

NRS 225  
Student Lab  
Manual

NRS 225

**Week 1** High acuity acute and chronic alterations in oxygenation

**Week 2** High acuity acute and chronic alterations in perfusion

**Week 3** High acuity acute and chronic alterations in immunity, infection, and inflammation (**EXAM 1**)

**Week 4** High acuity acute and chronic alterations in cellular regulation

**Week 5** High acuity acute and chronic alterations in cellular regulation

**Week 6** High acuity acute and chronic alterations in digestion and elimination  
(**EXAM 2**)

**Week 7** High acuity acute and chronic alterations in metabolism

**Week 8** High acuity acute and chronic alterations in cognition

**Week 9** High acuity acute and chronic alterations in mobility (**EXAM 3**)

**Weeks 10** High acuity acute and chronic alterations in sensory perception

**Week 11** High acuity acute and chronic alterations in mental health

**Week 12** High acuity acute and chronic alterations in mental health

**Week 13** High acuity acute and chronic alterations in mental health (**EXAM 4**)

**Week 14** High acuity acute and chronic alterations in mental health

**Week 15 HESI Exams**

**Week 16** Cumulative **Final Exam**

# **Please be prepared to demonstrate all prior skills learned in NRS 125.**

These are the skills learned in NRS 125.

**SKILL 13.19: Providing Tracheostomy Care**

**SKILL 13.18: Suctioning the Client with a Tracheostomy or Endotracheal Tube**

**SKILL 13.17: Oropharyngeal, Nasopharyngeal, and Nasotracheal Suctioning**

**SKILL 13.2: Obtaining Nose and Throat Specimens**

**SKILL 2.30: Administering Metered-Dose Inhaler Medications**

**SKILL 2.31: Administering Dry Powder Inhaled (DPI) Medication**

**SKILL 2.32: Administering Medication by Non-pressurized (Nebulized) Aerosol (NPA)**

**SKILL 13.5: Pursed-Lip Breathing**

**SKILL 14.3: Applying Anti-embolism Stockings (Graduated Compression Stockings, and Elastic Stockings)**

**SKILL 14.5: Applying Sequential Compression Devices (SCDs)**

**SKILL 15.3: Donning Sterile Gown and Gloves (Closed Method)**

**SKILL 15.6: Pouring from a Sterile Container**

**SKILL 12.5: Flushing/Maintaining a Nasogastric Tube**

**SKILL 12.6: Performing Gastric Lavage**

**SKILL 12.7: Removing a Nasogastric Tube**

**SKILL 18.7: Changing a Dressing for a Venous Ulcer**

**SKILL 15.9: Changing a Dry Sterile Dressing**

**SKILL 18.8: Maintaining Closed Wound Drainage (Jackson–Pratt Drain)**

**SKILL 18.3: Cleaning a Sutured Wound and Changing a Dressing on a Wound with a Drain**

**SKILL 13.4: Using an Incentive Spirometer**

**SKILL 7.1: Monitoring Intake and Output**

**SKILL 7.4: Regulating Infusion Flow Rate**

**SKILL 2.42: Adding Medications to Intravenous Fluid Containers**

**SKILL 2.43: Administering Intermittent Intravenous Medications Using a Secondary Set**

**SKILL 2.44: Administering Intravenous Medications Using IV Push**

**SKILL 6.18: Maintaining Continuous Bladder Irrigation**

**SKILL 2.23: Mixing Medications Using One Syringe**

**SKILL 6.23: Inserting a Rectal Tube**

**SKILL 6.25: Administering an Enema**

**SKILL 6.15: Performing Urinary Catheterization**

**SKILL 6.16: Performing Catheter Care and Removal**

**SKILL 6.19: Providing Suprapubic Catheter Care**

**SKILL 6.20: Performing Urinary Ostomy Care**

**SKILL 6.4: Obtaining a Urine Specimen from an Ileal Conduit**

**SKILL 11.14: Assisting a Client to Use Crutches**

**SKILL 2.35: Administering Vaginal Medications**

**SKILL 1.5: Measuring the Newborn's Head, Chest, and Abdomen**

**SKILL 17.3: Assessing for Abuse**

# Week 1

## **OBJECTIVES:**

Assess patients with high acuity acute and chronic alterations in oxygenation.

Analyze collected data as it pertains to high acuity acute and chronic alterations in oxygenation.

Utilize collected data to formulate a plan of care as it pertains to high acuity acute and chronic alterations in oxygenation.

Evaluate goals and therapeutic outcomes in high acuity acute and chronic alterations in oxygenation.

## **HESI RN Group Case Study:**

Med/Surg: COPD w/ pneumonia

## **Mini Math Review:**

### **Lab Skills:**

Perform a focused respiratory assessment.

Demonstrate the ability to interpret arterial blood gasses.

Demonstrate the ability to measure peak expiratory flow rate.

Demonstrate the ability to perform chest physiotherapy.

Demonstrate the ability to perform tracheostomy care.

Demonstrate the ability to manage chest tube drainage.

**Each week (when applicable) you will be asked to learn new skills and then perform them along with some of the associated prior learned skills in NRS 125.**

### **Associated prior NRS 125 Skills:**

SKILL 13.19: Providing Tracheostomy Care

SKILL 13.18: Suctioning the Client with a Tracheostomy or Endotracheal Tube

SKILL 13.17: Oropharyngeal, Nasopharyngeal, and Nasotracheal Suctioning

SKILL 13.2: Obtaining Nose and Throat Specimens

SKILL 2.30: Administering Metered-Dose Inhaler Medications

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SKILL 13.5: Pursed-Lip Breathing

SKILL 13.4: Using an Incentive Spirometer

Week 1  
10 Minute Math Review

1. A patient is ordered Aricept (donepezil HCl) 7.5 mg po at HS. On hand, you have 5 mg tablets. How many tablets will you give for the correct dose?
  
2. The order reads Prozac (fluoxetine hydrochloride) liquid 10 mg po daily. The medication solution reads Prozac liquid 20 mg per 5 mL. How much will you measure for the correct dose?
  
3. The patient is to receive 1000 mg of carafate (sucralfate) po 30 minutes prior to their meals. On hand you have 1 tablet = 1 gram. How many tablets will you give for the correct dose?
  
4. A patient is to receive 150 mL of D5/W to infuse in 1 hour. The tubing you have is calibrated to 15gtt/mL. Calculate the gtt/min.
  
5. A patient is ordered Toradol (Ketorolac tromethamine) 60 mg IM stat. What you have available is toradol 30 mg/mL. What will you draw up as the correct dose?
  
