

a) Gather equipment (Oxygen source ,Humidifier bottle with distilled water, if high humidity is desired for simple face mask , Simple face mask or plastic aerosol mask, Large-bore tubing for aerosol or small-bore tubing for simple face mask, Flowmeter, Nebulizer for aerosol , NO SMOKING signs For heated aerosol therapy,Humidifier heating element EQUIPM.)

b) Provide comfortable environment with good light

c) Explain procedure to client.

d) Provide privacy

e) Wash hands

B Procedure

1. Verify correct patient. Determine current vital signs, LOC, and SaO2 or ABG, if patient is at risk for CO2 retention.
2. Assess viscosity and volume of sputum produced.
3. Show the mask to the patient and explain the procedure.
4. Make sure the humidifier or nebulizer is filled to the appropriate mark
5. Attach the large-bore tubing from the mask to the humidifier in the heating element, if used.
6. Set desired oxygen concentration and plug in the heating element, if used.
7. If the patient is tachypneic and concentration of 50% oxygen or greater is desired, two humidifiers and flowmeters should be yoked together
8. Adjust the flow rate until the desired mist is produced (usually 10 to 12 L/minute).
9. Apply the mask to the patient's face and adjust the straps so the mask fits securely. Dry face around mask every 2 hours
10. Drain the tubing frequently by emptying condensate into a separate receptacle, not into the humidifier. If a heating element is used, the tubing will have to be drained more often.
11. If a heating element is used, check the temperature. The humidifier bottle should be warm, not hot, to touch .
12. Record FiO2 and immediate patient response. Note the patient's tolerance of treatment. Notify the physician if intolerance occurs
13. Assess the patient's condition and the functioning of equipment at regular intervals.
14. If the patient's condition changes, assess SaO2 or ABG.
15. Record changes in volume and tenacity of sputum produced.

Procedure Termination

a) Put client in comfortable position according to health status

b) Provide patient with reassurance

c) Return back equipments

d) Wash hands

e) Document findings

Procedure 10

Chest Tube Insertion

Preparation

a) Gather equipment (Tube thoracostomy tray Syringes Needles/trocar Basins/skin germicide Sponges Scalpel, sterile drape, and gloves Two large clamps Suture material Local anesthetic Chest tube (appropriate size); connector Cap, mask, gloves, gown, drapes Chest drainage system–connecting tubes and tubing, collection bottles or commercial system, vacuum pump (if required) Sterile water EQUIPMENT.)

b) Provide comfortable environment

c) Explain procedure to client.

d) Provide privacy

e) Wash hands

Procedure

Preparatory phase :

* Assess patient for pneumothorax, hemothorax, presence of respiratory distress.

* Obtain a chest X-ray. Other means of localization of pleural fluid include ultrasound or fluoroscopic localization

*Obtain informed consent

Verify right patient and right location/procedure.

*Premedicate if indicated.

*Assemble drainage system.

*Reassure the patient and explain the steps of the procedure. Tell the patient to expect a needle prick and a sensation of slight pressure during infiltration anesthesia.

*Position the patient as for an intercostal nerve block or according to physician preference

Performance phase:

* Needle or intracath technique

*Using universal precautions, the skin is prepared, anesthetized, and draped, using local anesthetic with a short 25G needle and using aspetic technique. A larger needle is used to infiltrate the subcutaneous tissue, intercostal muscles, and parietal pleura.

*An exploratory needle is inserted.
*The IntraCath catheter is inserted through the needle into the pleural space. The needle is removed, and the catheter is pushed several centimeters into the pleural space
*The catheter is taped to the skin; may be sutured to the chest wall and covered with a dressing.
*The catheter is attached to a connector/tubing and attached to a drainage system (underwater-seal or commercial system) and all connections taped.

Performance phase (continued)
*Trocar technique for chest tube insertion
*Using universal precautions and aseptic technique, a trocar catheter is used for the insertion of a large-bore tube for removal of a moderate to large amount of air leak or for the evacuation of serous effusion.
*A small incision is made over the prepared, anesthetized site. Blunt dissection (with a hemostat) through the muscle planes in the interspace to the parietal pleura is performed
*The trocar is directed into the pleural space, the cannula is removed, and a chest tube is inserted into the pleural space and connected to a drainage system..
*Hemostat technique using a large-bore chest tube Using universal precautions and aseptic technique, a large bore chest tube is used to drain blood or thick effusions from the pleural space.).
*Using universal precautions, aseptic technique, and after skin preparation and anesthetic infiltration, an incision is made through the skin and subcutaneous tissue.
*A curved hemostat is inserted into the pleural cavity and the tissue is spread with the clamp.
*The tract is explored with an examining finger.
*The tube is held by the hemostat and directed through the opening up over the ribs and into the pleural cavity.
*The clamp is withdrawn and the chest tube is connected to a chest drainage system.
*The tube is sutured in place and covered with a sterile dressing.
*Catheter is attached to a connector/tube and to the system. All connections are taped.
Follow-up phase
*Observe the drainage system for blood and air. Observe for fluctuation in the tube on respiration
*ecure a follow-up chest X-ray.

*Assess for bleeding, infection, leakage of air and fluid around the tube.

*Maintain integrity of the chest drainage system

Procedure Termination

a) Put client in comfortable position according to health status

b) Provide patient with reassurance

c) Return back equipments

d) Wash hands

e) Document findings

Procedure 11
Manual Resuscitation Bag, Administering Oxygen)

Preparation

a) Gather equipment (_ O2 source

_ Resuscitation bag and mask

_ Reservoir tubing or reservoir bag

_ O2 connecting tubing

_ Nipple adapter to attach flowmeter to

connecting tubing

_ Flowmeter

_ Gloves

_ Face shield).

b) Provide comfortable environment

c) Explain procedure to client.

d) Provide privacy

e) Wash hands]

Procedure

Preparatory phase

1. In cardiopulmonary arrest:

a. Follow steps to establish that a cardiopulmonary arrest has occurred

b. Use caution not to injure or increase injury to the cervical spine when opening the airway.

2. In suctioning or transport situation, assess patient's heart rate, level of consciousness (LOC), and respiratory status.

Performance phase

1. Attach connecting tubing from flowmeter and nipple adapter to resuscitation bag
2. Turn flowmeter to "flush" position.
3. Attach reservoir tubing or reservoir bag to resuscitation bag.
4. Put on face shield and gloves.

Cardiopulmonary arrest

1. If respirations are absent after the airway is open, insert an oropharyngeal airway and ventilate twice with slow, full breaths of 1 to 1½ seconds each. Allow 2 seconds between breaths
2. Breaths will have to be quickly interposed between cardiac compressions. If the patient needs only respiratory assistance, watch for chest expansion and listen with the stethoscope to ensure adequate ventilation
3. A rate of approximately 10 to 12 breaths/minute is used unless the patient is being given external cardiac
compressions.

Preoxygenation and suctioning

1. If hyperinflation is being used with suctioning, ventilate the patient before and after each suctioning pass (including after the last suction pass.

Transport

1. If hyperinflation is used in transport, suction patient before disconnection for transport; monitor heart and respiratory rates and LOC during procedure.
2. Ventilate at rate of 12 to 15 breaths/minu

Follow-up phase

1. In cardiopulmonary arrest, verify return of spontaneous pulse and respirations. Initiate further support as needed.
2. In suctioning or transport, return to previous support. Note patient tolerance of procedure.

Procedure Termination

a) Put client in comfortable position according to health status
b) Provide patient with reassurance
c) Return back equipments

d) Wash hands

Procedure 12

Administering Oxygen by Nasal Canula

Preparation

a) Gather equipment (Oxygen source

_ Plastic nasal cannula with connecting tubing

(disposable)

_ Humidifier filled with sterile water

_ Flowmeter

_ NO SMOKING signs)

b) Provide comfortable environment

c) Explain procedure to client.

d) Provide privacy

e) Wash hands

Procedure

Preparatory phase

1. Verify correct patient. Determine current vitalsigns, LOC, and most recent ABG.

2. Assess risk of CO2 retention with oxygen administration

Performance phase

1. Post NO SMOKING signs on the patient's door and in view of the patient and visitors.

2. Show the nasal cannula to the patient and explain the

procedure.

3. Make sure the humidifier is filled to the appropriate mark.

4. Attach the connecting tube from the nasal cannula to the humidifier outlet.

5. Set the flow rate at the prescribed liters per minute. Feel to determine if oxygen is flowing through the tips of the cannula.

6. Place the tips of the cannula in the patient's nose and adjust straps around ears for snug, comfortable fit.

Follow-up phase

1. Record flow rate used and immediate patient response.

2. Assess the patient's condition, ABG or SaO2 and the functioning of equipment at regular intervals.

3. Determine patient comfort with oxygen use.

Procedure Termination

a) Put client in comfortable position according to health status

b) Provide patient with reassurance

c) Return back equipments

d) Wash hands

Procedure 13
Nasotracheal Suctioning

Preparation

a) Gather equipment (Assemble the following equipment or obtain a prepackaged kit:

_ Disposable suction catheter (preferably soft rubber)

_ Sterile towel

_ Sterile disposable gloves

_ Sterile water

_ Anesthetic water-soluble lubricant jelly

_ Suction source at _80 to _120 mmHg

_ Resuscitation bag with face mask.

Connect 100% O2 source with flow of 10 L/minute

_ Oximeter)

b) Provide comfortable environment

c) Explain procedure to client.

d) Provide privacy

e) Wash hands

Procedure

Preparatory phase

1. Verify correct patient. Auscultate breath sounds, monitor heart rate, respiratory rate, color, ease of respirations. If the patient is on monitor, continue monitoring heart

rate or arterial BP. Discontinue the suctioning and apply oxygen if heart rate decreases by 20 beats/minute or increases by 40 beats/minute, if BP increases, or if cardiac dysrhythmia is noted.

