## Learning Activities

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<td><strong>Welcome, Attendance and Questions/Answers  p. 11</strong>&lt;br&gt;2 Instructor-12 students-6 students for each simulation&lt;br&gt;2 hours</td>
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- The Clinical Education Center is packed with new clinical content and nursing application
- Please prepare for the simulation scenarios as you would for a clinical day.
- Be prepared to provide knowledgeable, effective, and safe patient care in each of the simulation scenarios today. You will need to prepare for simulation in advance.

Please prepare before this experience:
- Complete the Nursing Care Plan tool utilizing the patient data for simulation patient James Snow provided in this workbook.
- You will be responsible for pages 1-4 for simulation experience #1 and pages 5 – 10 for simulation experience #2.
- No prep work is necessary for the skills you will be doing in the CEC except for the Care Plan. Just review readings as needed. These will be hands-on learning activities, so be ready for active engagement.

Please read before this experience:
- This workbook
- Selected procedures

Please bring to this experience:
- This workbook, please review the simulation in detail. You should be familiar with the patient’s PMH, admitting diagnosis, possible interventions which include medications
- Completed Care Plan including Medication cards for James Snow
- Stethoscope
- Clinical resources i.e. pen, penlight, clipboard
- Davis Drug book
- Enthusiasm and the thirst to acquire nursing knowledge😊
Clinical Education Center

Activity #1

Chest Tube Management 20 minutes

Your role as a student nurse:
Review Monitoring a Patient with a Chest Drainage System, Craven Procedure 25-8 p. 797 and also p 763

Critical Thinking Exercise:
• You are assigned to provide care for a patient with a Left pleural chest tube on your medical/surgical unit. Provide a brief report of an assessment of a chest tube along with nurse chest tube management considerations?

Activity #2

IV infusion Pumps-Alaris and Baxter
Primary and Secondary IV infusions 30 minutes

Your role as a student nurse:
Review Administering Intravenous Medications Using Intermittent Infusion Technique, Craven Procedure 20-7 p. 522
Administering Intermittent IV Medication Into Primary Line Using an Electronic Infusion Device (EID) or Smart Pump p 523-525.

Critical Thinking Exercise:
• You are assigned to provide care for a patient who requires a NS infusion of 125 mL/hr and an IVPB antibiotic in 50mL of fluid to be administered over 30minutes. Please program the IV infusion pump to infuse the IVPB over 30 minutes and then return the primary fluid to 125mL/hr. Please perform both of these tasks on the Alaris and Baxter pumps.

Activity #3

Respiratory Medications
Nebulizers and Inhalers
Review Incentive Spirometer and Oxygen Deliver Systems 20 minutes

Your role as a student nurse:
Administering Medication by Metered-Dose Inhaler, Craven Procedure 19-2 p. 445
Administering Oxygen by Nasal Cannula or Mask, Craven Procedure 25-5 p. 783
Promoting Breathing with the Incentive Spirometer, Craven Procedure 25-4 p. 780

Critical Thinking Exercise:
• You are assigned to administer a patient Albuterol MDI Inhaler with spacer 2 puffs or Albuterol 5mg Nebulized Treatment every 2 hours as needed. What would your patient’s physical assessment reveal to demand one of these medications? What factors would influence a RN’s selection in choosing which medication to give? Please administer one of these medications to this patient.

Activity #4

Emergency Procedure and Students Role 30 minutes

Your role as a student nurse:
Review Craven Cardiopulmonary Resuscitation p. 833-835

Critical Thinking Exercise:
• Interactive discussion and hands-on demonstration of nursing roles during a Code.

Activity #5

Developing a Nursing Plan of Care 10 minutes

Your role as a student nurse:

Critical Thinking Exercise:
• Interactive discussion and review of Care Plan for James Snow.
• Please hand your completed Care Plan to the Instructor so they can give you credit for your work.
CT Management

Assessment of CT
- Assess insertion site. Note color and amount of drainage, presence of crepitus or sub q air.
- Assess CT itself. Assure secured to pt, presence of clots.
- Assess drainage collection chamber for characteristics and amount of drainage.
- Assess suction chamber. Assure proper amount of suction.
- Check for air leaks.

Documentation of chest tube
- Patient’s tolerance of therapy
- Pain Management
- Characteristics of drainage
- Amount of drainage
- Insertion site – drainage on dressing, surrounding tissue
- Amount of suction
- Presence or absence of air leak

Amount of Suction

Leaks
- Bubbling in the water seal chamber indicates an air leak
- This may be within the system or within the patient
- Identify the source of the air leak:
  - Check and tighten connections; test the tube for leaks, RN physically examine tubing for cracks and connections
  - To assist in locating air leak, momentarily pinch tube closest to insertion site
    - If bubbling stops, air leak is most likely coming from the patient
    - If bubbling does not stop when chest tube is pinched, close it closer to the drainage system
    - If it stops at that point, the leak is probably coming from a loose connection - MD only can clamp; if leak is in tubing, replace the unit; if the leak may be at the insertion site, remove the CT dressing and inspect the site
  - Make sure the catheter eyelets have not pulled out beyond the chest wall (that they have not advanced out of the chest cavity)
  - If you cannot see or hear any obvious leaks at the site, the leak is from the lung
  - Replace the dressing and notify physician if air leak (bubbling) continues; check the patient history, would you expect a patient air leak
  - If bubbling fluctuates with respirations, the most likely source is the lung
- Document the magnitude of a patient air leak using the air leak meter
- The higher the numbered column through which bubbling occurs, the greater the degree of air leak
- Check site for crepitus

Integration I Experience 2 CEC/Sim Workbook
Alaris Pump

QUICK REFERENCE GUIDE
Alaris® PC unit (PC Unit) and Alaris® Pump module (Pump Module)

WARNINGS

- To ensure proper PC Unit and Pump Module operation, the user must be familiar with related features, setup, programming, and IV sets and accessories.
- This guide is not intended to be comprehensive instructions for the setup and operation of the Alaris® System. For complete instructions, along with Warnings and Cautions, refer to the Alaris® System Directions for Use (V6).

Programming an Infusion Using Guardrails® Suite MX Protection

Using Guardrails® drug library:
1. Press CHANNEL SELECT key.
2. Press Guardrails Drugs soft key.
3. Press soft key next to desired drug.
   • An optional hospital-defined therapy or clinical indication for delivery of this infusion might appear.
   • A weight-based, non-weight-based, or BSA-based option for delivery of this infusion might appear.
   • Multiple concentration listings for delivery of this infusion might appear.
4. Confirm selected drug and concentration.