6. An adult patient who weighs 150 lbs. is ordered Gentamicin sulfate 1.5 mg/kg IV 30 minutes prior to a procedure. What dose will you draw up?

## ABG interpretation

To make things simple, you will only need to refer to the three basic ABG values.

1. Acid Base Balance (pH)
2. Carbon Dioxide (CO<sub>2</sub>)
3. Bicarbonate (HCO<sub>3</sub>)

Normal ABG values are as follows:

1. pH = 7.35 to 7.45
2. CO<sub>2</sub> = 35 to 45
3. HCO<sub>3</sub> = 22 to 26

You also must note the following:

1. CO<sub>2</sub> greater than 45 is acidotic
2. HCO<sub>3</sub> less than 22 is acidotic
3. CO<sub>2</sub> less than 35 is alkalotic
4. HCO<sub>3</sub> greater than 26 is alkalotic

To interpret these results, all you have to do is memorize these four basic questions, and then answer them in order.

### A. Is the ABG normal?

1. If all the values fall within the normal parameters, then you have a normal ABG and you can stop here: The ABG is normal.
2. If any one of the values is out of the normal range, then you must move on to the next question.

### B. Is the pH Acidotic or Alkalotic? To determine this you look only at the pH.

1. **Alkalotic:** If the pH is greater than 7.45 the patient is Alkalotic.
2. **Acidotic:** If the pH is below 7.35 the patient is acidotic.
- 3.

### C. Is the cause respiratory or metabolic?

To determine this you look at pH and compare it with HCO<sub>3</sub> and CO<sub>2</sub>. If the pH is acidotic, you look for whichever value (HCO<sub>3</sub> or CO<sub>2</sub>) is also acidotic. If the pH is alkalotic, you look for whichever value (HCO<sub>3</sub> or CO<sub>2</sub>) is also alkalotic.

In this sense, you match the pH with HcO<sub>3</sub> and CO<sub>2</sub>. If the pH matches with the CO<sub>2</sub>, you have respiratory. If the pH matches with the HcO<sub>3</sub>, you have metabolic.

Or, put more simply:

1. **Metabolic Alkalosis:** If the pH is alkalotic and the HcO<sub>3</sub> alkalotic.
2. **Respiratory Alkalosis:** If the pH is alkalotic and the CO<sub>2</sub> is alkalotic
3. **Metabolic Acidosis:** If the pH is acidotic and the HcO<sub>3</sub> acidotic.
4. **Respiratory Acidosis:** If the pH is acidotic and the CO<sub>2</sub> is acidotic.

A special case is when the pH, CO<sub>2</sub> and HCO<sub>3</sub> are all alkalosis or all acidotic. In this case you have a case of combined alkalosis or combined acidosis.

1. **Combined Alkalosis:** If the pH is alkalotic, CO<sub>2</sub> is alkalotic, and HCO<sub>3</sub> is alkalotic
2. **Combined Acidosis:** If the pH is acidotic, CO<sub>2</sub> is acidotic, and HCO<sub>3</sub> is acidotic

#### D. Is the cause compensated or uncompensated?

1. **Compensated:** pH is anywhere inside the normal ranges (Anything between 7.35 to 7.45)
2. **Uncompensated:** pH is anywhere outside the normal ranges (greater than 7.45 or less than 7.35). Also, the value (CO<sub>2</sub> or HCO<sub>3</sub>) that does not match the pH will still be in the normal range.
3. **Partially compensated:** pH is anywhere outside the normal range, and the value that does not match the pH (CO<sub>2</sub> or HCO<sub>3</sub>) will be outside its normal range. This indicates the body is attempting to get the pH back to normal. Example: A patient is in respiratory failure and his CO<sub>2</sub> is 50 (acidotic) and pH is 7.24 (acidotic). An HCO<sub>3</sub> of 27 (alkalotic) means the body is attempting to get the pH back to normal, and this is considered compensation.

Put A, B, C, and D together and you have your basic ABG interpretation. That's it. It's easy.

\*<http://respiratorytherapycave.blogspot.com/2008/11/abg-interpretation-made-easy.html>

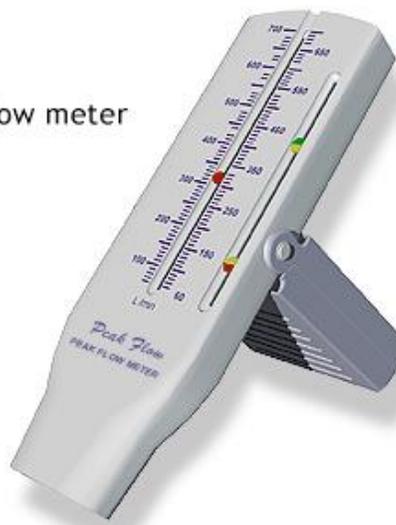
ABG	pH	PaCO <sub>2</sub>	HCO <sub>3</sub>
Respiratory Acidosis	↓	↑	normal
Respiratory Alkalosis	↑	↓	normal
Metabolic Acidosis	↓	normal	↓
Metabolic Alkalosis	↑	normal	↑

TABLE 1

Normal ABG Figures	
PH	7.35-7.45
PO <sub>2</sub>	80-100
PCO <sub>2</sub>	35-45
HC0 <sub>3</sub>	22-28

	pH	PCO <sub>2</sub>	HCO <sub>3</sub> <sup>-</sup>	DIFFERENTIAL
Metabolic Acidosis	↓	Normal or decreasing*	↓	Diabetes, Addison's, Renal failure, increased acid production
Metabolic Alkalosis	↑	Normal or increasing*	↑	Vomiting from upper GI obstruction, administration of alkaline solutions
Respiratory Acidosis	↓	↑	Normal or increasing*	Obstruction, Pneumonia, Mediastinal Disease
Respiratory Alkalosis	↑	↓	Normal or decreasing*	Anemia, CHF, Exuberant mechanical ventilation

Peak flow meter



ADAM.

### Measuring Peak Expiratory Flow Rates

A peak flow meter is a portable, easy-to-use device that measures how well the lungs are able to expel air. By blowing hard through a mouthpiece on one end, the peak flow meter can measure the force of air in liters per minute and give the client a reading on a built-in numbered scale. Doctors may recommend that you use a peak flow meter to help track a client's asthma control.

Regular use of a peak flow meter can help track data on asthma worsening by detecting airway narrowing even before the client feels any symptoms, giving them time to adjust their medication or take other steps before their symptoms get worse. A peak flow meter can be useful for adults and children as young as 5.