Performance phase

1. Make sure that the suction apparatus is functional. Place suction tubing within easy reach.
2. Inform and instruct the patient about the procedure.

a. At a certain interval, the patient will be requested to cough to open the lung passage so the catheter will go into the lungs and not into the stomach. The patient will also be encouraged to try not to swallow because this will also cause the catheter to enter the stomach.
b. The postoperative patient can splint the wound to make the coughing produced by NT suctioning less painful
3. Place the patient in a semi-Fowler's or sitting position if possible.
4. Monitor oxygen saturation via oximetry and heart rate during suctioning.
. 5. Place a sterile towel across the patient's chest. Squeeze a small amount of sterile anesthetic water-soluble lubricant jelly onto the towel.
6. Open the sterile pack containing curved-tipped suction catheter.
7. Aseptically glove both hands. Designate one hand (usually the dominant one) as "sterile" and the other hand as "contaminated."
8. Grasp the sterile catheter with the sterile hand.
9. Lubricate catheter with the anesthetic jelly and pass the catheter into the nostril and back into the pharynx.

10.Pass the catheter into the trachea. To do this, ask the patient to cough or say "ahh." If the patient is incapable of either, try to advance the catheter on inspiration. Asking the patient to stick out tongue, or hold tongue extended with a gauze pad, may also help to open the airway. If a protracted amount of time is needed to position the catheter in the trachea, stop and oxygenate the patient with face mask or the resuscitation bag-mask unit at intervals. If three attempts to place the catheter are unsuccessful, request assistance.
11.Specific positioning of catheter for deep bronchial suctioning:

a. For left bronchial suctioning, turn the patient's head to the extreme right, chin up.

b. For right bronchial suctioning, turn the patient's head to the extreme left, chin up.

Note: The value of turning the head as an aid to entering the right or left mainstem bronchi is not accepted by all clinicians.

12.Never apply suction until catheter is in the trachea. Once the correct position is ascertained, apply suction and gently rotate catheter while pulling it slightly upward. Do not remove catheter from the trachea.

13.Disconnect the catheter from the suctioning source after 5 to 10 seconds. Apply oxygen by placing a face mask over the patient's nose, mouth, and catheter, and instruct the patient to breathe deeply.

14.Reconnect the suction source. Repeat as necessary.

15.During the last suction pass, remove the catheter completely while applying suction and rotating the catheter gently. Apply oxygen when the catheter is removed.

Follow-up phase

1. Dispose of disposable equipment. Auscultate breath sounds.

2. Measure heart rate, BP, respiratory rate, and oxygen saturation. Record the patient's tolerance of procedure, type and amount of secretions removed, and complications.

3. Report any patient intolerance of procedure (changes in vital signs, bleeding, laryngospasm, upper airway noise).

Procedure Termination

a) Put client in comfortable position according to health status

b) Provide patient with reassurance

c) Return back equipments

d) Wash hands

Procedure 14

Administering Nebulizer Therapy

Preparation

a) Gather equipment

_ Air compressor

_ Connection tubing

_ Nebulizer

_ Medication and saline solutiont)

b) Provide comfortable environment

c) Explain procedure to client.

d) Provide privacy

e) Wash hands

Procedure

Preparatory phase

1. Auscultate breath sounds, monitor the heart rate before and after the treatment for patients using bronchodilator drug

Performance phase

1. Verify correct patient. Explain the procedure to the patient. This therapy depends on patient effort.
2. Place the patient in a comfortable sitting or a semi-Fowler's position.
3. Add the prescribed amount of medication and saline to the nebulizer. Connect the tubing to the compressor and set the flow at 6 to 8 L/minute.
4. Instruct the patient to exhale.
5. Tell the patient to take in a deep breath from the mouthpiece, hold breath briefly, then exhale.
6. Nose clips are sometimes used if the patient has difficulty breathing only through the mouth.
7. Observe expansion of chest to ascertain that patient is taking deep breaths.

8. Instruct the patient to breathe slowly and deeply until all the medication is nebulized.

9. On completion of the treatment, encourage the patient to cough after several deep breaths

Follow-up phase

1. Record medication used and description of secretions.

2. Disassemble and clean nebulizer after each use. Keep this equipment in the patient's room. The equipment is changed according to facility policy.

Procedure Termination

a) Put client in comfortable position according to health status

b) Provide patient with reassurance

c) Return back equipments

d) Wash hands

e) Document findings

Procedure 15

Administering Oxygen by Simple Face Mask with or without Aerosol

Preparation

a) Gather equipment (Oxygen source

_ Humidifier bottle with distilled water,

if high humidity is desired for simple face mask

_ Simple face mask or plastic aerosol mask

_ Large-bore tubing for aerosol or

small-bore tubing for simple face mask

_ Flowmeter

_ Nebulizer for aerosol

_ NO SMOKING signs

For heated aerosol therapy:

_ Humidifier heating element)

b) Provide comfortable environment

c) Explain procedure to client.

d) Wash hands

e) provide privacy

Procedure

Preparatory phase

1. Verify correct patient. Determine current vital signs, LOC, and SaO2 or ABG, if patient is at risk for CO2 retention

2. Assess viscosity and volume of sputum produced.

Performance phase

1. Post NO SMOKING signs on patient's door and in view of the patient and visitors

2. Show the mask to the patient and explain the procedure

3. Make sure the humidifier or nebulizer is filled to the appropriate mark

4. Attach the large-bore tubing from the mask to the humidifier in the heating element, if used.

5. Set desired oxygen concentration and plug in the heating element, if used.

6. If the patient is tachypneic and concentration of 50% oxygen or greater is desired, two humidifiers and flowmeters should be yoked together.

7. Adjust the flow rate until the desired mist is produced (usually 10 to 12 L/minute).

8. Apply the mask to the patient's face and adjust the straps so the mask fits securely. Dry face around mask every 2 hours.

9. Drain the tubing frequently by emptying condensate into a separate receptacle, not into the humidifier. If a heating element is used, the tubing will have to be drained more often

10.If a heating element is used, check the temperature. The humidifier bottle should be warm, not hot, to touch

Follow-up phase

1. Record FiO2 and immediate patient response. Note the patient's tolerance of treatment. Notify the physician if intolerance occurs.

2. Assess the patient's condition and the functioning of equipment at regular intervals.

3. If the patient's condition changes, assess SaO2 or ABG.

4. Record changes in volume and tenacity of sputum produced.

Procedure Termination

a) Put client in comfortable position according to health status

b) Provide patient with reassurance

c) Return back equipments

d) Wash hands

e) Documents Findings

Procedure 16

Administering Oxygen by Venturi Mask (High Air Fl Oxygen Entrainment System

Preparation

a) Gather equipment (Oxygen source

_ Flowmeter

_ Venturi mask for correct concentration (24%, 28%,31%,

35%, 40%, 50%) or correct concentration adapter if

interchangeable color-coded adapters are used

_ NO SMOKING signs

_ If high humidity desired

_ Compressed air source and flowmeter

_ Humidifier with distilled water

_ Large-bore tubing)

b) Provide comfortable environment

c) Explain procedure to client.

d) Wash Hands

e) Provide privacy

Procedure

Preparatory phase

1. Verify correct patient. Determine current vital signs, LOC, and most recent ABG

. 2. Assess risk of CO2 retention with oxygen administration

Performance phase

1. Post NO SMOKING signs on the door of the patient's room and in view of patient and visitors.

2. Show the Venturi mask to the patient and explain the procedure

3. Connect the mask by lightweight tubing to the oxygen source.

4. Turn on the oxygen flowmeter and adjust to the prescribed rate (usually indicated on the mask). Check to see that oxygen is flowing out the vent holes in the mask.

5. Place Venturi mask over the patient's nose and mouth and under the chin. Adjust elastic strap .

6. Check to make sure holes for air entry are not obstructed by the patient's bedding.

7. If aerosol nebulizer used:

a. Connect the humidifier to a compressed air source.

b. Attach large-bore tubing to the humidifier and connect the tubing to the fitting for high humidity at the base of the Venturi mask.

Follow-up phase

1. Record flow rate used and immediate patient response. Note the patient's tolerance of treatment. Report if intolerance occurs.

2. If CO2 retention is present, assess ABG every 30 minutes for 1 to 2 hours or until the PaO2 is greater than 50 mm Hg and the PaCO2 is no longer increasing. Monitor pH. Report if the pH decreases below the initial assessment value.

3. Determine patient comfort with oxygen use.

Procedure Termination

a) Put client in comfortable position according to health status

b) Provide patient with reassurance

c) Return back equipments

d) Wash hands

e) Document findings

Procedure 17

Teaching Self-Injection of Insulin

EQUIPMENT

1. Prescribed bottle of insulin
2. Disposable insulin syringe and needle or insulin pen injection device with insulin cartridge
3. Cotton ball and alcohol or alcohol wipe

Procedure

1. Give the patient the syringe or insulin pen device containingthe prescribed dose of insulin.
2. Have patient select a clean area of subcutaneous tissue.Instruct the patient to hold the syringe as he would a pencil

3. Show the patient how to select an area of skin from the anterior thighs and form a skin fold by picking up ubcutaneous tissue between the thumb and forefinger if the patient is thin.
4. Select areas of upper arms, abdomen, and upper ttocks for injection after patient becomes proficient with needle insertion
5. Assist the patient to insert the needle with a quick thrust to the hub at a 45- to 90-degree angle to the skin surface.
6. Instruct the patient to release the "pinched" skin and inject the insulin with slow, consistent pressure.
7. Have the patient count to 5 and then withdraw the needle in the same direction it was inserted.
8. If insulin is in a suspension (NPH), gently shake, rotate, or roll the insulin bottle to mix well.
9. Do not instruct the patient to wipe off the top of the vial with alcohol; instead, make sure that the vial is stored in its original carton and is kept clean.
10. Inject approximately the same volume of air into the insulin vial as the volume of insulin to be withdraw
11. If insulin pen device is being used, follow manufacturer's instructions for dialing the dosage and changing cartridges

To fill a syringe with long- and short-acting insulin mixture

12. Inject air equal to the number of units to be injected into each vial. Use the same sequence each time, for example, always NPH insulin first.