Using Guardrails® drug library:
(Continued)
7. Press VTI soft key and enter desired VTI. VTI may be pre-populated and value edited if appropriate.
8. Press START soft key.
   • The bolus option appears on the Continuous Infusion page when a VTI is entered.
   • Press BOLUS soft key.
   • Use numeric keys to enter desired bolus dose. This value may be pre-populated and edited if appropriate. If applicable, enter patient weight.
   • Press DURATION soft key and use numeric data keys to enter duration—this value may be pre-populated and edited if appropriate—or press Rapid Bolus soft key.
   • If Rapid Bolus is selected, the bolus dose is delivered at the hospital-established fastest rate for that specific drug.
   • Press START soft key to begin bolus infusion.
10. During any bolus infusion, press CHANNEL SELECT key to see detail screen.
11. Press appropriate DOSING UNITS soft key.
12. Press NEXT soft key to confirm parameters.
13. Press either RATE or DOSE soft key and enter desired value.
14. Press VTI soft key and enter desired VTI.
15. Press START soft key.

Basic Infusion:
1. Press CHANNEL SELECT key.
2. Press Basic Infusion soft key.
   • Enter duration press VOLUME DURATION soft key and enter duration value.
3. Press VTI soft key and enter desired VTI.
4. Press START soft key.

Secondary Piggyback Infusion:
Secondary infusion is not available on an Alaris® Syringe module.
1. Program primary infusion.
2. Press CHANNEL SELECT key.
3. Press OPTIONS key.
4. Press CHANNEL Labels soft key.
5. Press soft key next to applicable channel label.
6. Program infusion.

Secondary Piggyback Infusion Using Guardrails® drug library.
Secondary infusion is not available on an Alaris® Syringe module.
1. Program primary infusion.
2. Press CHANNEL SELECT key.
3. Press OPTIONS key.
4. Press CHANNEL Labels soft key.
5. Enter patient weight or BSA if required. If correct, press NEXT soft key.
6. Press either RATE or DOSE soft key and enter desired value. This value may be pre-populated and edited if appropriate.
   • OR
   • Press DURATION soft key and enter desired value. This value may be pre-populated and edited if appropriate. To enter rate, press RATE VOLUME soft key and enter infusion rate.
7. Press VTI soft key and enter desired VTI.
8. Press START soft key.

If the secondary clamp is not open, the fluid is delivered from the primary container.
9. Press VTI soft key and enter desired VTI.

When an infusion is started outside of a Guardrails® limit, a G icon displays. To view Guardrails® information, press any key next to Q icon.

Programming an Infusion Without Guardrails® Suite MX Protection

Drug Calculation:
1. Press CHANNEL SELECT key.
2. Press Guardrails® Drugs soft key.
3. Press DRUG CALC soft key.
4. Enter amount of drug in fluid container.
6. Enter diluent volume.
7. Press PATIENT WEIGHT soft key.
8. Press Yes or No soft key to indicate whether or not patient weight is to be used in drug calculation.
9. If applicable, enter patient weight.
10. Press TIME UNIT's soft key. Press Min, Hour, or Day soft key to select approximate time measurement.
11. Press appropriate DOSING UNITS soft key.
12. Press NEXT soft key to confirm parameters.
13. Press either RATE or DOSE soft key and enter desired value.
14. Press VTI soft key and enter desired VTI.
15. Press START soft key.

WARNING

- If the secondary clamp is not open, the fluid is delivered from the primary container.
- Press START soft key.

Restoring an Infusion Following an Infusion Complete - KVO
1. Press CHANNEL SELECT key.
2. Press Restore soft key to restore previous VTI or press VTI soft key to enter a new VTI.
3. Press START soft key.
4. Press CHANNEL Labels soft key.
5. Press soft key next to applicable channel label.
6. Program infusion.

Pressure Monitoring—Changing Selectable Pressure
This option is not available on an Alaris® Syringe module.
1. Press CHANNEL SELECT key.
2. Press OPTIONS key.
3. Press Pressure Limit soft key.
4. Press Selectable soft key.
5. Press either Up or Down soft key to increase/decrease occlusion pressure threshold.
6. Press CONFIRM soft key.
7. Press START soft key.

To power down individual channels, press and hold CHANNEL OFF key for approximately 1.5 seconds, until a beep is heard.

System Error
If an error is detected on the PC Unit, operation continues on all channels. When appropriate for the patient, power down the system and replace the PC Unit with an operational instrument. Service by qualified personnel is required.
Prepare lines via aseptic technique:

- Close primary line regulating clamp
- Insert spike into solution container. If an IV infusant requires venting, keep the vent on the drip chamber closed while spiking. After spiking the bottle, squeeze the drip chamber then open the vent
- Fill the drip chamber 2/3 full
- Slowly open roller clamp and prime tubing slowly while inverting and tapping air out of y-sites
- Prime tubing set and upper filament slowly to diminish air bubbling
- Fill the remainder of the IV tubing with the primary fluid; *Set tubing and upper filament portion of tubing is not to be touched or stretched during pump loading—failure to follow this instruction may result in infusion rate inaccuracy
- Observe and remove any air bubbles in tubing
- *When SmartSite valve is accessed, it must be swabbed with alcohol pads and allowed to dry prior to medication/flush delivery
- *The distal end of the tubing should always be covered with a sterile cap when not attached to a patient—DO NOT ‘loop’ the end of the tubing back into another Y-site port for storage

Secondary line aseptic preparation: Check for drug incompatibilities before hanging the IV medication with the primary IV solution

- Connect primed secondary tubing to primary line tubing at Y-site valve below check valve and above pump module OR back-prime existing secondary tubing
- To re-use the secondary set tubing, the back-prime procedure is as follows:
  - Close the clamp on the primary tubing.
  - Leave the empty bag and needleless system connected to the Y-site
  - Before hanging a new secondary IV solution lower the empty secondary bag below the level of the primary bag
  - Open the clamp of the secondary tubing to allow the primary solution to back prime the secondary set tubing
  - Remove the empty secondary bag and replace with the new secondary infusant
- Hang primary IV fluid from the extended 12 inch plastic hanger provided in secondary medication set ensuring that the primary solution is lower than the secondary solution
- Ensure that secondary bag is located 20 inches above the infusion pump
- Program pump for secondary medication and start infusion
- Verify that drips are falling into the drip chamber from the secondary medication set
- Applies appropriate label indicating date and time of scheduled tubing change
# Nebulizers and Inhalers