### Using a peak flow meter

1. Move the marker to the bottom of the numbered scale, and connect the mouthpiece to the peak flow meter (if it isn't already connected).
2. Have the client stand if able.
3. Have the client take a deep breath, filling their lungs completely.
4. Have the client place their lips tightly around the mouthpiece. Have the client as hard and as fast as they can with a single breath.
5. Note the final position of the marker. This is the client's peak flow rate.
6. Follow the steps above then blow into the peak flow meter two more times. Record the highest reading of the three.

\*<http://www.mayoclinic.org/tests-procedures/peak-flow-meter/basics/how-you-prepare/prc-20013057>

### **SKILL 13.3: Measuring Peak Expiratory Flow Rate**

<b>Procedure</b>	<b>Performed</b>		<b>Comments</b>
	<b>Yes</b>	<b>No</b>	
1. Gathered equipment and supplies. Introduced self, explained what procedure was to be done and why. Performed hand hygiene following infection control measures and verified client's identity. Provided privacy. Provided comfort and safety for client.			
2. Positioned client sitting with the chest free from contact with the bed or chair.			
3. Reset the marker on the flow meter to the zero position.			

<p>4. Assisted the client to use the flow meter.</p> <p>a. Asked the client to take a deep breath in.</p> <p>b. Had client place the mouthpiece in the mouth with the teeth around the opening and lips forming a tight seal.</p> <p>c. Had the client exhale as quickly and forcefully as possible. If exhaling a significant amount of air through the nose, applied a nose clip.</p>			
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Use  
“cupped”  
hands  
instead of  
“flat”  
hands.

<p>5. Performed step 4 twice more and allowed client to rest for 5 to 10 seconds in between. Recorded the highest PEFR level achieved.</p>			
<p>6. Performed hand hygiene.</p>			
<p>7. Documented results and client’s response.</p>			

### Manual Chest Physiotherapy

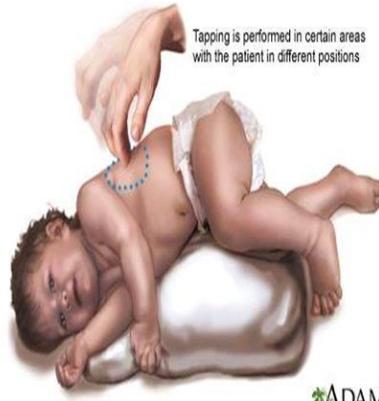
- Chest physiotherapy (CPT) is a technique used to mobilize or loose secretions in the lungs and respiratory tract. This is especially helpful for patients with large amount of secretions or ineffective cough. Chest physiotherapy consists of external mechanical maneuvers, such as chest percussion, postural drainage, vibration, to augment mobilization and clearance of airway secretions, diaphragmatic breathing with pursed-lips, coughing and controlled coughing.
- **Please Watch Video Review: <https://www.youtube.com/watch?v=MGrsdLzhhvE>**



## *Postural drainage*



Postural drainage is a technique for loosening mucus in the airway so that it may be coughed out



Tapping is performed in certain areas with the patient in different positions

ADAM.



Chest PT can also be done via a high-frequency chest wall oscillation (HFCWO) vest otherwise known as an Airway Clearance System. The goals of HFCWO treatment are the same as with any other airway clearance technique—to break up mucus and help bring it to the upper airways, where it can be coughed out or removed by suction. The machine connected to the vest is an air compressor that delivers bursts of air to rapidly inflate and deflate the vest about 25 times per second.

This creates gentle pressure and vibration on the chest, which does three things:

1. Breaks up mucus, making it thinner
2. Creates “mini coughs” in the lungs, which help push the mucus out
3. Makes the cilia move faster, helping them carry the loosened mucus to the upper airways

Table below describes some advantages and disadvantages of the vest over manual chest PT:

<b>Advantages</b>	<b>Disadvantages</b>
Treatment can be done without help.	Expense - new models of the vest can cost between \$15,000 and \$20,000, and may not always be covered by insurance.
Does not require any skill, so every treatment will be done correctly.	Requires access to electricity.
Freedom to do other things during treatment, because no special position or breathing techniques are required.	Must bring equipment when traveling. The compressor weighs between 10 and 30 pounds, depending on the model.
Treats all lobes of the lung at once, so treatment time is shorter than manual CPT.	

### SKILL 13.6: Preparing the Client for Chest Physiotherapy (CPT)

<b>Procedure</b>	<b>Performed</b>		<b>Comments</b>
	<b>Yes</b>	<b>No</b>	
1. Checked physician’s order. Introduced self, explained what procedure was to be done and why. Performed hand	<input type="checkbox"/>	<input type="checkbox"/>	

hygiene following infection control measures and verified client's identity. Provided privacy. Provided comfort and safety for client.		
2. Administered CPT before or at least 2 hours after meals to prevent vomiting.		
3. Established the location of lung segments if the entire lung field was to undergo CPT; drained affected segment first.		
4. Auscultated chest for breath sounds and adventitious sounds prior to therapy.		
5. Obtained pulse oximetry (SPO <sub>2</sub> ) if indicated before therapy.		
6. Placed towel over skin when performing CPT (optional).		
7. Auscultated lungs after therapy		
8. Performed hand hygiene.		
9. Documented procedure, assessment data, and client's response.		

**SKILL 13.19: Providing Tracheostomy Care**

Procedure	Performed		Comments
	Yes	No	
1. Checked physician's order and gathered equipment and supplies. Introduced self, explained what procedure was to be done and why. Performed hand hygiene following infection control measures and verified client's identity. Provided privacy. Provided comfort and safety for client and self, including raising bed to appropriate height for procedure.			
2. Prepared client and equipment. a. Assisted client to semi-Fowler or Fowler position to			

<p>promote lung expansion.</p> <ul style="list-style-type: none"> <li>b. Suctioned tracheostomy tube, if needed.</li> <li>c. If suctioning was required, allowed client to rest and restore oxygenation.</li> <li>d. Opened tracheostomy kit or sterile basins.</li> <li>e. Established sterile field.</li> <li>f. Opened other sterile supplies as needed.</li> <li>g. Poured soaking solution and sterile normal saline into separate containers.</li> <li>h. Applied clean gloves.</li> <li>i. Removed oxygen source.</li> <li>j. Unlocked inner cannula and removed it by gently pulling it outward toward self in line with its curvature. Placed inner cannula in soaking solution.</li> <li>k. Removed soiled tracheostomy dressing. Placed soiled dressing in gloved hand and peeled glove off so that it turned inside out over dressing. Removed and discarded gloves and dressing. Performed hand hygiene.</li> </ul>			
<p>3. Applied sterile gloves. Kept dominant hand sterile during procedure.</p>			
<p>4. Cleaned inner cannula.</p> <ul style="list-style-type: none"> <li>a. Removed inner cannula from soaking solution.</li> <li>b. Cleaned lumen and entire inner cannula thoroughly using brush or pipe cleaners moistened with sterile normal saline. Inspected cannula for cleanliness.</li> <li>c. Rinsed inner cannula thoroughly in sterile normal saline.</li> <li>d. After rinsing, gently tapped cannula against inside edge of sterile saline container. Used pipe cleaner folded in half to dry only inside of cannula.</li> </ul>			