13. After injecting air into the second vial, keep needle in vial and withdraw prescribed amount of that type of insulin, then withdraw needle
14. Withdraw prescribed amount of insulin from the second vial

Procedure 18

Foot Care Guidelines

EQUIPMENT

_ Mirror (optional)

_ Magnifying glass (optional)

_ Moisturizing lotion

_ Lamb's wool

_ Scissors and nail file

Procedure

1. Inspect the feet carefully and daily for calluses, corns, blisters, abrasions, redness, and nail abnormalities.
2. Bathe the feet daily in warm (never hot) water.
3. Massage the feet with an absorbable agent.
4. Prevent moisture between the toes to prevent maceration of the skin.
5. Wear well-fitting, noncompressive shoes and socks—long enough, wide enough, soft, supple, and low-heeled.
6. Go to a podiatrist on a regular basis if corns, calluses,and ingrown toenails are present.
7. Avoid heat, chemicals, and injuries to the feet.
8. Inspect inside of shoes for foreign objects or areas of roughness.
9. Take action if an injury occurs to the foot.

Procedure 19

Pre-Operative Preparation

Physical preparation

Equipments

- Hospital gown
- IV solution and Equipment
- Skin cleansing solution
- Compression stockings
- Intermittent compression device
- Venous foot pump
- Urinary catheterization kit
- Preoperative check list
- Medications
- Enema set and prescribed solution
- Douche set and prescribed solution

Procedure

1. Follow Standard protocol
2. Identify patient using name and birthday/ID number/ask the patient to state name
3. Apply identification bracelet if all information is correct
4. Assist patient with putting hospital gown and removing personal items
5. Instruct/ remove the patients makeup, nail polish, hairpins and jewelry
6. Ensure that money and valuables have been locked up or given to a family member
7. Ensure that patient has followed appropriate fluid and food restrictions as per order
8. Verify that patient has followed request for omission or ingestion of medications as instructed
9. Verify that a bowel preparation (laxative, cathartic, enema) is completed if ordered
10. Ensure that a medical history and physical examination results are in patients record
11. Verify the informed consent is complete
12. Ensure that necessary lab investigations, ECG, X-ray etc., are completed and are on the chart
13. Verify the blood type and cross match are completed if ordered and that blood transfusions are available as needed
14. Ask if patient has an advance directive, if so place it on patient record
15. Assess and record vitals
16. Administer cathartics/enemas if ordered
17. Instruct the patient to void
18. Start an IV line as per order
19. Administer preoperative medications as ordered

20. Apply compression stockings/Intermittent compression device/Venous plexus foot pump as ordered
21. Cleanse and prepare the surgical site if ordered
22. Insert urinary catheter if ordered
23. Remove contact lenses, eye glasses, hair pieces and dentures
24. Place cap on the patients head
25. Assist patient onto stretcher for transport to OR
26. Follow completion protocol

Procedure 20

Implementaiton For Providing Early Post Operative And Convalescent Phase Recovery

Equipments

- Post operative bed
- Stethoscope, sphygmomanometer, pulseoximeter, cardiac monitor, thermometer
- IV fluids and equipments needed
- Emesis basin
- Washcloth and towel
- Waterproof pads
- Equipment for oral hygiene
- Pillows
- Facial Tissue
- Oxygen equipment such as mask, regulator, and tubing
- Suction equipment
- Dressing supplies
- Intermittent suction
- Orthopedic appliances if needed
- Clean gloves

Procedure

1. See standard protocol

Early Recovery (Initial Post operative care)

2. If patient is being transported by stretcher, prepare for transfer with bed in high position, with sheet folded to side and room for a stretcher to be places beside bed easily
3. Assist transport staff to move patient from stretcher to bes and identify the patient
4. Attach any existing oxygen tubing, position IV fluids, verify IV flow rate settings in infusion pump and check for drainage tubes
5. Maintain airway, if patient remains sleepy or lethargic, keep head extended and support in side lying position.

6. Check vital signs and compare with patients baseline values in the recovery area, continue assessing vital signs as ordered
7. Encourage patient to cough and deep breathe to prevent atelectasis
8. If NG tube is present, check placement and irrigate, connect all other drainage tubes to appropriate collection device and prevent tension on tubing.
9. Assess patients surgical dressing for appearance, presence and character of drainage.
10. Unless contraindicated outline drainage along the edges with a pen and reassess for change, if no dressing is present inspect condition of wound
11. Palpate abdomen for bladder distension, if Foleys catheter is present check for positioning and draining freely.
12. If no urinary drainage system is present, explain that voiding within 8hours after surgery is expected.
13. Measure all sources of fluid I&O chart
14. Describe the purpose of equipment and frequent observations to patient and significant others
15. Position patient for comfort, maintaining correct body alignment and prevent tension on surgical wound site
16. Place call light within reach and raise side rails, instruct to call for assistance to get out of bed
17. Assess the level of pain and medicate as ordered

Continued Postoperative Care

18. Assess vital signs at least every 4 hours or as ordered
19. Provide oral care at least every 2 hours as needed, if permitted offer ice chips
20. Encourage patient to turn, cough and deep breathe at least every 2 hours
21. Encourage incentive spirometer as ordered
22. Promote ambulation and activity as ordered
23. Progress from clear liquids to regular diet as tolerated if nausea and vomiting not occur
24. Include patient and family in decision making, clarify their doubts
25. Provide opportunity for patients who must adjust to a change in body appearance or function to verbalize feelings

Convalescent Phase

26. Assess patients home environment for safety, cleanliness, and availability of assistance for patient
27. Discuss discharge plans with patient and care giver
28. Keep patient and family informed of progress made toward recovery
29. See completion protocol

Procedure 21

Deep Breathing Exercises, Coughing, Splinting

Equipments

1. Videotapes or computer programs are effective in giving basic information to a single patient or group of patients. Many facilities provide a television channel dedicated to patient instruction.
2. Booklets, brochures, and models, if available, are helpful.
3. Demonstrate any equipment that will be specific for the particular patient. Examples:

a. Drains and drainage bags
b. Monitoring equipment
c. Side rails
d. Incentive spirometer
e. Pillow/Blankets

Coughing, Deep breathing and Splinting

Coughing promotes the removal of chest secretions.

1. Assist the patient to high fowlers position in bed with knees flexed or sitting on side of bed or chair in upright position
2. Instruct patient to lightly place palms of hands across from ewach other along the lower border of the rib cage or upper abdomen
3. Have patient take slow, deep breaths inhaling through nose. Explain that patient will feel normal downward movement of diaphragm during inspiration. Demonstrate as needed
4. Have patient avoid using chest and shoulder muscles while inhaling
5. Have patient take slow, deep breaths hold for count of 3 seconds, and slowly exhale through mouth as if blowing out a candle
6. Have patient repeat breathing exercise 3 – 5 times
7. Have patient take two slow, deep breaths inhaling through nose and exhaling through pursed lips
8. Have patient inhale deeply a third time and hold breath to count 3, cough fully for two to three consecutive coughs without inhaling between coughs
9. Caution patient against just clearing throat
10. Have patient practice several times. Instruct patient to perform turning, coughing and deep breathing every 2 hours.

Teach Incentive spirometer

1. Position in sitting or reclining position
2. Instruct patient to exhale completely and place mouthpiece so lips completely cover it and inhale slowly, maintaining constant flow through unit
3. After maximum inspiration, patient should hold breath for 2 to 3 seconds and exhale slowly
4. Set marker on spirometer at maximum inspiration point to establish postoperative target
5. Instruct patient to breathe normally for a short period and repeat process for total of 10 times every hour while awake

SPLINTING

1. Explain purpose of splinting
2. Place pillow or blanket over site of discomfort and then assist patient to place hands firmly over area
3. Have patient hold area firmly while coughing, deep breathing and turning

LEG EXERCISES

Leg exercises facilitate venous return from the lower extremities and reduce the risk of circulatory complications like venous thrombus

Procedure

1. Instruct and encourage patient that leg exercises to be performed every 1 to 2 hours while awake: ankle rotation, dorsiflexion and plantar flexion, leg extension and flexion, straight leg raises
2. Position patient supine
3. Instruct patient to rotate each ankle in a complete circle and draw imaginary circles with the big toe 5 times
4. Alternate dorsiflexion and plantar flexion while instructing patient to feel calf muscles tighten and relax, repeat 5 times
5. Instruct patient to alternate flexing and extending knees one leg at a time, repeat 5 times
6. Instruct patient to alternate raising legs straight up from bed surface. Leg should be kept straight, repeat 5 times
7. Instruct patient to perform these four leg exercises 10 to 12 times every 1 to 2 hours while awake.

Procedure 1

Obtaining an Electrocardiogram (ECG)

Student's Name:_____

ID # : _____ Date : _____

No	Procedure Steps	Yes	No	Comments
	Preparation			
1.	Verify the order for an ECG on the patient's medical record			
2.	Gather equipment (gloves, exam light, penlight, magnifying glass, centimeter ruler.)			
3.	Provide comfortable environment with good light			
4.	Explain procedure to client.			
5.	Provide privacy			
6.	Wash hands			
	Procedure			
7.	Place the ECG machine close to the patient's bed, and plug the power cord into the wall outlet			
8.	If the bed is adjustable, raise it to a comfortable working height, usually elbow height of the caregiver			
9.	Have the patient lie supine in the center of the bed with the arms at the sides.			
10.	Raise the head of the bed if necessary to promote comfort			
11.	Expose the patient's arms and legs, and drape appropriately.			
12.	Encourage the patient to relax the arms and legs.			
13.	Make sure the feet do not touch the bed's footboard			
14.	Select flat, fleshy areas on which to place the electrodes. Avoid muscular and bony areas. If the patient has an amputated limb, choose a site on the stump.			