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<th>Uses</th>
<th>Onset</th>
<th>Drug Names</th>
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<td><strong>Short-Acting</strong></td>
<td></td>
<td></td>
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<td><strong>Beta-2 Agonists</strong></td>
<td>Bronchodilator-relaxes smooth muscles.</td>
<td>Fast</td>
<td>Xopenex (levalbuterol), Airet, Proventil, Ventolin (albuterol)</td>
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<tr>
<td><strong>Anticholinergics</strong></td>
<td>Reduce airway tone and improve expiratory flow limitation, hyperinflation, &amp; exercise capacity.</td>
<td>Intermediate – slower then Beta2-agonists but faster than steroids.</td>
<td>Atrovent (ipratropium)</td>
</tr>
<tr>
<td><strong>Steroids</strong></td>
<td>Prevents and reduces swelling inside the airways, making them less sensitive. It may also decrease mucus production. Best med for long-term control.</td>
<td>Slow – typically used as a long-term control medication. Not for quick relief of acute attacks.</td>
<td>Pulmicort (budesonide); Flovent (fluticasone); Qvar (beclomethasone HFA); Azmacort (triamcinolone)</td>
</tr>
<tr>
<td><strong>Combination</strong></td>
<td>See individual drugs</td>
<td>See individual drugs</td>
<td>DuoNeb (albuterol and ipratropium)</td>
</tr>
<tr>
<td><strong>Alpha/Beta Agonist</strong></td>
<td>Vasoconstrictor-decreases swelling, bronchodilator-relaxes smooth muscles.</td>
<td>Fast ~1 minute</td>
<td>Racemic epinephrine (1:100)</td>
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Administer the following order:

- Albuterol 5 mg Nebulized Treatment q6 hours

**Procedure:**

1. Wash your hands prior to preparing each treatment
2. Use a clean nebulizer
3. Measure the correct dose of medication and other solutions prescribed by the physician. Add these to the nebulizer
4. Connect the air tubing from the compressor to the nebulizer base
5. Make sure all connections are snug
6. Turn on air to 8L/min and observe for mist flow
   1. If patient is on 3 L/min or less of oxygen therapy **MAY** deliver med with compressed air (yellow wall outlet)
   2. If patient is on 4 L/min or more of oxygen therapy, deliver med with oxygen flowmeter (green wall outlet) at 8 L/min
7. Instruct patient to put the mouthpiece in their mouth between their teeth and close their lips around it
8. Make sure the nebulizer in an upright position. This prevents spilling and promotes nebulization
9. Instruct patient to gently breathe in and out of the mouthpiece
10. The nebulizer will/should continually mist
11. Have the patient breathe in slowly and deeply over three to five seconds
12. At the end of a deep breath, instruct patient to hold their breath for up to ten seconds. This allows the medication time to deposit in the airway
13. Resume normal breathing
14. Occasionally tapping the side of the nebulizer helps the solution drop to where it can be misted
15. Continue these steps until all the medication is used and no mist is seen
16. Turn air or oxygen off and replace patient’s oxygen if needed
17. Clean mouthpiece, and place equipment in plastic bag at bedside

**Documentation:**

- Time and date of treatment
- Respiratory assessment before and after intervention (respiratory effort, lung sounds, SpO₂, pulse)
- Patient complaints
- Patient education
Oxygen Delivery Devices

**Oxyhood**
Delivers heated, humidified oxygen to patient ~15 kg.
FiO₂ is set by dial on blender
FiO₂ range = 21 – 7100%
Minimum Flow Rate = 10 LPM
(to clear exhaled CO₂ from hood)

**Venti Mask**
Delivers humidified oxygen
(Aerosol adapter can be added.)
FiO₂ is set by entrainment dial on mask
Low Concentrations: 14%, 26%, 28%, 31%
High Concentrations: 35%, 40%, 50%

**Non-Rebreathing Mask**
Delivers non-humidified oxygen
Used for emergency delivery
FiO₂ range = 60 – 7100%
Reservoir bag provides 100% FiO₂ and minimizes room air dilution
Flap valves minimize entrainment of room air (which will dilute FiO₂)
Flow Rate is adjusted according to the patient’s ventilatory pattern to keep reservoir bag inflated

**Simple Oxygen Mask**
Delivers humidified oxygen
Minimum Flow Rate = 5 LPM
(to clear exhaled CO₂ from mask)
Approximate concentrations:
6 L = 40%
7 L = 50%
8 L = 60%

**Aerosol Mask**
Delivers cool, aerosolized oxygen or air
FiO₂ is set by dial on nebulizer
Maximum FiO₂ is 40 – 60%
Minimum FR = 8 LPM

**Tracheotomy Mask**
Delivers heated, aerosolized oxygen or air
FiO₂ is set by dial on blender
Maximum FiO₂ is 40 – 60%
Minimum FR = 8 LPM

**Face Tent**
Delivers cool, aerosolized oxygen or air
Loose fit under the chin for patient comfort, speaking, etc.
FiO₂ is set by dial on nebulizer (concentration is unstable)
Maximum FiO₂ is 40 – 50%
Minimum FR = 4 LPM

**Nasal Canula**
Delivers humidified oxygen
Nasal passages must be patent
Blender Set up: FiO₂ is set by dial;
1 – 2 L flow can be used as CPAP for infants
Wall Set up: FiO₂ is set by flow rate
Approximate FiO₂ (if RR and V̇₂ are normal)
Adult
Infant
1 L = 24% 1 L = 28%
2 L = 28% ¼ L = 33%
3 L = 32% ½ L = 45%
4 L = 36% ¼ L = 50%
5 L = 40% 1 L = 55%
6 L = 44%

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Integration I Experience 2 CEC/Sim Workbook
7
Nursing Roles in a Code Situation

- **The definition** of a CODE BLUE is a situation where the patient or visitor experiences a loss of vital signs (life support) or there is a use of emergency advanced cardiac life support (ACLS) drugs/ electrical therapy necessary to prevent impending loss of vital signs.

- **Clinical providers caring for, or in the vicinity of the patient or visitor experiencing a CODE BLUE, are responsible for** initiating Basic Life Support (BLS) and calling for help by instructing others to call the operator to initiate the CODE BLUE or by calling 911.

- **Any Healthcare Provider certified in BLS may initiate the AED** component on the defibrillator/pacemaker as the first responder, once unresponsiveness has been determined and the call has been placed to the CODE TEAM.

- **Acute:** enter patient room and find them non-arousable and a pulse check is negative.

- **Gradual decompensation:** slow decline in patient condition- can be harder to know when to call for help, call for a MET/RRT early.

**Basic steps in Emergency Response:**

1. **Call for help, don't leave the patient**
   - Access code team and call for the code cart.
   
2. **Set the tone**
   - Move patient to area where team can work.
   - Make sure chest is dry and clothes are off.
   - Lower head of bed if in bed, and lower the bed itself so that you can do compressions.

3. **Look, listen, and feel-check simultaneously responsiveness & breathing & then for pulse < 10 sec-Compressions, Airway, Breathing (CAB)**
   - Begin compression only CPR at least 100/min at least 2 inches.
   - One person should be completely focused on compressions from the second CPR is initiated- Push hard and Push fast.
   - 2nd person: Switch often- YOU WILL GET TIRED!! Recommend every 2 minutes after 5 rounds of compressions.
   - If airway barrier or ambu-bag is available, give 2 slow breaths- 30:2 CPR.