<p>5. Replaced inner cannula and secured it in place.</p> <ul style="list-style-type: none"> <li>a. Inserted inner cannula by grasping outer flange and inserting cannula in direction of its curvature.</li> <li>b. Locked cannula in place by turning lock into position to secure flange of inner cannula to outer cannula.</li> </ul>			
<p>6. Cleaned incision site and tube flange.</p> <ul style="list-style-type: none"> <li>a. Used sterile applicators or gauze dressings moistened with normal saline and cleaned incision site.</li> <li>b. Used hydrogen peroxide mixed with sterile normal saline; (used a separate sterile container if this is necessary) to remove crusty secretions around the tracheostomy site. Did not use directly on the site.</li> <li>c. Cleaned flange of tube.</li> <li>d. Thoroughly dried client's skin and tube flanges with dry gauze squares.</li> </ul>			
<p>7. Applied sterile dressing.</p> <ul style="list-style-type: none"> <li>a. Used a commercially prepared tracheostomy dressing or opened and refolded a nonraveling 4 x 4 gauze dressing into a V shape.</li> <li>b. Placed dressing under flange of tracheostomy tube.</li> <li>c. Ensured that tracheostomy tube is securely supported while applying dressing.</li> </ul>			
<p>8. Changed tracheostomy ties as needed to keep skin clean and dry.</p> <p><i>Two-Strip Method (Twill Ties)</i></p> <ul style="list-style-type: none"> <li>a. Cut two unequal strips of twill ties, one approximately 25 cm (10 in.) long and the other about 50 cm (20 in.) long.</li> <li>b. Cut 1 cm (0.5 in.) lengthwise slit approximately 2.5 cm (1 in.) from each end of tie.</li> <li>c. Left old ties in place and threaded new ties onto</li> </ul>			

<p>tracheostomy flange from bottom side then threaded long end of tape through slit pulling until it was securely fastened.</p> <p>d. Repeated process for second tie.</p> <p>e. Asked client to flex neck. Slipped longer tape under client's neck, placed finger between tape and client's neck and tied tapes together at side of neck.</p> <p>f. Tied ends of ties using square knots. Cut off any long ends.</p> <p>g. Once the clean ties were secured, removed the soiled ties and discarded.</p> <p><i>One-Strip Method (Twill Ties)</i></p> <p>a. Cut length of twill tape 2.5 times length needed to go around client's neck.</p> <p>b. Threaded one end of tape into slot on one side of flange.</p> <p>c. Brought both ends of tape together. Placed them around client's neck.</p> <p>d. Threaded end of tape next to client's neck through slot from back to front.</p> <p>e. Had client flex neck. Tied loose ends with a square knot at side of client's neck. Cut off long ends.</p>			
<p>9. Taped and padded tie knot.</p> <p>a. Placed folded 4 x 4 gauze square under tie knot and applied tape over knot.</p> <p>b. Checked tightness of ties.</p>			
<p>10. Returned bed to lowest height. Removed and discarded sterile gloves. Performed hand hygiene.</p>			
<p>11. Documented procedure, client's response, and assessment data.</p>			
<p><b>Variation: Using a Disposable Inner Cannula</b></p>			

<p>1. Opened new cannula package. Unlocked current inner cannula with gloved hand and removed it by gently pulling it toward self in line with curvature. Checked cannula for amount and type of secretions and discarded properly. Picked up new inner cannula, only touching outer locking portion. Inserted new cannula into tracheostomy. Locked cannula in place by turning lock, if present.</p>			
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This is the brand of chest tube drainage sets used at UMCP.

**Employee training video:** <https://www.youtube.com/watch?v=pH4XMTJXQY8>

<b>SKILL 13.21: Maintaining Chest Tube Drainage</b>			
<b>Procedure</b>	<b>Performed</b>		<b>Comments</b>
	<b>Yes</b>	<b>No</b>	
<p>1. Gathered equipment and supplies. Introduced self, explained what procedure was to be done and why. Performed hand hygiene following infection control measures and verified client's identity. Provided privacy. Provided comfort and safety for client.</p>			
<p>2. Assessed the client.</p> <ul style="list-style-type: none"> <li>a. Determined ease of respirations, breath sounds, respiratory rate and depth, oxygen saturation, and chest movements every 2 hours.</li> <li>b. Observed dressing site and inspected for excessive and abnormal drainage. Palpated for subcutaneous emphysema.</li> <li>c. Determined level of discomfort with and without</li> </ul>			

<p>activity.</p> <p>d. Evaluated impact of possible changes to client’s body image that may occur.</p>			
<p>3. Implemented all necessary safety precautions.</p> <p>a. Monitor intactness of closed chest drainage system. Kept 250-mL pour bottle of sterile water (or normal saline) and sterile petrolatum gauze at bedside in case of a breach in this system.</p> <p>b. Kept drainage system below chest level and upright at all times.</p>			
<p>4. Maintained the patency of the drainage system.</p> <p>a. Checked that all connections were secured with tape.</p> <p>b. Inspected drainage tubing for kinks or loops dangling below entry level of drainage system.</p> <p>c. Coiled drainage tubing and secured it to bed linen and ensured client had enough slack to move.</p> <p>d. Verified air vent in system was open periodically.</p> <p>e. Avoided forceful manipulation of tube.</p>			
<p>5. Assessed fluid level fluctuations and bubbling in drainage system.</p> <p>a. Checked fluctuation of fluid in water-seal chamber as client breathed.</p> <p>b. In suction drainage systems, checked that fluid line remained constant.</p> <p>c. Checked for intermittent bubbling in water-seal chamber.</p> <p>d. Checked for gentle bubbling in suction control chamber in wet systems.</p>			
<p>6. Assessed the drainage.</p> <p>a. Inspected drainage in collection container at least every</p>			