15.	If an area is excessively hairy, clip the hair. Do not shave hair. Clean excess oil or other substances from the skin with soap and water and dry it completely			
16.	Apply the limb lead electrodes. .			
17.	Connect the limb lead wires to the electrodes. Make sure the metal parts of the electrodes are clean and bright.			
18.	Expose the patient's chest			
19.	Apply the precordial lead electrodes.: • V1: Fourth intercostal space at right sternal border • V2: Fourth intercostal space at left sternal border • V3: Halfway between V2 and V4 • V4: Fifth intercostal space at the left midclavicular line • V5: Fifth intercostal space at anterior axillary line (halfway between V4 and V6) • V6: Fifth intercostal space at midaxillary line, level with V4			
20.	Connect the precordial lead wires to the electrodes. Make sure the metal parts of the electrodes are clean and bright.			
21.	After the application of all the leads, make sure the paperspeed selector is set to the standard 25 m/second and that the machine is set to full voltage.			
22.	If necessary, enter the appropriate patient identification data into the machine. .			
23.	Ask the patient to relax and breathe normally. Instruct the patient to lie still and not to talk while you record the ECG			
24.	Press the AUTO button.			
25.	When the machine finishes recording the 12-lead ECG, remove the electrodes and clean the patient's skin			

26.	Return the patient to a comfortable position. Lower bed height and adjust the head of bed to a comfortable position.			
27.	Clean ECG machine per facility policy. If not done electronically from data entered into the machine, label the ECG with the patient's name, date of birth, location, date and time of recording, and other relevant information, such as symptoms that occurred during the recording			
28.	Remove additional PPE, if used			
29.	Perform hand hygiene			

Procedure 2

Applying a Cardiac Monitor

Student's Name:_____

ID # : _____ **Date : _____**

No	Procedure Steps	Yes	No	Comments
	Preparation			
1.	Verify the order for an ECG on the patient's medical record			
2.	Gather equipment (gloves, exam light, penlight, magnifying glass, centimeter ruler.)			
3.	Provide comfortable environment with good light			
4.	Explain procedure to client.			
5.	Provide privacy			
6.	Wash hands			
	Procedure			
1.	Connect an electrode to each of the lead wires, carefully checking that each lead wire is in its correct outlet.			
2.	If the bed is adjustable, raise it to a comfortable working height, usually elbow height of the caregiver			
3.	Expose the patient's chest and determine electrode positions, (If necessary, clip the hair from an area about 10 cm in diameter around each electrode site).			
4.	Remove the backing from the pre gelled electrode			
5.	Apply the electrode to the site and press firmly to ensure a tight seal. Repeat with the remaining electrodes to complete the three-lead or five lead system. When all the electrodes are in place, connect the appropriate lead wire to each electrode. Check waveform for clarity, position, and size.			

6.	Set the upper and lower limits of the heart rate alarm, based on the patient's condition or unit policy			
7.	For telemetry, place the transmitter in the pouch in the hospital gown.			
8.	To obtain a rhythm strip, press the RECORD key either at the bedside for monitoring or at the central station for telemetry			
9.	Label the strip with the patient's name and room number, date, time, and rhythm identification			
10.	Place the rhythm strip in the appropriate location in the patient's chart			
11.	Return the patient to a comfortable position.			
12.	Lower bed height and adjust the head of bed to a comfortable position.			
13.	Remove additional PPE, if used			
14.	Perform hand hygiene.			

Procedure 3
Caring for a Gastrostomy Tube

Student's Name:_____

ID # : _____ **Date : _____**

No	Procedure Steps	Yes	No	Comments
	Preparation			
1.	Verify the medical order or facility policy and procedure regarding site care.			
2.	Gather equipment			
3.	Provide comfortable environment with good light			
4.	Explain procedure to client.			
5.	Assess patient for presence of pain at the tube insertion site.			
6.	Provide privacy			
7.	Wash hands			
	Procedure			
1.	Pull the patient's bedside curtain.			
2.	Raise bed to a comfortable working position, usually elbow height of the caregiver			
3.	Put on gloves.			

4.	If gastrostomy tube is 15. New and still has sutures holding it in place, dip cotton-tipped applicator into sterile saline solution and gently clean around the insertion site, removing any crust or drainage. Avoid adjusting or lifting the external disk for the first few days after placement except to clean the area 16. gastric tube insertion site has healed and the sutures are removed, wet a washcloth and apply a small amount of soap onto washcloth. Gently cleanse around the insertion, removing any crust or drainage. Rinse site, removing all soap.			
5.	Dry skin around insertion site dry.			
6.	If the sutures have been removed, gently rotate the guard or external bumper 90 degrees at least once a day. Assess that the guard or external bumper is not digging into the surrounding skin. Avoid placing any tension on the feeding tube.			
7.	Leave the site open to air unless there is drainage. If drainage is present, place one thickness of precut gauze pad or drain sponge under the external bumper and change as needed to keep the area dry. Use a skin protectant or substance such as zinc oxide to prevent skin breakdown.			
8.	Remove gloves.			
9.	Lower the bed and assist the patient to a position of comfort as needed.			
10.	Remove additional PPE, if used.			
11.	Perform hand hygiene.			

Procedure 4
Changing and Emptying an Ostomy Appliance

Student's Name:_____

ID # : _____ **Date : _____**

No	Procedure Steps	Yes	No	Comments
	Preparation			
1.	Verify the medical order or facility policy and procedure regarding site care.			
2.	Gather equipment			
3.	Provide comfortable environment with good light			
4.	Explain procedure to client.			
5.	Assess patient for presence of pain at the tube insertion site.			
6.	Provide privacy			
7.	Wash hands			
	Procedure			
1.	Pull the patient's bedside curtain.			
2.	Raise bed to a comfortable working position, usually elbow height of the caregiver			
3.	Put on gloves.			
4.	Remove clamp and fold end of pouch upward like a cuff			
5.	Empty contents into bedpan, toilet, or measuring device.			
6.	Wipe the lower 2 inches of the appliance or pouch with toilet tissue			
7.	Un cuff edge of appliance or pouch and apply clip or clamp, or secure			
8.	Remove gloves.			

9.	Assist patient to a comfortable position. If appliance is not to be changed,			
10.	Remove additional PPE,			
11.	Perform hand hygiene			
12.	**Changing an Appliance** Place a disposable pad on the work surface.			
13.	Set up the wash basin with warm water and the rest of the supplies			
14.	Place a trash bag within reach.			
15.	Put on clean gloves.			
16.	Place waterproof pad under the patient at the stoma site.			
17.	Empty the appliance as described previously.			
18.	Gently remove pouch faceplate from skin by pushing skin from appliance rather than pulling appliance from skin			
19.	Start at the top of the appliance, while keeping the abdominal skin taut.			
20.	Apply a silicone-based adhesive remover by spraying or wiping with the remover wipe.			
21.	Place the appliance in the trash bag, if disposable. If reusable, set aside to wash in lukewarm soap and water and allow to air dry after the new appliance is in place.			
22.	Use toilet tissue to remove any excess stool from stoma.			
23.	Cover stoma with gauze pad.			

24.	Clean skin around stoma with mild soap and water or a cleansing agent and a washcloth.			
25.	Remove all old adhesive from skin; use an adhesive remover, as necessary. Do not apply lotion to peristomal area.			
26.	Gently pat area dry. Make sure skin around stoma is thoroughly dry. Assess stoma and condition of surrounding skin. .			
27.	Apply skin protectant to a 2-inch (5 cm) radius around the stoma, and allow it to dry completely, which takes about 30 seconds			
28.	Lift the gauze squares for a moment and measure the stoma opening, using the measurement guide. Replace the gauze. Trace the same-size opening on the back center of the appliance. Cut the opening 1/8 inch larger than the stoma size.			
29.	Remove the backing from the appliance. Quickly remove the gauze squares and ease the appliance over the stoma. Gently press onto the skin while smoothing over the surface. Apply gentle pressure to appliance for 5 minutes.			
30.	Close bottom of appliance or pouch by folding the end upward and using the clamp or clip that comes with the product, or secure Velcro closure.			
31.	Ensure the curve of the clamp follows the curve of the patient's body.			

32.	Lower the bed and assist the patient to a position of comfort as needed.			
33.	Remove additional PPE, if used.			
34.	Perform hand hygiene.			

Procedure 5

Irrigating a Colostomy

Student's Name:_____

ID # : _____ Date : _____

No	Procedure Steps	Yes	No	Comments
	Preparation			
1.	Verify the medical order or facility policy and procedure regarding site care.			
2.	Gather equipment			
3.	Provide comfortable environment with good light			
4.	Explain procedure to client.			
5.	Assess patient for presence of pain at the tube insertion site.			
6.	Provide privacy			
7.	Wash hands			
	Procedure			
1.	Assist patient onto bedside commode or into nearby bathroom.			
2.	Warm solution in amount ordered and check temperature with a bath thermometer,			
3.	Add irrigation solution to container			
4.	Release clamp and allow fluid to progress through tube before reclamping.			
5.	Hang container so that bottom of bag will be at patient's shoulder level when seated			
6.	Put on nonsterile gloves.			
7.	Remove ostomy appliance and attach irrigation sleeve.			
8.	Place drainage end into toilet bowl or commode.			

9.	Lubricate end of cone with water-soluble lubricant			
10.	Insert the cone into the stoma.			
11.	Introduce solution slowly over a period of 5 to 6 minutes.			
12.	Hold cone and tubing (or if patient is able, allow patient to hold) all the time that solution is being instilled			
13.	14. Control rate of flow by closing or opening the clamp.			
15.	Hold cone in place for an additional 10 seconds after the fluid is infused			
16.	Remove cone. Patient should remain seated on toilet or bedside commode.			
17.	After majority of solution has returned, allow patient to clip (close) bottom of irrigating sleeve and continue with daily activities.			
18.	19. After solution has stopped flowing from stoma, put on clean gloves.			
20.	Remove irrigating sleeve and cleanse skin around stoma opening with mild soap and water. Gently pat peristomal skin dry.			
21.	Attach new appliance to stoma or stoma cover			
22.	Remove gloves			
23.	Return the patient to a comfortable position.			
24.	Make sure the linens under the patient are dry, if appropriate. Ensure that the patient is covered.			
25.	Raise side rail. Lower bed height and adjust head of bed to a comfortable position, as necessary.			