4. **Once the code cart is at the bedside**
   - Attach stat pads and place patient back board. Don’t stop compressions!
   - Turn AED on, analyze, defibrillate if indicated.

5. **CODE team arrives**
   - Continue compressions until relieved by someone.
   - The primary nurse needs to give a QUICK SBAR what happened, what did you do, brief PMH & significant events. Don’t be afraid to offer what you think is the cause of the event.
   - The primary nurse should stay in the room to document and/or be available for questions.
   - Other RNs can usually leave and provide care for those RNs involved in the CODE.

**Nursing Roles:**

**First Responder:**
- Determines unresponsiveness and alerts floor/unit to emergency.
- **Activates code team** and sets the tone for code team arrival.
- **Begins CPR** awaiting code cart arrival (compression- only if no mouth barrier available).
- Places stat-pads/backboard and attaches to monitor, initiates AED capability and follows AED prompt.

**Second Responder:**
- **Brings code cart to room**, assist with Stat-pad placement, initiates AED capability and follows AED prompt.
- Calls Code blue if not already done.

**Third Responder:**
- **Set-up of ventilation bag and oxygen**.
- Assists with 2 person CPR when needed.

**Documentation:**
- Documents event on Code record or in EMR.
- Specific assignments: Record keeping, completion of the clinical record, along with all documentation at the end of the resuscitation. Delegate’s clock used for timing on the resuscitative event. Can incorporate the help of any other RNs to help clarify documentation, rhythm strips and obtaining the MD signature and ID number.

**Patient/Family Teaching:**
- **RN role to address advance directives- know your patient’s wishes**.
- The Team will determine if family presence is appropriate at each given code.
- Family presence during emergencies?
- Identification of a family facilitator should be determined at the time of the arrest, prior to bringing the family in.
- If the family is already in the room at the time of the arrest, the primary RN must alert the team to the family presence.
- The primary RN should assess the situation and offer family presence if appropriate.
Assisting with Ventilation

**Important to learn how to get good seal with mask and be able to operate ambu bag**

Open the airway
- Perform the head-tilt chin-lift maneuver or the jaw thrust. In patients with suspected cervical spine injury, do not perform a head-tilt; rather, only perform a chin-lift maneuver
- Use an airway adjunct.
  - Place an OPA in unresponsive patients without a gag reflex
  - If the patient is awake, place one or two NPA devices instead, as this may be better tolerated. However, because of the risk of intracranial placement, avoid the use of a NPA in patients with significant head and facial trauma

Position the mask
- Place the mask on the patient’s face before attaching the bag
- Cover the nose and the mouth with the mask without extending it over the chin
- Change the size of the mask, as appropriate, to create a good seal
- No matter which technique is being used, avoid applying pressure on the soft tissues of the neck or on the eyes
- The two-hand technique is preferred to the one-hand technique and should be used whenever possible
- Hold the mask in place using the one-hand E-C technique, as shown below:
- One-hand E-C technique
  - Use the nondominant hand
  - Create a C-shape with the thumb and index finger over the top of the mask and apply gentle downward pressure
  - Hook the remaining fingers around the mandible and lift it upward toward the mask, creating the E

![One-hand E-C technique](image)

- The alternative one-hand technique shown below can also be used

![Alternate one-hand technique](image)

- If a second person is available to provide ventilations by compressing the bag, a two-hand technique can be used
- Create two opposing semicircles with the thumb and index finger of each hand to form a ring around the mask connector, and hold the mask on the patient’s face. Then, lift up on the mandible with the remaining digits, as shown below

![Two-hand technique](image)
Alternatively, place both thumbs opposing the mask connector, using the thenar eminences to hold the mask on the patient’s face, while lifting up the mandible with the fingers, as shown below.

**Alternate two-hand technique**
- Place the web space of the thumb and index finger against the mask connector
- Push downward with gentle pressure
- Wrap the remaining fingers around the mandible and lift it upward

**Ventilate the patient**
- Provide a volume of 6-7 mL/kg per breath (approximately 500 mL for an average adult)
- For a patient with a perfusing rhythm, ventilate at a rate of 10-12 breaths per minute
- During cardiopulmonary resuscitation (CPR), give 2 breaths after each series of 30 chest compressions until an advanced airway is placed. Then ventilate at a rate of 8-10 breaths per minute
- Give each breath over 1 second
- If the patient has intrinsic respiratory drive, assist the patient’s breaths. In a patient with tachypnea, assist every few breaths
- Ventilate with low pressure and low volume to decrease gastric distension
- Maintain cricoid pressure consistently
  - This pressure is meant to compress the esophagus and reduce the risk of aspiration
  - However, it does not completely protect against regurgitation, especially in cases of prolonged ventilation or poor technique
  - Care must be taken to avoid excessive pressure, which can result in compression of the trachea.

**Assess the adequacy of ventilation**
- Observe for chest rise, improving color, and oxygen saturation
- Monitor for air leak
- Be cognizant of increasing gastric distention

**Additional Notes**
Simulation

Your role as a student nurse:
Please review this workbook including each scenario, the patient’s medical orders, MAR, and admission report


Critical Thinking Exercise:
- Be prepared to work for 15 minutes in groups of 3 to complete objectives for each scenario
- Three students will actively participate in simulation and 3 students will actively observe
- All 6 students will actively participate for 15 minutes with an instructor guided debrief

General Patient Medical Information for All Scenarios Today

Primary Medical Diagnosis: S/P ORIF for L Hip fracture

History of Present Illness:
Mr. James Snow is a 79 year old male who you are receiving from the PACU. His diagnosis is S/P open reduction and internal fixation (ORIF) of Left hip for his hip fracture (Displaced Femoral Neck) earlier today.

Situation
79 year old male admitted to orthopedic surgeon Dr. Oliver Mitchell with Dx: S/P Left hip ORIF

Background
Patient is 79 year old male who fell from a ladder this morning while working in his yard. He arrived to the Emergency Department via ambulance with obvious deformity to left hip and inability to bear weight. He was found to have a hip fracture on X-Ray left femoral neck displaced; CT scan of head was negative.

PMH: Type 2 DM, COPD, Osteoporosis
He is has been very anxious about his wife. He is the primary caretaker for his wife who had a stroke last year and requires help with daily ADLs. He has a son who lives locally and is at his bedside. He also has a daughter who lives in California.

His PACU recovery has been without complications. Please see PACU faxed SBAR report.

Assessment:
PACU assessment: A & O x 4. S1 S2 no murmurs. Respiratory effort was briefly labored with wheezing at times. Now, after Albuterol neb, even and unlabored with clear breath sounds throughout on 4 L per NC. BS active x 4 quads. Left cheek and elbow with abrasions. Left Hip with Hemovac and dressing. Abductor pillow, TEDs. Foley, and SCDs in place. Left lower extremity CMS intact. Right PICC with NS @ 75 and Dilaudid PCA infusing. XR of Hip completed in PACU to verify hardware placement. CBC with diff, CMP, and PT/PTT drawn and sent in PACU and waiting results.