<p>15 minutes during first 2 hours after chest tube insertion and every 2 hours thereafter.</p> <p>b. Marked time, date, and drainage level container every 4–8 hours.</p> <p>c. Noted any sudden change in amount or color of drainage. Reported drainage that exceeded 100 mL/hour or color indicating hemorrhage to primary care provider.</p>			
<p>7. Watched for dislodgement of the tubes or drainage system tipped over, and remedied the problem promptly.</p> <p>a. If chest tube became disconnected from drainage system:</p> <ol style="list-style-type: none"> <li>1) Immediately inserted end of the chest tube 2.5–5 cm (1–2 in.) into sterile pour bottle of water to create a water seal.</li> </ol> <p>b. If chest tube became dislodged:</p> <ol style="list-style-type: none"> <li>1) Immediately applied sterile occlusive dressing to insertion site and taped down on three sides. Lifted the fourth side periodically when client exhales to allow air trapped in pleural space to be expelled.</li> <li>2) Notified physician to insert another chest tube.</li> <li>3) Assessed client every 10 minutes</li> </ol> <p>c. If wet system tipped over:</p> <ol style="list-style-type: none"> <li>1) Returned system to upright position.</li> <li>2) Asked client to take deep breaths.</li> <li>3) Notified physician.</li> <li>4) Assessed client.</li> </ol>			
<p>8. If continuous bubbling persisted in the water-seal or air leak collection chamber determined its source by sequential clamping of tube using padded hemostat.</p>			

9. Took a specimen of the chest drainage as required.			
10. Ensured essential client care: encouraged deep-breathing and coughing exercises; repositioned the client every 2 hours; auscultated the client's chest every 4 hours; percussed the client's chest; checked that the chest tube site dressing was dry and occlusive; examined the chest tube insertion site for signs of healing, skin irritation, or infection. Assisted client with range-of-motion exercises.			
11. Performed hand hygiene.			
12. Documented procedures, client's response, assessment data, and results in client's record.			

## Week 2

### Objectives:

Assess patients with high acuity acute and chronic alterations in perfusion.

Analyze collected data as it pertains to high acuity acute and chronic alterations in perfusion.

Utilize collected data to formulate a plan of care as it pertains to high acuity acute and chronic alterations in perfusion.

Implement the plan of care in high acuity acute and chronic alterations in perfusion.

Evaluate goals and therapeutic outcomes in high acuity acute and chronic alterations in perfusion.

### HESI RN Group Case Study:

Physical Assessment: Heart & Neck Vessels

### Mini Math Review:

### Lab Skills:

Perform a focused cardiac assessment.

Demonstrate the ability to correctly identify and classify heart murmurs.

### Associated prior NRS 125 Skills:

SKILL 14.3: Applying Anti-embolism Stockings (Graduated Compression Stockings, and Elastic Stockings)

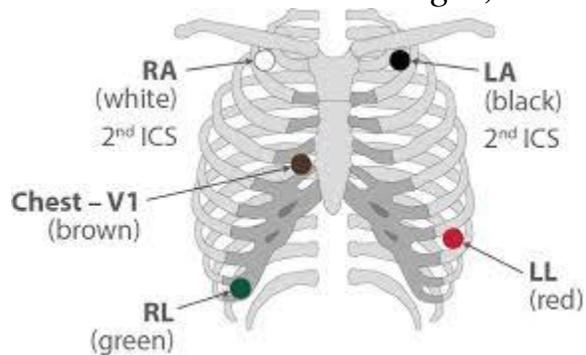
SKILL 14.5: Applying Sequential Compression Devices (SCDs)

## Grading systolic murmurs

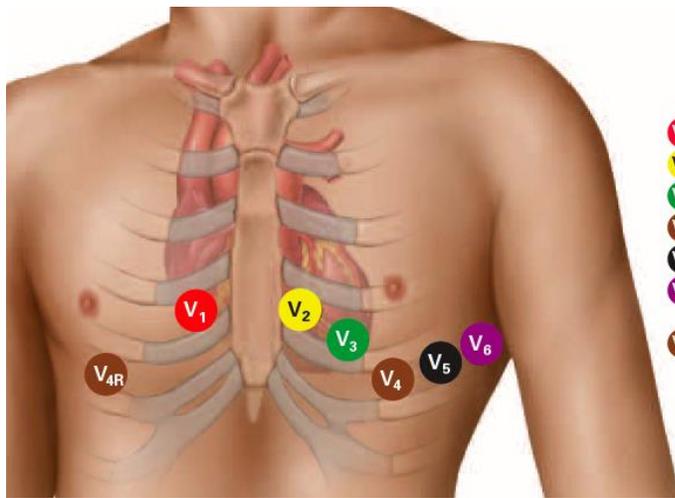
<u>Intensity</u>	<u>Description</u>
Grade I/VI	Barely audible
Grade II/VI	Audible, but soft
Grade III/VI	Easily audible
Grade IV/VI	Easily audible and associated with a thrill
Grade V/VI	Easily audible, associated with a thrill, and still heard with the stethoscope only lightly on the chest
Grade VI/VI	Easily audible, associated with a thrill, and still heard with the stethoscope off of the chest

Demonstrate the ability to apply ECG leads.

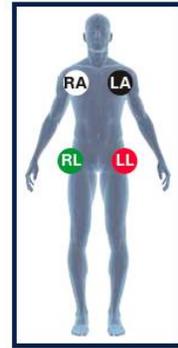
**5 Lead** = “*White on the right, smoke over fire, clouds over grass*”



Demonstrate the ability to record a 12 lead EKG.



- V<sub>1</sub>** 4<sup>th</sup> intercostal space to the right of the sternum
- V<sub>2</sub>** 4<sup>th</sup> intercostal space to the left of the sternum
- V<sub>3</sub>** directly between the leads V<sub>2</sub> & V<sub>4</sub>
- V<sub>4</sub>** 5<sup>th</sup> intercostal space at midclavicular line
- V<sub>5</sub>** level with V<sub>4</sub> at left anterior axillary line
- V<sub>6</sub>** level with V<sub>5</sub> at left midaxillary line (directly under the midpoint of the armpit)
- V<sub>4R</sub>** 5<sup>th</sup> intercostal space, right midclavicular line



- RA** Right Arm
- LA** Left Arm
- RL** Right Leg
- LL** Left Leg

### SKILL 14.6: Monitoring Clients on Telemetry (Applying ECG Leads)

Procedure	Performed		Comments
	Yes	No	
1. Checked physician's order and gathered equipment and supplies. Introduced self, explained what procedure was to be done and why. Performed hand hygiene, following infection control measures, and verified client's identity. Provided privacy. Provided comfort and safety for client and self, including raising bed to appropriate height for procedure.			
2. Placed fresh 9-volt battery in telemetry transmitter box if needed. Instructed client about telemetry range and to notify nurse if an electrode fell off.			
3. Checked the expiration date on the electrode packet.			
4. Determined appropriate lead to be monitored.			
5. Selected electrode sites that were not over bony prominence, muscular area, joints, breasts, or skin creases.			
6. Assessed skin site before placing electrode. Wiped skin areas using alcohol swab. Allowed site to dry thoroughly before affixing electrode.			