26.	Remove gloves and additional PPE, if used.			
27.	Perform hand hygiene			

Procedure 6

Administration of Parenteral Nutrition

Student's Name:_____

ID # : _____ **Date : _____**

No	Procedure Steps	Yes	No	Comments
	Preparation			
1.	Verify the medical order or facility policy and procedure regarding site care.			
2.	Gather equipment i) Volume control infuser j) Bag of total parenteral nutrition (TPN) k) Bag of I.V. lipids (if not using 3-in-1 total nutrient admixture [TNA]) l) Administration tubing with luer-lock connections m) 1.2-_m filter n) Hypoallergenic tape, 1 inch o) Clean gloves p) Sterile dressing kit to include: a. Alcohol swab sticks (3) b. Povidone-iodine sticks (3) c. Sterile gloves d. Transparent dressing			
3.	Provide comfortable environment with good light			
4.	Explain procedure to client.			
5.	Assess patient for presence of pain at the tube insertion site.			
6.	Provide privacy			
7.	Wash hands			
	Procedure			

1.	**To change bag and bottle:** **<u>Preparatory phase</u>** 4. Remove TNA from refrigerator at least 1 hour before hanging. Check date and patient's name.			
2.	3. Inspect fluid for cracking or creaming. Verify that TPN/TNA matches current orders			
4.	Wash hands			
5.	**<u>Performance phase</u>** Using strict sterile technique, attach I.V. tubing (with filter) to TNA bag and purge of air.			
6.	Close all clamps on new tubing. Insert tubing into volume control infuser.			
7.	If venous access device (VAD) has a clamp at proximal end, clamp tubing.			
8.	If no clamp is available on central VAD, instruct patient to perform Valsalva's maneuver (bear down and hold breath) while new tubing is connected.			
9.	Sterilely connect tubing to hub of VAD, making sure the connection is securely fastened using luer-lock connections.			
10.	Open all clamps and regulate flow through volume control infuser			
11.	**<u>Follow-up phase</u>** Monitor administration hourly, assess integrity of fluid and administration system and patient tolerance and complications			

12.	Document tubing change and rate of fluid administration، presence of complications, and any treatment given			
13.	**Patient education** Teach patient signs and symptoms of complications، including sepsis, phlebitis, extravasation, and to report changes to nursing personnel			
14.	If patient is to be discharged to home with TNA, begin instruction regarding proper storage, handling, and administration of TNA. Include family members as appropriate			
15.	Remove gloves			
16.	Return the patient to a comfortable position.			
17.	Make sure the linens under the patient are dry, if appropriate. Ensure that the patient is covered.			
18.	Raise side rail. Lower bed height and adjust head of bed to a comfortable position, as necessary			
19.	Remove gloves and additional PPE, if used.			
20.	Perform hand hygiene			

Procedure 7

To change central venous catheter dressing

Student's Name:_____

ID # : _____ **Date : _____**

No	Procedure Steps	Yes	No	Comments
	Preparation			
8.	Verify the medical order or facility policy and procedure regarding site care.			
9.	Gather equipment			
10.	Provide comfortable environment with good light			
11.	Explain procedure to client.			
12.	Assess patient for presence of pain at the tube insertion site.			
13.	Provide privacy			
14.	Wash hands			
	Procedure			
19.	Put on clean gloves and carefully remove old dressing.			
20.	Inspect insertion site for complications.			
21.	Clean insertion site with each alcohol swab beginning at insertion site and moving outward in a circular pattern.			
22.	Repeat using each povidone-iodine swab			
23.	Allow to dry.			
24.	Remove adhesive backing of transparent dressing. Center dressing over site.			
25.	Loop and tape tubing to skin using hypoallergenic tape. Do not tape over dressing			

26.	**Follow-up phase** Document dressing change and observation of insertion site.			
27.	Observe insertion site frequently for signs of complications			
28.	**Patient education** Teach patient signs and symptoms of infection, phlebitis, and fluid extravasation and to report changes to nursing personnel.			
29.	If patient is to be discharged to home with TNA, begin instruction regarding sterile dressing change. Include family members as appropriate			
30.	Remove gloves			
31.	Return the patient to a comfortable position.			
32.	Make sure the linens under the patient are dry, if appropriate. Ensure that the patient is covered.			
33.	Remove gloves and additional PPE, if used.			
34.	Perform hand hygiene			
35.	Raise side rail.			
36.	Lower bed height and adjust head of bed to a comfortable position, as necessary			

Procedure 8

Peritoneal Lavage

Student's Name:_____

ID # : _____ Date : _____

No	Procedure Steps	Yes	No	Comments
	Preparation			
1.	Verify the medical order or facility policy and procedure regarding site care.			
2.	Gather equipment 7. Peritoneal dialysis tray 8. Sterile solution (lactated Ringer's solution) 9. I.V. tubing; I.V. pole 10. Peritoneal dialysis catheter (multiple perforations) 11. Local skin anesthetic 12. sterile gloves			
3.	Provide comfortable environment with good light			
4.	Explain procedure to client.			
5.	Assess patient for presence of pain at the tube insertion site.			
6.	Provide privacy			
7.	Wash hands			
	Procedure			
1.	**<u>Preparatory Phase</u>** Explain the procedure to the patient; ensure that an informed consent form has been signed.			
2.	Insert indwelling catheter into the bladder.			
3.	Prepare the abdomen as for surgery.			

4.	Place the patient in a supine position.			
5.	Fill the I.V. tubing with solution using aseptic technique			
6.	**Performance phase (by physician)** The skin is infiltrated 3⁄4 to 1 1⁄4 inches (2-3 cm) below the umbilicus in the midline with local anesthetic.			
7.	A small vertical incision is made at the chosen site.			
8.	Bleeding vessels are carefully ligated.			
9.	The peritoneum is opened under direct vision and the peritoneal catheter is inserted into the peritoneal cavity,			
	OR			
10.	A needle is passed intra-abdominally, a flexible wire is passed through the needle, and a catheter is guided over the wire.			
11.	A syringe is attached to the catheter, and the peritoneal cavity is aspirated.			
12.	If no blood (or less than 10 mL) is present, the catheter is attached to the I.V. tubing; 500-1,000 mL of solution is infused into the peritoneal cavity through Attached to the dialysis catheter			
13.	After the solution is infused, the empty I.V. bag is removed from the pole and lowered below the abdominal level (near the floor).			
14.	The peritoneal dialysis catheter is removed, and the wound is closed (unless laparotomy is necessary			

15.	The fluid recovered from the peritoneal cavity is examined visually and is usually sent to the laboratory for cell counts and microscopic inspection of spun-down sediment.			
16.	Remove gloves and additional PPE, if used.			
17.	Perform hand hygiene			
18.	Documentation			

Procedure 9

Administering Oxygen by Simple Face Mask with or without Aerosol

Student's Name:_____

ID # : _____ Date : _____

No	Procedure Steps	Yes	No	C L O
A	**Preparation**			
	a) Gather equipment (Oxygen source ,Humidifier bottle with distilled water, if high humidity is desired for simple face mask , Simple face mask or plastic aerosol mask, Large-bore tubing for aerosol or small-bore tubing for simple face mask, Flowmeter, Nebulizer for aerosol , NO SMOKING signs For heated aerosol therapy,Humidifier heating element EQUIPM.)			
	b) Provide comfortable environment with good light			
	c) Explain procedure to client.			
	d) Provide privacy			
	e) Wash hands			
B	**Procedure**			
	Verify correct patient. Determine ➢ current vital signs, LOC, and SaO2 or ABG, if patient is at risk for CO2 retention.			
	Assess viscosity and volume of sputum produced.			
	Show the mask to the patient and explain the procedure.			
	Make sure the humidifier or nebulizer is filled to the appropriate mark			
	Attach the large-bore tubing from the mask to the humidifier in the heating element, if used.			
	Set desired oxygen concentration and plug in the heating element, if used.			

	If the patient is tachypneic and concentration of 50% oxygen or greater is desired, two humidifiers and flowmeters should be yoked together			
	Adjust the flow rate until the desired mist is produced (usually 10 to 12 L/minute).			
	Apply the mask to the patient's face and adjust the straps so the mask fits securely. Dry face around mask every 2 hours			
No	**Procedure Steps**	**Yes**	**No**	**Comments**
	Drain the tubing frequently by emptying condensate into a separate receptacle, not into the humidifier. If a heating element is used, the tubing will have to be drained more often.			
	If a heating element is used, check the temperature. The humidifier bottle should be warm, not hot, to touch .			
	Record FiO2 and immediate patient response. Note the patient's tolerance of treatment. Notify the physician if intolerance occurs			
	Assess the patient's condition and the functioning of equipment at regular intervals.			
	If the patient's condition changes, assess SaO2 or ABG.			
	Record changes in volume and tenacity of sputum produced.			
	Procedure Termination			
	a) Put client in comfortable position according to health status			
C	b) Provide patient with reassurance			
	c) Return back equipments			
	d) Wash hands			
	e) Document findings			