Please see each scenario for specific assessment changes

Recommendations:
Please see each scenario for specific objectives
**Situation**

Date/Time Faxed: **Today/15 minutes ago**
Room #: Ortho/Simulation floor
PACU RN: Kelli RN

**Background**

**Procedure:** S/P ORIF for L Hip fracture
Attending: **Dr. Spencer**
Anesthesia: General, Spinal/Epidural, Block, **Femoral nerve**, MAC, Local Sedation

**History:** DM type 2, COPD, Osteoporosis
L Hip Fx (Femoral Neck displaced) s/p Fall
Allergies: iodine, Morphine

Pre Op: BP 140/80, P 88, R 20, T 37, O2 Sat 94% on 2L
Post OP: BP 122/62, P 82, R 16, T 37, O2 Sat 95% on 4L

Neuro: Awake, Alert, Oriented x 2, Confused, Coherent, Dementia, Delirium
Resp: Clear, Stridor, Crackles, Wheezing, Rhonchi, Diminished, Air leak

O2 Therapy: 4L Nasal Canula, 100% Non-rebreather, 40% Humidified Face Tent, Vented,

Cardiac: Sinus Rhythm, Sinus Brady, Sinus Tachy, A-fib, A-Flutter, PVCs, PACs, Others
GI: Nausea, Vomiting, Distended, Bowel sounds present, Bowel sounds absent
GU: Soft, Distended, Foley present, Voided, No Void, Others
Skin: Intact, Pressure Sores, Ecchymotic, Burns, Scars, Blisters, Others
Activity: Moves ext x 4, Moves ext x 2, Paralyzed, HOB 45, Others

Operative Site: **L Hip**

Dressing: Clean, dry and intact, mild, moderate, soaked, oozing

**IV Size/Site/Status:** R PICC line placed in OR

<table>
<thead>
<tr>
<th>Total INs</th>
<th>Crystalloids 750</th>
<th>Colloids</th>
<th>Blood Prod</th>
<th>PO 0</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBL 150</td>
<td>Urine 250</td>
<td>Emesis</td>
<td>JP</td>
<td>HMVAC 100</td>
<td></td>
</tr>
</tbody>
</table>

**Assessment**

Pain Score: 3 (1-10), Sleeping but c/o pain when awake 3

PACU Meds Given:
- Fentanyl
- Morphine
- Dilaudid
- Demerol
- Toradol
- Phenergan
- Zofran 1 hour ago
- Propofol
- Benadryl

PCPA/PCEA:
- Dilaudid 0.2 mg/ml
- Basal 0
- Demand 0.2 mg
- Lockout 8 min

Peripheral Nerve Block:

Pain Buster:

Test Done:
- Xrays
- Ultrasound
- CBC
- BMP
- CMP
- Coags
- Mg, Phos, Ca, Others waiting for results
- FSBG
- 251 units of Lispro given

Equipment:
- IV Pump
- SCD
- Monitor
- Wound Vac
- CPM: Time Started

**Patient Meets PACU Discharge Criteria @ 15 minutes ago**

**Recommendations**

Patient may be transferred to your unit within 15 minutes.

Patient’s family aware of readiness for transfer: YES _X_ NO

Belongings sent with patient: YES _X_ NO

Antibiotics due: at 2000 Labs due: waiting for results

Central Line cleared for use: YES/NO

Other Recommendations: Integration I Experience 2 CEC/Sim Workbook

**Red Level: High Fall Risk Due to Recent Sedation**
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Patient Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Today</td>
<td>0800</td>
<td>James Snow</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D.O.B. - 6/1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MRN: 78980098</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Slot</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Admit to Ortho/Simulation Floor</td>
</tr>
<tr>
<td>2</td>
<td>Admit height: 5'11&quot;  Admit weight: 86.3 Kg</td>
</tr>
<tr>
<td>3</td>
<td>Diagnosis: S/P ORIF for L Hip fracture after fall</td>
</tr>
<tr>
<td>4</td>
<td>PMH: DM type 2, COPD, Osteoporosis</td>
</tr>
<tr>
<td>5</td>
<td>Vital Signs with pulse oximetry &amp; CMS (foot, toes, pedal pulses) checks q 4 hours and prn</td>
</tr>
<tr>
<td>6</td>
<td>Call HO: Temp ≥ 38.4 C or ≤ 35, SBP ≥ 160 or ≤ 80, DBP ≥ 100 or ≤ 50, HR ≥ 120 or ≤ 50, RR ≥ 24 or ≤ 8, BG ≥ 400 or ≤ 70, loss or change in CMS, U.O ≤ 120, drain output ≥ 200</td>
</tr>
<tr>
<td>7</td>
<td>Activity: Bedrest until 1800, then dangle at bedside as tolerated Up in chair TID starting in am with PT Hip abduction wedge when supine and side lying in bed Hip precautions: do NOT flex hip past 90 degrees, do NOT cross past midline or overspread legs Full weight bearing with walker starting with PT in am</td>
</tr>
<tr>
<td>8</td>
<td>Diet: Regular diet, advance as tolerated</td>
</tr>
<tr>
<td>9</td>
<td>Intake and Output q 4 hours</td>
</tr>
<tr>
<td>10</td>
<td>IS x 10 every hour while awake</td>
</tr>
<tr>
<td>11</td>
<td>Change dressing after initial dressing change by MD prn</td>
</tr>
<tr>
<td>12</td>
<td>Thigh high stockings and SCDs to LE while supine. Remove for 30 minutes twice a day. Encourage thigh &amp; calf contraction</td>
</tr>
<tr>
<td>13</td>
<td>Oxygen per NC as needed for SpO2 &lt; 92%</td>
</tr>
<tr>
<td>14</td>
<td>Finger stick blood glucose q AC and HS</td>
</tr>
<tr>
<td>15</td>
<td>CBC with auto diff, BMP, PT/PTT every am x 3 days start in am tomorrow</td>
</tr>
<tr>
<td>16</td>
<td>PT &amp; OT eval and treat</td>
</tr>
<tr>
<td>17</td>
<td>Foley to gravity, D/C POD # 2</td>
</tr>
<tr>
<td>18</td>
<td>XR pelvis AP for hips, routine, in am</td>
</tr>
<tr>
<td>19</td>
<td>(ORDERS CONT. on next page 1 of 4)</td>
</tr>
</tbody>
</table>