7. Attached lead wires to chest electrodes.			
8. Applied electrodes to client's chest: peeled off paper backing on electrode disc. Checked that sponge pad in center of electrode was moist with conductive jelly. Placed electrode on skin with adhesive side down. Pressed edges down to secure.			
9. Attached wire into transmitter box. Matched the color codes of the wires to the telemetry box.			
10. Had base station run an ECG strip to check clarity of transmission.			
11. Repositioned bed to lowest height. Performed hand hygiene.			
12. Set HIGH and LOW alarm limits on the monitor. Turned alarm buttons to ON per agency/unit protocol (e.g., 50 low, 100 high).			
13. Assessed skin surrounding electrode regularly for signs of irritation.			
14. Checked lead placement at least once a shift unless notified by client or monitoring station that electrodes were not functioning properly.			
15. Changed electrodes at least every 3 days or if ECG strip indicated poor conduction of wave form.			
16. Documented procedure, including a short ECG rhythm strip, assessment data, and client's response in client's record.			

**SKILL 14.8: Recording a 12-Lead ECG**

Procedure	Performed		Comments
	Yes	No	
1. Checked physician's order and gathered equipment and supplies. Introduced self, explained what procedure was to be done and why. Performed hand hygiene, following infection control measures, and verified client's identity. Provided privacy. Provided comfort and safety for client and self, including raising bed to appropriate height for procedure.			

<p>2. Assessed client's chest for electrode placement. Determined if skin care needed, including hair clipping. Attached wires to electrodes before pressing onto client's chest.</p>			
<p>3. When placing electrodes, ensured lead wires were all going in the same direction.</p>			
<p>4. Placed electrodes on fleshy areas, avoiding bone and muscle.</p>			
<p>5. Placed the four limb leads, one on each limb, according to the color coding. Three standard leads will be recorded on the 12-lead ECG.</p> <ul style="list-style-type: none"> <li>a. Lead I: Right arm wrist (negative electrode) white; and left arm (positive electrode black). Recorded activity between the two arms.</li> <li>b. Lead II: Right arm (negative electrode) and left leg ankle (positive electrode red). Recorded activity between arm and leg.</li> <li>c. Lead III: Left arm (negative electrode) and left leg (positive electrode green). Recorded activity between arm and leg.</li> </ul>			
<p>6. Three augmented limb lead tracings obtained on the ECG as follows.</p> <ul style="list-style-type: none"> <li>a. aVR: Recorded activity between the center of the heart and right arm.</li> <li>b. aVL: Recorded activity between the center of the heart and left arm.</li> <li>c. aVF: Recorded activity between the center of the heart and the left leg or foot.</li> </ul>			
<p>7. Placed the chest leads as follows.</p> <ul style="list-style-type: none"> <li>a. V1: Fourth intercostal space, right sternal border. Recorded activity between the center of the heart and the fourth intercostal space; P wave is shown best here. <ul style="list-style-type: none"> <li>(1) Palpated the jugular notch above sternum (felt like a depression).</li> <li>(2) Moved finger down and palpated the manubrium of sternum (felt solid).</li> <li>(3) Continued to move finger down to the angle of Louis,</li> </ul> </li> </ul>			

<p>which is at the top of the sternal body.</p> <p>(4) Moved finger to the right of the angle of Louis to the second right rib.</p> <p>(5) Below the rib is the second intercostal space.</p> <p>(6) Moved fingers down, palpating the next two ribs. Below the fourth rib and to the right of the sternal body is the fourth intercostal space. Placed electrode in this area.</p> <p>b. V2: Fourth intercostal space, left sternal border.</p> <p>c. V3: Midway between V2 and V4, between 4th and 5th intercostal space.</p> <p>d. V4: Fifth intercostal space, left midclavicular line.</p> <p>e. V5: Fifth intercostal space, anterior axillary line.</p> <p>f. V6: Fifth intercostal space, left midaxillary line.</p>			
8. Began taking the ECG according to manufacturer's directions on machine.			
9. Removed electrodes. Reposition bed to lowest height. Performed hand hygiene.			
10. Placed tracing copy on client's chart.			

**Week 2**  
**10 Minute Math Review**

1. The order is prednisone 50 mg po now. You have on hand prednisone 20 mg tablets. How many should you give?
  
2. The order reads pilocarpine hydrochloride 0.25% ophthalmic solution 1 gtt to OU at 0900 and 2100. Describe how you will administer the 0900 dose.
  
3. The physician orders Vitamin B1 (thiamine hydrochloride) 10 mg IM bid. You have a 10mL multiple dose vial of Vitamin B1 (thiamine HCL) of 100 mg/mL. How much will you give as a dose?

4. The order reads vancomycin HCL 0.5 g po bid. On hand you have a 100 mL bottle of vancomycin HCL liquid, 125mg/5mL. How much will you pour as one dose?
5. IV order of 1 L D5/W to infuse in 24 hours. The tubing drop factor is 10 gtt/mL. Calculate how many drops per minute you would have to manually adjust the drip rate.
6. You have an infusion pump which is calibrated to infuse mL/hr. Using the above order, at what rate would you set the infusion pump?

## Week 3

### **OBJECTIVES:**

Assess patients with high acuity acute and chronic alterations in immunity, infection, and inflammation.

Analyze collected data as it pertains to high acuity acute and chronic alterations in immunity, infection, and inflammation.

Utilize collected data to formulate a plan of care as it pertains to high acuity acute and chronic alterations in immunity, infection, and inflammation. Implement the plan of care in high acuity acute and chronic alterations in immunity, infection, and inflammation.

Evaluate goals and therapeutic outcomes in high acuity acute and chronic alterations in immunity, infection, and inflammation.

### **HESI RN Group Case Study:**

Med/Surg: HIV & Tuberculosis

### **Mini Math Review:**

### **Lab Skills:**

Demonstrate the ability to manage central lines.