Procedure 10

Chest Tube Insertion

Student's Name:_____
ID # : _____ Date : _____

		Performed		CLO
No	**Procedure Steps**	**Yes**	**No**	
A	**Preparation**			
	a) Gather equipment (Tube thoracostomy tray Syringes Needles/trocar Basins/skin germicide Sponges Scalpel, sterile drape, and gloves Two large clamps Suture material Local anesthetic Chest tube (appropriate size); connector Cap, mask, gloves, gown, drapes Chest drainage system–connecting tubes and tubing, collection bottles or commercial system, vacuum pump (if required) Sterile water EQUIPMENT.)			
	b) Provide comfortable environment			
	c) Explain procedure to client.			
	d) Provide privacy			
	e) Wash hands			
	Procedure			
B	Preparatory phase			
	. Assess patient for pneumothorax, hemothorax, presence of respiratory distress.			
	. Obtain a chest X-ray. Other means of localization of pleural fluid include ultrasound or fluoroscopic localization			
	Obtain informed consent			
	Verify right patient and right location/procedure.			
	. Premedicate if indicated.			
	Assemble drainage system.			
	Reassure the patient and explain the steps of the procedure. Tell the patient to expect a needle prick and a sensation of slight pressure during infiltration anesthesia.			
	Position the patient as for an intercostal nerve block or according to physician preference			
C	Performance phase Needle or intracath technique			
	Using universal precautions, the skin is prepared, anesthetized, and draped, using local anesthetic with a short 25G needle and using			

	aspetic technique. A larger needle is used to infiltrate the subcutaneous tissue, intercostal muscles, and parietal pleura.			
	An exploratory needle is inserted.			
	The IntraCath catheter is inserted through the needle into the pleural space. The needle is removed, and the catheter is pushed several centimeters into the pleural space			
	The catheter is taped to the skin; may be sutured to the chest wall and covered with a dressing.			
	The catheter is attached to a connector/tubing and attached to a drainage system (underwater-seal or commercial system) and all connections taped.			
D	Performance phase (continued) Trocar technique for chest tube insertion			
	Using universal precautions and aseptic technique, a trocar catheter is used for the insertion of a large-bore tube for removal of a moderate to large amount of air leak or for the evacuation of serous effusion.			
	A small incision is made over the prepared, anesthetized site. Blunt dissection (with a hemostat) through the muscle planes in the interspace to the parietal pleura is performed			
	The trocar is directed into the pleural space, the cannula is removed, and a chest tube is inserted into the pleural space and connected to a drainage system..			
	Hemostat technique using a large-bore chest tube Using universal precautions and aseptic technique, a large bore chest tube is used to drain blood or thick effusions from the pleural space.).			
	Using universal precautions, aseptic technique, and after skin preparation and anesthetic infiltration, an incision is made through the skin and subcutaneous tissue.			
	A curved hemostat is inserted into the pleural cavity and the tissue is spread with the clamp.			
	The tract is explored with an examining finger.			
	The tube is held by the hemostat and directed through the opening up over the ribs and into the pleural cavity.			
	The clamp is withdrawn and the chest tube is connected to a chest drainage system.			

	The tube is sutured in place and covered with a sterile dressing.			
	Catheter is attached to a connector/tube and to the system. All connections are taped.			
E	Follow-up phase			
	Observe the drainage system for blood and air. Observe for fluctuation in the tube on respiration			
	ecure a follow-up chest X-ray.			
	Assess for bleeding, infection, leakage of air and fluid around the tube.			
	Maintain integrity of the chest drainage system			
F	**Procedure Termination**			
	a) Put client in comfortable position according to health status			
	b) Provide patient with reassurance			
	c) Return back equipments			
	d) Wash hands			
	e) Document findings			

Procedure 11

Manual Resuscitation Bag, Administering Oxygen)

Student's Name:_____
ID # : _____ Date : _____

No	Procedure Steps	Yes	No	C L O
A	**Preparation**			
	a) Gather equipment (_ O2 source _ Resuscitation bag and mask _ Reservoir tubing or reservoir bag _ O2 connecting tubing _ Nipple adapter to attach flowmeter to connecting tubing _ Flowmeter _ Gloves _ Face shield).			
	b) Provide comfortable environment			
	c) Explain procedure to client.			
	d) Provide privacy			
	e) Wash hands			
B	**Procedure**			
	Preparatory phase 1. In cardiopulmonary arrest: a. Follow steps to establish that a cardiopulmonary arrest has occurred			
	b. Use caution not to injure or increase injury to the cervical spine when opening the airway.			
	2. In suctioning or transport situation, assess patient's heart rate, level of consciousness (LOC), and respiratory status.			
	Performance phase 1. Attach connecting tubing from flowmeter and nipple adapter to resuscitation bag			
	2. Turn flowmeter to "flush" position.			
	3. Attach reservoir tubing or reservoir bag to resuscitation bag.			
	4. Put on face shield and gloves.			
	Cardiopulmonary arrest			

	1. If respirations are absent after the airway is open, insert an oropharyngeal airway and ventilate twice with slow, full breaths of 1 to 1½ seconds each. Allow 2 seconds between breaths			
	2. Breaths will have to be quickly interposed between cardiac compressions. If the patient needs only respiratory assistance, watch for chest expansion and listen with the stethoscope to ensure adequate ventilation			
	3. A rate of approximately 10 to 12 breaths/minute is used unless the patient is being given external cardiac compressions.			
	Preoxygenation and suctioning 1. If hyperinflation is being used with suctioning, ventilate the patient before and after each suctioning pass (including after the last suction pass.			
	Transport 1. If hyperinflation is used in transport, suction patient before disconnection for transport; monitor heart and respiratory rates and LOC during procedure. 2. Ventilate at rate of 12 to 15 breaths/minu			
	Follow-up phase 1. In cardiopulmonary arrest, verify return of spontaneous pulse and respirations. Initiate further support as needed. 2. In suctioning or transport, return to previous support. Note patient tolerance of procedure.			
C	**Procedure Termination**			
	a) Put client in comfortable position according to health status			
	b) Provide patient with reassurance			
	c) Return back equipments			
	d) Wash hands			

Procedure 12

Administering Oxygen by Nasal Canula

Student's Name:_____
ID # : _____ Date : _____

No	Procedure Steps	Yes	No	C L O
A	**Preparation**			
	a) Gather equipment (Oxygen source _ Plastic nasal cannula with connecting tubing (disposable) _ Humidifier filled with sterile water _ Flowmeter _ NO SMOKING signs)			
	b) Provide comfortable environment			
	c) Explain procedure to client.			
	d) Provide privacy			
	e) Wash hands			
B	**Procedure**			
	Preparatory phase 1. Verify correct patient. Determine current vital signs, LOC, and most recent ABG.			
	2. Assess risk of CO2 retention with oxygen administration			
	Performance phase 1. Post NO SMOKING signs on the patient's door and in view of the patient and visitors.			
	2. Show the nasal cannula to the patient and explain the procedure.			
	3. Make sure the humidifier is filled to the appropriate mark.			
	4. Attach the connecting tube from the nasal cannula to the humidifier outlet.			
	5. Set the flow rate at the prescribed liters per minute. Feel to determine if oxygen is flowing through the tips of the cannula.			
	6. Place the tips of the cannula in the patient's nose and			

	adjust straps around ears for snug, comfortable fit.			
	Follow-up phase 1. Record flow rate used and immediate patient response.			
	2. Assess the patient's condition, ABG or SaO2 and the functioning of equipment at regular intervals.			
	3. Determine patient comfort with oxygen use.			
C	**Procedure Termination**			
	a) Put client in comfortable position according to health status			
	b) Provide patient with reassurance			
	c) Return back equipments			
	d) Wash hands			

Procedure 13

Nasotracheal Suctioning

Student's Name:_____
ID # : _____ Date : _____

No	Procedure Steps	Yes	No	C L O
A	**Preparation**			
	a) Gather equipment (Assemble the following equipment or obtain a prepackaged kit: _ Disposable suction catheter (preferably soft rubber) _ Sterile towel _ Sterile disposable gloves _ Sterile water _ Anesthetic water-soluble lubricant jelly _ Suction source at _80 to _120 mmHg _ Resuscitation bag with face mask. Connect 100% O2 source with flow of 10 L/minute _ Oximeter)			
	b) Provide comfortable environment			
	c) Explain procedure to client.			
	d) Provide privacy			
	e) Wash hands			
B	**Procedure**			
	Preparatory phase 1. Verify correct patient. Auscultate breath sounds, monitor heart rate, respiratory rate, color, ease of respirations. If the patient is on monitor, continue monitoring heart rate or arterial BP. Discontinue the suctioning and apply oxygen if heart rate decreases by 20 beats/minute or increases by 40 beats/minute, if BP increases, or if cardiac dysrhythmia is noted.			
	Performance phase 1. Make sure that the suction apparatus is functional. Place suction tubing within easy reach.			
	2. Inform and instruct the patient about the procedure. a. At a certain interval, the patient will be requested to cough to open the lung passage so the catheter will go into the lungs and not into the stomach. The patient will also be encouraged to try not to swallow because this will also cause the catheter to enter the stomach.			

	b. The postoperative patient can splint the wound to make the coughing produced by NT suctioning less painful			
	3. Place the patient in a semi-Fowler's or sitting position if possible.			
	4. Monitor oxygen saturation via oximetry and heart rate during suctioning.			
	. 5. Place a sterile towel across the patient's chest. Squeeze a small amount of sterile anesthetic water-soluble lubricant jelly onto the towel.			
	6. Open the sterile pack containing curved-tipped suction catheter.			
	7. Aseptically glove both hands. Designate one hand (usually the dominant one) as "sterile" and the other hand as "contaminated."			
	8. Grasp the sterile catheter with the sterile hand.			
	9. Lubricate catheter with the anesthetic jelly and pass the catheter into the nostril and back into the pharynx.			
	10.Pass the catheter into the trachea. To do this, ask the patient to cough or say "ahh." If the patient is incapable of either, try to advance the catheter on inspiration. Asking the patient to stick out tongue, or hold tongue extended with a gauze pad, may also help to open the airway. If a protracted amount of time is needed to position the catheter in the trachea, stop and oxygenate the patient with face mask or the resuscitation bag-mask unit at intervals. If three attempts to place the catheter are unsuccessful, request assistance.			
	11.Specific positioning of catheter for deep bronchial suctioning: a. For left bronchial suctioning, turn the patient's head to the extreme right, chin up. b. For right bronchial suctioning, turn the patient's head to the extreme left, chin up. *Note:* The value of turning the head as an aid to entering the right or left mainstem bronchi is not accepted by all clinicians.			
	12.Never apply suction until catheter is in the trachea. Once the correct position is ascertained, apply suction and gently rotate catheter while pulling it slightly upward. Do not remove catheter from the trachea.			
	13.Disconnect the catheter from the suctioning source after 5 to 10 seconds. Apply oxygen by placing a face mask over the patient's nose,			

	mouth, and catheter, and instruct the patient to breathe deeply.			
	14.Reconnect the suction source. Repeat as necessary.			
	15.During the last suction pass, remove the catheter completely while applying suction and rotating the catheter gently. Apply oxygen when the catheter is removed.			
	Follow-up phase 1. Dispose of disposable equipment. Auscultate breath sounds.			
	2. Measure heart rate, BP, respiratory rate, and oxygen saturation. Record the patient's tolerance of procedure, type and amount of secretions removed, and complications.			
	3. Report any patient intolerance of procedure (changes in vital signs, bleeding, laryngospasm, upper airway noise).			
C	**Procedure Termination**			
	a) Put client in comfortable position according to health status			
	b) Provide patient with reassurance			
	c) Return back equipments			
	d) Wash hands			