**Orders Transcribed by:**

**Title:**

**Date:**

**Time:**

**Verified by:**

**Title:**

**Date:**

**Time:**
Dispensing by non-proprietary name under formulary system is permitted, unless checked here: ☐

**DATE:** Today  |  **TIME:** 1500

**ATTENDING PHYSICIAN:** Dr. Spencer  |  **UPI ID #** 3456

**ORDERING HEALTHCARE PROVIDER:** Dr. Mitchell  |  **GME/UPI** 1223

**SERVICE:** Ortho Surgery  |  **CODE STATUS:** Full

**PAGER:** 3567

**ALLERGIES:** Iodine, Morphine

1. IV Infusions: NS at 75 ml/hr
2. Cefazolin (ANCEF) IVPB 1g in 50 ml every 8 hours for 3 doses
3. Glyburide 5 mg orally once daily
4. Albuterol 5mg Nebulized treatment or Albuterol MDI Inhaler with spacer 2 puffs every 2 hours as needed for SOB
5. Senna 2 tablets (8.6mg each tablet) orally, nightly at bedtime (hold for diarrhea)
6. Lovenox 30mg SQ, 2 times daily start in am on POD 2
7. Zofran 4 mg IV PRN every 6 hours as needed for nausea
8. Ambien oral 5mg PRN nightly for sleep
9. Diphenhydramine oral 25 mg PRN every 6 hours for itching
10. Hydromorphone PCA see orders
11. Lispro sliding scale see orders

**SIGNATURE/TITLE** Dr. Mitchell MD

**ORDERS CONT. on next page 2 of 4**
**DATE:** Today  
**TIME:** 0800

**ATTENDING PHYSICIAN:** Dr. Spencer  
**UP! ID #: 3456

**ORDERING HEALTHCARE PROVIDER:** Dr. Mitchell  
**GME/UPI:**

**SERVICE:** Ortho Surgery  
**CODE STATUS:** Full

**PAGER:** 3567

**ALLERGIES:** Iodine, Morphine

### Intravenous Patient Controlled Analgesia (IV PCA)

#### Medications

**IV PCA Medication**

**Hydromorphone** standard concentration **0.2 mg/mL** IV PCA infusion

- **None** Basal (Continuous) Rate
- **0.2 mg** Demand Dose every **8** minutes lockout interval
- **0.2 mg** Bolus dose **every 2 hour** per Clinician as needed for pain
- **None** Initial Clinician Loading Dose

- Senna 2 tablets (8.6mg each tablet) orally 2 times daily

- **Narcan** PRN for opioid reversal
  
  - If respiratory rate less than 8 per minute or sedation level of 1 (not able to arouse)
  - Stop infusion
  - Administer Narcan 0.1 mg STAT IV
  - May repeat every 3-5 minutes x 3 doses to a total of 0.4 mg
  - Dilute one vial of naloxone (0.4 mg/ml) in 9 mL of NS

**IV PCA Treatments/Interventions**

- **Monitor respiratory rate and sedation level**
  
  - Every hour x 12 hours, then every 2 hours x 12 hours, then every 4 hours
  - Increase temporarily to every 30 minutes x 2 when PCA dose is increased or a bolus is given
  - If respiratory rate less than 10 per minute or sedation level of 2 (difficult to arouse)
  
  Call ordering provider

- **Monitor heart rate, blood pressure, temperature, pain level, and pulse oximetry every 4 hours**

- **The acute pain service (APS) has been consulted. Do not administer additional opioids/sedatives without direct authorization by APS.**

(ORDERS CONT. on next page 3 of 4)

**Dr. Mitchell MD**

**SIGNATURE/TITLE**

**Orders transcribed by:**

**Title:**

**Date:**

**Time:**

**Verified by:**

**Title:**

**Date:**

**Time:**
Subcutaneous Insulin Sliding Scale: Lispro

☐ NO Glargine dose. Use Rapid Acting Insulin only
☐ Give ___________ units of Glargine SQ at 2200

☐ Patient eating po meals
  • Check glucose just before meals, at 2200, and prn. Send BG to lab if meter reading less than 50 mg/dl or greater than 450 mg/dl, or if clinical picture does not correlate with meter reading
  • Administer Lispro immediately after meal to assure calories are consumed (app. 0800-1230-1730)
  • At BREAKFAST, LUNCH, and DINNER, administer Lispro from table below for “Receiving Calories”
    o If less than ¼ of the meal was consumed, administer Lispro from the table for “No Calories”
    o If patient temporarily NPO (e.g. for a procedure) administer Lispro from the ordered table for “No Calories” for the missed meal
  • If 2200 blood glucose is >250mg/dL, administer HALF the Lispro dose from the ordered table for “No Calories” and round up to the nearest whole unit as needed
☐ Patient NPO
  • Administer Lispro from the ordered table for “No Calories”
  • Check glucose at 0600, 1200, 1800, and 2400

Lispro (HumALOG) Subcutaneous Injection for sliding scale use table below

<table>
<thead>
<tr>
<th>Blood Glucose mg/dL</th>
<th>Receiving Calories</th>
<th>No Calories</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 70</td>
<td>Implement Hypoglycemia orders Call MD</td>
<td>Implement Hypoglycemia orders Call MD</td>
</tr>
<tr>
<td>71-124</td>
<td>3 units</td>
<td>No Insulin</td>
</tr>
<tr>
<td>125-149</td>
<td>3 units</td>
<td>No Insulin</td>
</tr>
<tr>
<td>150-199</td>
<td>4 units</td>
<td>1 units</td>
</tr>
<tr>
<td>200-249</td>
<td>5 units</td>
<td>2 units</td>
</tr>
<tr>
<td>250-299</td>
<td>6 units</td>
<td>3 units</td>
</tr>
<tr>
<td>300-349</td>
<td>7 units</td>
<td>4 units</td>
</tr>
<tr>
<td>350-399</td>
<td>8 units</td>
<td>5 units</td>
</tr>
<tr>
<td>≥400</td>
<td>Call MD</td>
<td>Call MD</td>
</tr>
</tbody>
</table>

Hypoglycemia orders for blood glucose ≤ 70 mg/dL
1. If patient can take po: administer 15 grams of carbohydrate (4 oz of fruit juice or non-diet soda or 15 grams of glucose gel)
2. If patient unable to take po and has no IV access: administer 1 mg (1 amp) glucagon IM
3. Check blood glucose in 15 minutes and repeat above po or IV treatment until blood glucose is ≥100mg/dL
4. After treating patient, notify MD for potential insulin adjustment orders

ORDERS CONT. on next page 4 of 4
**Medication Administration Record (MAR)**

Date: Today

Name: James Snow  
MRN: 78980098  
Date of Birth: 06/1  
Allergies: *Iodine, Morphine*  
Admit height: 5'11"  
Admit weight: 86.3 Kg