Demonstrate the ability to use and maintain venous access devices.

Demonstrate the ability to perform central line care.

Demonstrate the ability to draw blood from a central line.

Demonstrate the ability to give IV push medication via central line.

### **Associated prior NRS 125 Skills:**

SKILL 2.44: Administering Intravenous Medications Using IV Push

SKILL 7.4: Regulating Infusion Flow Rate

SKILL 2.42: Adding Medications to Intravenous Fluid Containers

SKILL 2.43: Administering Intermittent Intravenous Medications Using a Secondary Set



### SKILL 7.13: Managing Central Lines

Procedure	Performed		Comments
	Yes	No	
1. Checked physician's order. Introduced self and verified client's identity. Explained procedure and how results would be used. Gathered equipment.			
2. Performed hand hygiene and observed other appropriate infection control procedures.			
3. Positioned client appropriately. <ul style="list-style-type: none"> <li>a. Assisted client to a comfortable position, either sitting or lying. Exposed IV site but provided for client privacy.</li> </ul>			
4. Labeled each lumen of multiple- lumen catheters.			
5. Monitored tubing connections. <ul style="list-style-type: none"> <li>a. Ensured all tubing connections were taped or secured according to agency protocol.</li> <li>b. Checked connections every 2 hours.</li> </ul>			
6. Changed tubing according to agency policy.			
7. Changed the catheter site dressing according to agency policy and using strict aseptic technique.			

<p>8. Administered all infusions as ordered.</p> <ul style="list-style-type: none"> <li>a. Used a controller or pump for all fluids.</li> <li>b. Maintained the fluid flow at the prescribed rate.</li> </ul>			
<p>9. Capped lumens without continuous infusions, and flushed them regularly.</p> <ul style="list-style-type: none"> <li>a. Changed the catheter cap as indicated by agency protocol. Cleaned adapter caps with an alcohol or other agency approved swab before penetration.</li> <li>b. Flushed lumens according to agency protocol. Flushed catheter before and after each dose of medication.</li> <li>c. Used a 10-mL or larger syringe to flush.</li> <li>d. Avoided reflux of blood back into catheter when disconnecting syringe.</li> </ul>			
<p>10. Administered medications as ordered.</p> <ul style="list-style-type: none"> <li>a. If a capped lumen used for medication was flushed with heparin solution, aspirated and discarded or flushed the line with 5 to 10 ml of normal saline according to agency protocol before giving the medication.</li> <li>b. After the medication was instilled, injected normal saline first and then heparin flush solution if indicated by agency protocol.</li> </ul>			
<p>11. Performed hand hygiene.</p>			
<p>12. Monitored the client for vital signs, skin color, mental alertness, appearance of the catheter site, and presence of adverse symptoms at least every 4 hours. Monitored for complications:</p> <ul style="list-style-type: none"> <li>a. Suspected air embolism</li> <li>b. Suspected sepsis</li> <li>c. Suspected occluded lumen</li> </ul>			
<p>13. Documented all relevant information.</p>			

**SKILL 7.14: Changing a Central Line Dressing**

Procedure	Performed		Comments
	Yes	No	
1. Gathered equipment and supplies. Introduced self, explained what procedure was to be done and why. Performed hand hygiene, following infection control measures, and verified client's identity. Provided privacy. Provided comfort and safety for client and self, including raising bed to appropriate height for procedure.			
2. Assisted client to a comfortable position, either sitting or lying. Exposed central line site but provided for client privacy.			
3. Prepared client. Applied mask and had client apply mask and/or asked client to turn head away from insertion site.			
4. Prepared equipment. a. Established sterile field and placed sterile supplies.			
5. Removed old dressing. a. Applied clean gloves. b. For a transparent dressing, pulled both sides away from insertion site, stretching it to lift off skin. For taped dressings, held catheter with one hand and gently pulled tape in direction of catheter. c. Inspected skin for signs of irritation or infection. d. Removed and discarded gloves. Performed hand hygiene.			
6. Cleansed the site. a. Applied sterile gloves. b. Cleaned catheter insertion site with CHG-based skin prep in a back-and-forth motion, with plenty of friction for a minimum of 30 seconds. c. Used one hand to lift catheter to clean under it, if possible. d. For additional protection against central line associated bloodstream infections, used CHG-impregnated sponges at the catheter exit site, according to agency policy.			
7. Applied the new dressing.			

<ul style="list-style-type: none"> <li>a. Secured catheter to skin with a catheter securement device.</li> <li>b. Applied a transparent semipermeable polyurethane dressing. Used other dressings as specified by policy.</li> <li>c. Returned bed to lowest height. Removed and discarded gloves. Performed hand hygiene.</li> <li>d. Labeled dressing with catheter information, date and time of dressing change, and own initials.</li> </ul>			
8. Documented all relevant information.			

**SKILL 2.44: Administering Intravenous Medications Using IV Push**

<b>Procedure</b>	<b>Performed</b>		<b>Comments</b>
	<b>Yes</b>	<b>No</b>	
1. Checked medication order. Gathered MAR, medication, sterile syringe, antiseptic swabs, clean gloves, and watch with second hand or digital readout. Removed appropriate medication from medication drawer, shelf, or refrigerator. Checked MAR with medication label to verify correct medication and expiration date. Signed out controlled medicines following agency policy.			
2. Checked the medication label three times for safety: <ul style="list-style-type: none"> <li>a. When it was taken from medication drawer</li> <li>b. Compared it to the MAR</li> <li>c. Compared it to the MAR in client's room or when ready to leave medication preparation area</li> </ul>			
3. Prepared correct amount of medication without contaminating it. Calculated dosage accurately and recommended delivery rate for medication.			
4. Identified self and verified client identity with two identifiers. Explained procedure and how it will help. Provided privacy. Performed hand hygiene and donned gloves. Checked MAR and client allergy status. Determined if specific assessment was indicated before administering medication (e.g., vital signs) and			