Procedure 14

Administering Nebulizer Therapy

Student's Name:_____
ID # : _____ Date : _____

No	Procedure Steps	Yes	No	C L O
A	**Preparation**			
	a) Gather equipment (_ Air compressor _ Connection tubing _ Nebulizer _ Medication and saline solutiont)			
	b) Provide comfortable environment			
	c) Explain procedure to client.			
	d) Provide privacy			
	e) Wash hands			
B	**Procedure**			
	Preparatory phase 1. Auscultate breath sounds, monitor the heart rate before and after the treatment for patients using bronchodilator drug			
	Performance phase 1. Verify correct patient. Explain the procedure to the patient. This therapy depends on patient effort.			
	2. Place the patient in a comfortable sitting or a semi- Fowler's position.			
	3. Add the prescribed amount of medication and saline to the nebulizer. Connect the tubing to the compressor and set the flow at 6 to 8 L/minute.			
	4. Instruct the patient to exhale.			
	5. Tell the patient to take in a deep breath from the mouthpiece, hold breath briefly, then exhale.			
	6. Nose clips are sometimes used if the patient has difficulty breathing only through the mouth.			
	7. Observe expansion of chest to ascertain that patient is taking deep breaths.			
	8. Instruct the patient to breathe slowly and deeply until all the medication is nebulized.			
	9. On completion of the treatment, encourage the patient to cough after several deep breaths			
	Follow-up phase 1. Record medication used and description of secretions.			

	2. Disassemble and clean nebulizer after each use. Keep this equipment in the patient's room. The equipment is changed according to facility policy.			
C	**Procedure Termination**			
	a) Put client in comfortable position according to health status			
	b) Provide patient with reassurance			
	c) Return back equipments			
	d) Wash hands			
	e) Document findings			

Procedure 15

Administering Oxygen by Simple Face Mask with or without Aerosol

Student's Name:_____
ID # : _____ Date : _____

No	Procedure Steps	Yes	No	Comments
A	**Preparation**			
	a) Gather equipment (Oxygen source _ Humidifier bottle with distilled water, if high humidity is desired for simple face mask _ Simple face mask or plastic aerosol mask _ Large-bore tubing for aerosol or small-bore tubing for simple face mask _ Flowmeter _ Nebulizer for aerosol _ NO SMOKING signs *For heated aerosol therapy:* _ Humidifier heating element)			
	b) Provide comfortable environment			
	c) Explain procedure to client.			
	d) Wash hands			
	e) provide privacy			
B	**Procedure**			
	Preparatory phase 1. Verify correct patient. Determine current vital signs, LOC, and SaO2 or ABG, if patient is at risk for CO2 retention			
	2. Assess viscosity and volume of sputum produced.			
	Performance phase 1. Post NO SMOKING signs on patient's door and in view of the patient and visitors			
	2. Show the mask to the patient and explain the procedure			
	3. Make sure the humidifier or nebulizer is filled to the appropriate mark			
	4. Attach the large-bore tubing from the mask to the humidifier in the heating element, if used.			
	5. Set desired oxygen concentration and plug in the heating element, if used.			
	6. If the patient is tachypneic and concentration of 50% oxygen or greater is desired, two humidifiers and flowmeters should be yoked together.			

	7. Adjust the flow rate until the desired mist is produced (usually 10 to 12 L/minute).			
	8. Apply the mask to the patient's face and adjust the straps so the mask fits securely. Dry face around mask every 2 hours.			
	9. Drain the tubing frequently by emptying condensate into a separate receptacle, not into the humidifier. If a heating element is used, the tubing will have to be drained more often			
	10.If a heating element is used, check the temperature. The humidifier bottle should be warm, not hot, to touch			
	Follow-up phase 1. Record FiO2 and immediate patient response. Note the patient's tolerance of treatment. Notify the physician if intolerance occurs.			
	2. Assess the patient's condition and the functioning of equipment at regular intervals.			
	3. If the patient's condition changes, assess SaO2 or ABG.			
	4. Record changes in volume and tenacity of sputum produced.			
C	**Procedure Termination**			
	a) Put client in comfortable position according to health status			
	b) Provide patient with reassurance			
	c) Return back equipments			
	d) Wash hands			
	e) Documents Findings			

Procedure 16

Administering Oxygen by Venturi Mask (High Air Flow Oxygen Entrainment System

Student's Name:_____
ID # : _____ Date : _____

No	Procedure Steps	Yes	No	C L O
A	**Preparation**			
	a) Gather equipment (Oxygen source _ Flowmeter _ Venturi mask for correct concentration (24%, 28%,31%, 35%, 40%, 50%) or correct concentration adapter if interchangeable color-coded adapters are used _ NO SMOKING signs _ If high humidity desired _ Compressed air source and flowmeter _ Humidifier with distilled water _ Large-bore tubing)			
	b) Provide comfortable environment			
	c) Explain procedure to client.			
	d) Wash Hands			
	e) Provide privacy			
B.	**Procedure**			
	Preparatory phase 1. Verify correct patient. Determine current vital signs, LOC, and most recent ABG			
.	2. Assess risk of CO2 retention with oxygen administration			
	Performance phase 1. Post NO SMOKING signs on the door of the patient's room and in view of patient and visitors.			
	2. Show the Venturi mask to the patient and explain the procedure			
	3. Connect the mask by lightweight tubing to the oxygen source.			
	4. Turn on the oxygen flowmeter and adjust to the prescribed rate (usually indicated on the mask). Check to see that oxygen is flowing out the vent holes in the mask.			
	5. Place Venturi mask over the patient's nose and mouth and under the chin. Adjust elastic strap .			

	6. Check to make sure holes for air entry are not obstructed by the patient's bedding.			
	7. If aerosol nebulizer used: a. Connect the humidifier to a compressed air source. b. Attach large-bore tubing to the humidifier and connect the tubing to the fitting for high humidity at the base of the Venturi mask.			
	Follow-up phase 1. Record flow rate used and immediate patient response. Note the patient's tolerance of treatment. Report if intolerance occurs.			
	2. If CO2 retention is present, assess ABG every 30 minutes for 1 to 2 hours or until the PaO2 is greater than 50 mm Hg and the PaCO2 is no longer increasing. Monitor pH. Report if the pH decreases below the initial assessment value.			
	3. Determine patient comfort with oxygen use.			
C	**Procedure Termination**			
	a) Put client in comfortable position according to health status			
	b) Provide patient with reassurance			
	c) Return back equipments			
	d) Wash hands			
	e) Document findings			

Procedure 17

Teaching Self-Injection of Insulin

EQUIPMENT

15. Prescribed bottle of insulin
16. Disposable insulin syringe and needle or insulin pen injection device with insulin cartridge
17. Cotton ball and alcohol or alcohol wipe

No	Procedure Steps	Yes	No	C L O
A	**Procedure**			
1.	Give the patient the syringe or insulin pen device containing the prescribed dose of insulin.			
2.	Have patient select a clean area of subcutaneous tissue.			
3.	Instruct the patient to hold the syringe as he would a pencil			
4.	Show the patient how to select an area of skin from the anterior thighs and form a skin fold by picking up subcutaneous tissue between the thumb and forefinger if the patient is thin.			
5.	Select areas of upper arms, abdomen, and upper buttocks for injection after patient becomes proficient with needle insertion			
6.	Assist the patient to insert the needle with a quick thrust to the hub at a 45- to 90-degree angle to the skin surface.			
7.	Instruct the patient to release the "pinched" skin and inject the insulin with slow, consistent pressure.			
8.	Have the patient count to 5 and then withdraw the needle in the same direction it was inserted.			
9.	If insulin is in a suspension (NPH), gently shake, rotate, or roll the insulin bottle to mix well.			
10.	Do not instruct the patient to wipe off the top of the vial with alcohol; instead, make sure that the vial is stored in its original carton and is kept clean.			
11.	Inject approximately the same volume of air into the insulin vial as the volume of insulin to be withdraw			
12.	If insulin pen device is being used, follow manufacturer's instructions for dialing the dosage and changing cartridges			
13.	**To fill a syringe with long- and short-acting insulin mixture**			

14.	Inject air equal to the number of units to be injected into each vial. Use the same sequence each time, for example, always NPH insulin first.			
15.	After injecting air into the second vial, keep needle in vial and withdraw prescribed amount of that type of insulin, then withdraw needle			
16.	Withdraw prescribed amount of insulin from the second vial			

Procedure 18

Foot Care Guidelines

EQUIPMENT

_ Mirror (optional)
_ Magnifying glass (optional)
_ Moisturizing lotion
_ Lamb's wool
_ Scissors and nail file

No	Procedure Steps	Yes	No	C L O
A	**Procedure**			
1.	Inspect the feet carefully and daily for calluses, corns, blisters, abrasions, redness, and nail abnormalities.			
2.	Bathe the feet daily in warm (never hot) water.			
3.	Massage the feet with an absorbable agent.			
4.	Prevent moisture between the toes to prevent maceration of the skin.			
5.	Wear well-fitting, noncompressive shoes and socks— long enough, wide enough, soft, supple, and low-heeled.			
6.	Go to a podiatrist on a regular basis if corns, calluses, and ingrown toenails are present.			
7.	Avoid heat, chemicals, and injuries to the feet.			
8.	Inspect inside of shoes for foreign objects or areas of roughness.			
9.	Take action if an injury occurs to the foot.			