<table>
<thead>
<tr>
<th>Scheduled Medications</th>
<th>Time</th>
<th>Yesterday</th>
<th>POD 1</th>
<th>POD 2</th>
<th>Page 1 of 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance IV fluid NS at 75ml/hr</td>
<td>Continuous</td>
<td>Started in PACU 1000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glyburide 5 mg orally once daily</td>
<td>0900</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senna 2 tablets (8.6mg each tablet) orally daily at bedtime</td>
<td>2100</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cefazolin (ANCEF) IVPB 1g in 50 ml every 8 hours for 3 doses</td>
<td>0400 1200 2000</td>
<td>Need @ 1200</td>
<td>Need @ 0400 Need @ 1200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lovenox 30mg SQ 2 times daily start in am on POD 2</td>
<td>0900 2100</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Signature</th>
<th>Initial</th>
<th>Signature</th>
<th>Initial</th>
<th>Signature</th>
<th>Initial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kelli Craddock RN</td>
<td>KC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Integration I Experience 2 CEC/Sim Workbook  
17
**Medication Administration Record (MAR)**

Name: James Snow  
MRN: 78980098  
Date of Birth: 06/1  
Allergies: iodine, Morphine  
Admit height: 5'11"  
Admit weight: 86.3 Kg

<table>
<thead>
<tr>
<th>PRN Medications</th>
<th>Time</th>
<th>Yesterday</th>
<th>POD 1</th>
<th>POD 2</th>
<th>Page 2 of 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albuterol 5mg Nebulized Treatment every 2 hours as needed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Albuterol MDI Inhaler with spacer 2 puffs every 2 hours as needed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambien oral 5mg PRN nightly for sleep</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zofran 4 mg IV push every 6 hours as needed for nausea</td>
<td></td>
<td>Given in PACU 1030</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diphenhdramine oral 25 mg PRN every 6 hours for itching</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Narcan 0.1 mg STAT IV if respiratory rate less than 8 per minute or sedation level of 1 (not able to arouse)  
May repeat every 3-5 minutes x 3 doses to a total of 0.4 mg  
Dilute one vial of naloxone (0.4 mg/ml) in 9 mL of NS | | | | | |

<table>
<thead>
<tr>
<th>Signature</th>
<th>Initial</th>
<th>Signature</th>
<th>Initial</th>
<th>Signature</th>
<th>Initial</th>
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<td></td>
<td></td>
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</tr>
</tbody>
</table>

Integration I Experience 2 CEC/Sim Workbook  
18
**Medication Administration Record (MAR)**

**Name:** James Snow  
**MRN:** 78980098  
**Date of Birth:** 06/1  
**Allergies:** Iodine, Morphine  
**Admit height:** 5'11"  
**Admit weight:** 86.3 Kg

<table>
<thead>
<tr>
<th>PRN Medications</th>
<th>Time</th>
<th>Yesterday</th>
<th>Today</th>
<th>Tomorrow</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Insulin Sliding Scale Receiving Calories</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Blood Glucose ≤ 70 mg/dL</strong></td>
<td></td>
<td>Implement Hypoglycemia Orders</td>
<td>Call MD</td>
<td></td>
</tr>
<tr>
<td><strong>Blood Glucose 71-124 mg/dL</strong></td>
<td></td>
<td>Lispro insulin 3 units SQ</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Blood Glucose 125-149 mg/dL</strong></td>
<td></td>
<td>Lispro insulin 3 units SQ</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Blood Glucose 150-199 mg/dL</strong></td>
<td></td>
<td>Lispro insulin 4 units SQ</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Blood Glucose 200-249 mg/dL</strong></td>
<td></td>
<td>Lispro insulin 5 units SQ</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Blood Glucose 250-299 mg/dL</strong></td>
<td></td>
<td>Lispro insulin 6 units SQ</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Blood Glucose 300-349 mg/dL</strong></td>
<td></td>
<td>Lispro insulin 7 units SQ</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Blood Glucose 350-399 mg/dL</strong></td>
<td></td>
<td>Lispro insulin 8 units SQ</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Blood Glucose ≥400 mg/dL</strong></td>
<td></td>
<td>Call MD</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Glucagon 1mg (1 amp) IM</strong></td>
<td></td>
<td>Unable to take po or IV</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Blood Glucose ≤ 70 mg/dL</strong></td>
<td></td>
<td># 2 of Hypoglycemia Orders</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Signature</th>
<th>Initial</th>
<th>Signature</th>
<th>Initial</th>
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Integration I Experience 2 CEC/Sim Workbook
**Medication Administration Record (MAR)**

Name: James Snow  
MRN: 78980098  
Date of Birth: 06/1  
Allergies: **Iodine, Morphine**  
Admit height: **5'11**"  
Admit weight: **86.3 Kg**

<table>
<thead>
<tr>
<th>Medications</th>
<th>Time</th>
<th>Yesterday</th>
<th>POD 1</th>
<th>POD 2</th>
<th>Page 4 of 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Insulin Sliding Scale</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>NO Calories</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Blood Glucose ≤ 70 mg/dL**  
Implement Hypoglycemia Orders  
Call MD

**Blood Glucose 71-124 mg/dL**  
NO insulin

**Blood Glucose 125-149 mg/dL**  
NO insulin

**Blood Glucose 150-199 mg/dL**  
Lispro insulin 1 units SQ

**Blood Glucose 200-249 mg/dL**  
Lispro insulin 2 units SQ

**Blood Glucose 250-299 mg/dL**  
Lispro insulin 3 units SQ  
**Given in PACU 0700 KC**

**Blood Glucose 300-349 mg/dL**  
Lispro insulin 4 units SQ

**Blood Glucose 350-399 mg/dL**  
Lispro insulin 5 units SQ

**Blood Glucose ≥400 mg/dL**  
Call MD

**Glucagon 1mg (1 amp) IM**  
Unable to take po or IV  
Blood Glucose ≤ 70 mg/dL  
# 2 of Hypoglycemia Orders

<table>
<thead>
<tr>
<th>Signature</th>
<th>Initial</th>
<th>Signature</th>
<th>Initial</th>
<th>Signature</th>
<th>Initial</th>
</tr>
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<tbody>
<tr>
<td>Kelli Craddock RN</td>
<td>KC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Allergies:** *Iodine, Morphine*

---

### Infusion Code

- **IVPCA**= Intravenous patient Controlled Analgesia (*record amount in mg or mcg*)
- **PCEA**= Patient Controlled Epidural Analgesia (*record amount in ml*)
- **IT**= Intrathecal
- **K**= Ketamine

### Medication Code

- **M**= Morphine
- **B**= Bupivacaine
- **H**= Hydromorphone
- **R**= Ropivacaine
- **F**= Fentanyl
- **O**= Other