Procedure 19

Check List For Leg Exercises

No	**Procedure Steps**	Performed		Comments
		Yes	No	
1	Check the patient's chart for the type of surgery and review the medical orders.			
2	Gather the necessary supplies and bring to the bedside stand or overbed table.			
3	Perform hand hygiene and put on PPE, if indicated.			
4	Identify the patient.			
5	Close curtains around bed and close the door to the room, if possible. Explain what you are going to do and why you are going to do it to the patient.			
6	Identify the patient's learning needs. Identify the patient's level of knowledge regarding leg exercises. If the patient has had surgery before, ask about this experience.			
7	Explain the rationale for performing leg exercises.			
8	Provide teaching regarding leg exercises.			
	Assist or ask the patient to sit up (semi-Fowler's position) and explain to the patient that you will first demonstrate, and then coach him/her to exercise one leg at a time.			
	Straighten the patient's knee, raise the foot, extend the lower leg, and hold this position for a few seconds. Lower the entire leg. Practice this exercise with the other leg.			
	Assist or ask the patient to point the toes of both legs toward the foot of the bed, then relax them. Next, flex or pull the toes toward the chin.			
	Assist or ask the patient to keep legs extended and to make circles with both ankles, first circling to the left and then to the right. Instruct the patient to repeat these exercises three times.			
9	Validate the patient's understanding of information. Ask the patient to give a return demonstration. Ask the patient if he or she has any questions. Encourage the patient to practice the activities and ask questions, if necessary.			
10	Remove PPE, if used. Perform hand hygiene.			

Procedure 20
Check List Preoperative Care Day Of Surgery

.No	**Procedure Steps**	Performed		Comments
		Yes	No	
1	Check the patient's chart for the type of surgery and review the medical orders. Review the nursing database, history, and physical examination. Check that the baseline data are recorded; report those that are abnormal.			
2	Gather the necessary supplies and bring to the bedside stand or overbed table.			
3	Perform hand hygiene and put on PPE, if indicated.			
4	Identify the patient.			
5	Close curtains around bed and close the door to the room, if possible. Explain what you are going to do and why you are going to do it to the patient.			
6	Check that preoperative consent forms are signed, witnessed, and correct; that advance directives are in the medical record (as applicable); and that the patient's chart is in order.			
7	***Check vital signs.*** Notify primary care provider and surgeon of any pertinent changes (e.g., rise or drop in blood pressure, elevated temperature, cough, symptoms of infection).			
8	Provide hygiene and oral care. Assess for loose teeth and caps. Remind patient of food and fluid restrictions before surgery.			
9	Instruct the patient to remove all personal clothing, including underwear, and put on a hospital gown.			
10	Ask patient to remove cosmetics, jewelry including bodypiercing, nail polish, and prostheses (e.g., contact lenses, false eyelashes, dentures, and so forth). Some facilities allow a wedding band to be left in place depending on the type of surgery, provided it is secured to the finger with tape.			
11	If possible, give valuables to family member or place valuables in appropriate area, such as the hospital safe, if this is not possible. They should not be placed in narcotics drawer.			
12	Have patient empty bladder and bowel before surgery.			
13	Attend to any special preoperative orders, such as starting an IV line.			

14	Complete preoperative checklist and record of patient's preoperative preparation.			
15	Question patient regarding the location of the operative site. Document the location in the medical record according to facility policy. The actual site will be marked on the patient when the patient arrives in the preoperative holding area by the licensed independent practitioner who will be directly involved in the procedure			
16	Administer preoperative medication as prescribed by physician/anesthesia provider.			
17	Raise side rails of bed; place bed in lowest position. Instruct patient to remain in bed or on stretcher. If necessary, use a safety belt.			
18	Help move the patient from the bed to the transport stretcher, if necessary. Reconfirm patient identification and ensure that all preoperative events and measures are documented.			
19	Tell the patient's family where the patient will be taken after surgery and the location of the waiting area where the surgeon will come to explain the outcome of the surgery. If possible, take the family to the waiting area.			
20	After the patient leaves for the operating room, prepare the room and make a postoperative bed for the patient. Anticipate any necessary equipment based on the type of surgery and the patient's history.			
21	Remove PPE, if used. Perform hand hygiene.			

Procedure 21
Check List For Early Post Operative And Convalescent Phase Recovery

No	**Procedure Steps**	Performed		Comments
		Yes	No	
	Immediate Care			
1	When patient returns from the PACU, obtain a report from the PACU nurse and review the operating room and PACU data.			
2	Perform hand hygiene and put on PPE, if indicated.			
3	Identify the patient.			
4	Close curtains around bed and close the door to the room, if possible. Explain what you are going to do and why you are going to do it to the patient.			
5	Place patient in safe position (semi- or high Fowler's or side-lying). Note level of consciousness.			
6	Obtain vital signs. Monitor and record vital signs frequently. Assessment order may vary, but usual frequency includes taking vital signs every 15 minutes the first hour, every 30 minutes the next 2 hours, every hour for 4 hours, and finally every 4 hours.			
7	Assess the patient's respiratory status. Measure the patient's oxygen saturation level.			
8	Assess the patient's cardiovascular status.			
9	Assess the patient's neurovascular status, based on the type of surgery performed.			
10	Provide for warmth, using heated or extra blankets, as necessary. Assess skin color and condition.			
11	Check dressings for color, odor, presence of drains, and amount of drainage. Mark the drainage on the dressing by circling the amount, and include the time. Turn the patient to assess visually under the patient for bleeding from the surgical site.			

12	Verify that all tubes and drains are patent and equipment is operative; note amount of drainage in collection device. If an indwelling urinary (Foley) catheter is in place, note urinary output.			
13	Verify and maintain IV infusion at correct rate.			
14	Assess for pain and relieve it by administering medications ordered by the physician. If the patient has been instructed in use of PCA for pain management, review its use. Check record to verify if analgesic medication was administered in the PACU.			
15	Provide for a safe environment. Keep bed in low position with side rails up, based on facility policy. Have call bell within patient's reach.			
16	Remove PPE, if used. Perform hand hygiene.			
	Ongoing Care			
17	Promote optimal respiratory function.			
	Assess respiratory rate, depth, quality, color, and capillary refill. Ask if the patient is experiencing any difficulty breathing.			
	Assist with coughing and deep breathing exercises			
	Assist with incentive spirometry			
	Assist with early ambulation			
	Provide frequent position change.			
	Administer oxygen as ordered.			
	Monitor pulse oximetry			
18	Promote optimal cardiovascular function:			
	Assess apical rate, rhythm, and quality and compare with peripheral pulses, color, and blood pressure. Ask if the patient has any chest pains or shortness of breath.			
	Provide frequent position changes.			
	Assist with early ambulation.			
	Apply antiembolism stockings or pneumatic compression devices, if ordered and not in place. If in place, assess for integrity.			
	Provide leg and range-of-motion exercises if not contraindicated			
19	Promote optimal neurologic function:			

	Assess level of consciousness, motor, and sensation.			
	Determine the level of orientation to person, place, and time.			
	Test motor ability by asking the patient to move each extremity.			
	Evaluate sensation by asking the patient if he or she can feel your touch on an extremity.			
20	Promote optimal renal and urinary function and fluid and electrolyte status. Assess intake and output, evaluate for urinary retention and monitor serum electrolyte levels.			
	Promote voiding by offering bedpan at regular intervals, noting the frequency, amount, and if any burning or urgency symptoms.			
	Monitor urinary catheter drainage if present.			
	Measure intake and output.			
21	Promote optimal gastrointestinal function and meet nutritional needs:			
	Assess abdomen for distention and firmness. Ask if patient feels nauseated, any vomiting, and if passing flatus.			
	Auscultate for bowel sounds.			
	Assist with diet progression; encourage fluid intake; monitor intake.			
	Medicate for nausea and vomiting, as ordered by physician.			
22	Promote optimal wound healing.			
	Assess condition of wound for presence of drains and any drainage.			
	Use surgical asepsis for dressing changes.			
	Inspect all skin surfaces for beginning signs of pressure ulcer development and use pressure-relieving supports to minimize potential skin breakdown.			
23	Promote optimal comfort and relief from pain.			
	Assess for pain (location and intensity using scale)			
	Provide for rest and comfort; provide extra blankets, as needed, for warmth.			
	Administer pain medications, as needed, or other nonpharmacologic methods.			

24	Promote optimal meeting of psychosocial needs:			
	Provide emotional support to patient and family, as needed.			
	Explain procedures and offer explanations regarding postoperative recovery, as needed, to both patient and family members			

Procedure 22

Check List For Deep Breathing Exercises, Coughing, Splinting

No	**Procedure Steps**	Performed		Comments
		Yes	No	
1	Check the patient's chart for the type of surgery and review the medical orders.			
2	Gather the necessary supplies and bring to the bedside stand or over bed table.			
3	Perform hand hygiene and put on PPE, if indicated.			
4	Identify the patient.			
5	Close curtains around bed and close the door to the room, if possible. Explain what you are going to do and why you are going to do it to the patient.			
6	Identify the patient's learning needs. Identify the patient's level of knowledge regarding deep breathing exercises, coughing, and splinting of the incision. If the patient has had surgery before, ask about this experience.			
7	Explain the rationale for performing deep breathing exercises, coughing, and splinting of the incision.			
8	Provide teaching about deep breathing exercises.			
	Assist or ask the patient to sit up (semi- or high-Fowler's position) and instruct the patient to place the palms of both hands along the lower anterior rib cage.			
	Instruct the patient to exhale gently and completely.			
	Instruct the patient to breathe in through the nose as deeply as possible and hold breath for 3 seconds.			
	Instruct the patient to exhale through the mouth, pursing the lips like when whistling.			
	Have the patient practice the breathing exercise three times. Instruct the patient that this exercise should be performed every 1 to 2 hours for the first 24 hours after surgery.			
9	Provide teaching regarding coughing and splinting (providing support to the incision).			
	Ask the patient to sit up (semi-Fowler's position) and apply a folded bath blanket or pillow against the part of the body where the incision will be (e.g., abdomen or chest).			
	Instruct the patient to inhale and exhale through the nose three times.			

	Ask the patient to take a deep breath and hold it for 3 seconds and then cough out three short breaths.			
	Ask the patient to take a breath through the mouth and strongly cough again two times.			
	Instruct the patient that he or she should perform these actions every 2 hours when awake after surgery.			
10	Validate patient's understanding of information. Ask the patient to give a return demonstration. Ask the patient if he or she has any questions. Encourage the patient to practice the activities and ask questions, if necessary.			
11	Remove PPE, if used. Perform hand hygiene.			