---

#### Medication Transcription

<table>
<thead>
<tr>
<th>DATE</th>
<th>INFUSION CODE</th>
<th>MEDICATION &amp; CONCENTRATION</th>
<th>BOLUS DOSE</th>
<th>CONTINUOUS (BASAL) RATE</th>
<th>DEMAND DOSE PCA/PCEA</th>
<th>LOCK-OUT</th>
<th>INITIALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Today</td>
<td>IVPCA</td>
<td>Hydromorphone 0.2 mg/mL</td>
<td>None</td>
<td>0.2 mg</td>
<td>None</td>
<td>8 min</td>
<td>KC SC</td>
</tr>
</tbody>
</table>

---

#### Infusion Admin & Wastage Record

<table>
<thead>
<tr>
<th>DATE</th>
<th>MEDICATION CODE</th>
<th>DATE HUNG</th>
<th>TIME HUNG</th>
<th>AMOUNT HUNG*</th>
<th>INITIALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Today</td>
<td>H</td>
<td>1 hour ago</td>
<td>10 mg/50 mL</td>
<td>KC SC</td>
<td></td>
</tr>
</tbody>
</table>

---

#### IV PCA/PCEA Demand Dose Record

**Verify Correct Medication** 2 RN’s must document pump settings at:
- Initial set-up; shift change; patient transfer; change in settings and when hanging a new beg

<table>
<thead>
<tr>
<th>DATE</th>
<th>TIME</th>
<th>PCA/PCEA DOSE GIVEN</th>
<th>PCA/PCEA DOSE ATTEMPTS</th>
<th>AMOUNT INFUSED*</th>
<th>DERMATONES</th>
<th>R</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Today</td>
<td>1 hour ago</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>K</td>
<td>C</td>
</tr>
</tbody>
</table>

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#### PUMP SETTING RECORD

<table>
<thead>
<tr>
<th>DATE</th>
<th>TIME</th>
<th>LOADING DOSE</th>
<th>BOLUS DOSE</th>
<th>CONTINUOUS (BASAL) RATE</th>
<th>DEMAND DOSE PCA/PCEA</th>
<th>LOCK-OUT</th>
<th>INITIALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Today</td>
<td>1 hour ago</td>
<td>None</td>
<td>0.2 mg</td>
<td>None</td>
<td>0.2 mg</td>
<td>8 min</td>
<td>KC SC</td>
</tr>
</tbody>
</table>

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#### Signature

<table>
<thead>
<tr>
<th>Signature</th>
<th>Initial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kelli Craddock RN</td>
<td>KC</td>
</tr>
<tr>
<td>Stephanie Craddock RN</td>
<td>SC</td>
</tr>
</tbody>
</table>
Simulation Scenarios

Your role as a student nurse:
- Be familiar with the patient’s medical orders, MAR, and ED faxed report
- The instructor will give you a 1 minute pre-brief to review the scenario’s objectives
- Be prepared to work for 15 minutes in groups of 3 to complete objectives for each scenario
- Three students will actively participate in simulation and 3 students will actively observe
- All 6 students will actively participate for 15 minutes with an instructor guided debrief

Critical Thinking Exercise:
- 3 active simulation participants will divide into nursing roles to meet the patient’s needs and scenario objectives
- You are working with an interdisciplinary team and may consult by phone a Physician, Provider, Charge Nurse, CNA, Pharmacist, Case Manager, Respiratory Therapist, Social Worker, Chaplin, Physical Therapist and others as available
- Role recommendations: 1 assessment/VS nurse, 1 intervention/medication nurse, 1 intervention/primary nurse
- The team will be randomly assigned to roles.
  - Student 1: Assessment/VS nurse
  - Student 2: Interventions/Medication administration nurse
  - Student 3: Intervention/Primary nurse
- 3 active observers should focus on observing simulation and be able to highlight successes and deficits in patient assessment, nursing interventions, and safety

Scenario #5- POD 1 @ 1130am
Sim room 3

Recommendations: James Snow has just arrived to your unit from the PACU. Please admit him to his room by verifying orders, implementing orders, and educating the patient on the plan of care. As a team please admit this patient to your unit and provide any nursing care he may need.
At minimum please complete:
- A basic assessment including drains and incisions along with any needed focused assessments. Please include a set of vital signs.
- Provide patient education to room, post-op orders, and overall plan of care.
- Verify admission orders, verify MAR, and verify IVF along with PCA.
- Also provide any nursing care for patient and communication to provider as needed

<table>
<thead>
<tr>
<th>Sedation scale</th>
<th>5 = wide awake</th>
<th>3 = sleeping arousable</th>
<th>1 = not able to arouse</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 = drowsy</td>
<td>2 = difficult to arouse</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Scenario #6 POD 1-30 minutes later, pt c/o nausea @ 1200pm
Sim room 3

Recommendations: It is 30 minutes later, patient is complaining of nausea and son is at patient’s bedside very concern about the amount of pain the patient is having postoperatively. James Snow requires his 1200 medications along with any prn medications, a basic assessment including a glucose check, any nursing care he may need.
At minimum please complete:
- A basic assessment including any needed focused assessments. Please include a set of vital signs.
- Provide patient 1200 medications and any prn medications as ordered (pt c/o nausea)
- Check glucose
- Also provide any nursing care for patient and communication to provider as needed
Scenario #7- POD 2 @ 0900am PCA D/C's-pt c/o pain & mild SOB  
Sim room 2

James Snow  
D.O.B. – 6/1  
MRN: 78980098

Orders transcribed by:  
Title:  
Date:  
Time:  

Verified by:  
Title:  
Date:  
Time:  

**Recommendations:** It is POD 2 (2 days post-op) for James Snow. His PCA has been D/C'd and a new order for Morphine has been ordered for pain management.

James is complaining of 6/10 pain and some mild shortness of breath. James Snow requires his 0900 medications along with any prn medications, a basic assessment, any nursing care he may need.

At minimum please complete:
- A basic assessment including any needed focused assessments. Please include a set of vital signs.
- Provide patient 0900 medications and any prn medications as ordered (pt c/o 6/10 pain and SOB)
- Also provide any nursing care for patient and communication to provider as needed

Scenario #8- POD 2 @ 1200pm  
Sim room 3

**Recommendations:** It is 1200 on POD 2 (2 days post-op) for James Snow. Please assure that all orders have been implemented including POD post-op order to d/c foley and provide patient with education. Patient is c/o nausea and abdominal distention. James Snow also requires his 1200 medications along with any prn medications, and a basic assessment including a glucose check.

At minimum please complete:
- A basic assessment including any needed focused assessments. Please include a set of vital signs and a glucose check.
- Provide patient 1200 medications and any prn medications as ordered (c/o nausea and abdominal distention) 
- d/c foley
- Provide patient education on post-operative interventions to prevent complications and overall plan of care.
- Also provide any nursing care for patient and communication to provider as needed

**ADDITIONAL NOTES**