assessed client.		
<p>5. <i>If Using a Primary Infusion Line to Give Medication:</i></p> <ul style="list-style-type: none"> <li>a. Cleaned primary tubing injection port closest to client.</li> <li>b. Inserted medication syringe cannula into line port.</li> <li>c. Pinched primary tubing between port and infusion bag while injecting medication slowly in calculated increments (e.g., inject 1/4 of medication over a 20- second period). Always checked literature to determine injection times for specific medication.</li> <li>d. After injecting small increments, unpinched primary tubing to allow flushing of medication.</li> <li>e. Observed client for any adverse effects.</li> <li>f. Delivered next increment, using your watch and timing drug injection according to the drug insert instructions.</li> <li>g. Disconnected syringe when medication injection was completed.</li> </ul>		
<p><i>If Using an IV Lock to Give Medication:</i></p> <ul style="list-style-type: none"> <li>a. Prepared two syringes of sterile normal saline (or heparin if indicated by agency policy) as flushes.</li> <li>b. Cleaned injection port with antiseptic swab. Inserted needle or syringe containing normal saline and aspirated for blood.</li> <li>c. Flushed the saline lock with the saline and removed the needle or syringe.</li> <li>d. Cleaned the lock's injection port and inserted needle or syringe containing prepared medication into port.</li> <li>e. Injected medication at recommended rate of infusion. Used a watch to be accurate with timing.</li> <li>f. Removed the needle or syringe when all medication had been administered.</li> <li>g. Cleaned the port and attached the second saline syringe and flushed the port.</li> </ul>		
6. Discarded equipment in appropriate containers.		
7. Removed gloves and performed hand hygiene.		
8. Documented medication on MAR and in client's record, including assessment findings, if indicated.		
9. Continued to assess client for desired drug action and possible side effects or adverse reactions.		

<b>Variation: Positioning a Child for Injections or Intravenous Access</b>			
<p><i>Supine Position</i></p> <ol style="list-style-type: none"> <li>a. Placed child in a supine position on a bed or stretcher.</li> <li>b. Had parent, nurse, or assistant lean over child to restrain the child's body and extend the extremity to be used for access or injection.</li> </ol>			

**Procedure**

1. Gathered equipment and supplies. Introduced self, explained what procedure was to be done and why. Performed hand hygiene. Provided privacy. Provided comfort and safety for client and self, including raising bed to appropriate height.
2. Assisted the client to a comfortable position, either sitting or lying. Exposed the IVAD site but provided for client privacy.
3. Prepared the site.
  - a. Located the IVAD device and its septum.
  - b. Prepared skin in accordance with agency policy and let area dry after applying solutions.
  - c. Applied sterile gloves.
4. Inserted the Huber needle.
  - a. Grasped base of IVAD device between two fingers of nondominant hand to stabilize it.
  - b. Inserted the needle at a 90° angle to the septum, and pushed it firmly through the skin and septum until it contacted the septum.
  - c. Avoided tilting or moving needle when septum is punctured.
  - d. When needle came in contact with base of septum, aspirated for blood to determine correct placement.
  - e. Infused saline flush.
5. Prevented manipulation or dislodgement of needle.
  - a. Supported the Huber needle with 2 x 2 dressings and applied an occlusive transparent dressing to needle site.

b. Looped and taped tubing.
6. Attached infusion tubing or intermittent infusion access cap to Huber needle.
7. After use, performed a final flush with heparinized saline.
a. When flushing, maintained positive pressure and clamped tubing immediately before flush is finished.
<b>Variation: Obtaining a Blood Specimen</b>
a. Withdrew 10 mL of blood and discarded it.
b. Drew up the required amount of blood and transferred it to the appropriate containers.
c. Slowly instilled 10 mL normal saline (or per agency policy).
d. Injected 5 mL heparin flush solution to prevent clotting.
8. Returned bed to lowest height. Removed and discarded gloves. Performed hand hygiene.
9. Documented all relevant information.

**Week 3**  
**10 Minute Math Review**

1. Order is levodopa 0.75 g po daily. On hand you have 250 mg tablets. How many tablets will you give?
  
2. Order is dilantin (phenytoin) suspension 150mg po bid. On hand is a bottle containing dilantin 75mg/7.5 mL. How many mL will you give for one dose?
  
3. The physician orders gentamicin 24 mg IVPB q8 hr for a child weighing 26 lbs.
  - a. What is the suggested dosage range for this child (you may google or look up on a smart phone)?
  
  - b. Is this a safe dose for this child?

4. The physician orders ampicillin 50mg/kg/day to be divided into 4 doses. The patient weighs 20 kg. How many mg would be in each dose?
5. Order is Ancef 50mg IVPB in 100 mL NS to infuse in 30 mins. The infusion pump delivers mL/hr. At what rate will you set the infusion pump?

## Week 4

### **OBJECTIVES:**

Assess patients with high acuity acute and chronic alterations in cellular regulation.

Analyze collected data as it pertains to high acuity acute and chronic alterations in cellular regulation.

Utilize collected data to formulate a plan of care as it pertains to high acuity acute and chronic alterations in cellular regulation.

Implement the plan of care in high acuity acute and chronic alterations in cellular regulation.

Evaluate goals and therapeutic outcomes in high acuity acute and chronic alterations in cellular regulation.

### **HESI RN Group Case Study:**

Med/Surg: Lung Cancer

### **Mini Math Review:**

#### **Lab Skills:**

Demonstrate the ability to administer a blood transfusion.

Demonstrate the ability to perform ostomy care.

Demonstrate the ability to teach a patient how to perform breast and testicular self-examinations

### **Associated prior NRS 125 Skills:**

SKILL 7.4: Regulating Infusion Flow Rate

SKILL 2.42: Adding Medications to Intravenous Fluid Containers

SKILL 2.43: Administering Intermittent Intravenous Medications Using a Secondary Set

SKILL 6.18: Maintaining Continuous Bladder Irrigation

SKILL 6.23: Inserting a Rectal Tube

SKILL 6.25: Administering an Enema

SKILL 6.15: Performing Urinary Catheterization

SKILL 6.16: Performing Catheter Care and Removal

SKILL 6.19: Providing Suprapubic Catheter Care

SKILL 6.20: Performing Urinary Ostomy Care

SKILL 6.4: Obtaining a Urine Specimen from an Ileal Conduit

**Week 4**  
**10 Minute Math Review**

1. Order is for heparin 7,000 units subQ Q 12 hr. On hand you have a vial containing 5,000 u/mL. How much will you draw up in the syringe for the dose?
  
2. Calculate the rate of infusion for a 1000 mL of D5/W over 12 hours.
  
3. Order is Benadryl 75 mg po now. On hand you have Benadryl 25mg/5mL. How much will you give for this dose?
  
4. Order is to infuse a solution of heparin 20,000U to 1 L ofD5/W at 80 mL/hr. Calculate the dose of infusion.

**SKILL 3.2: Administering Blood Transfusions**

<b>Procedure</b>	<b>Performed</b>		<b>Comments</b>
	<b>Yes</b>	<b>No</b>	
1. Checked physician's order and gathered equipment and supplies. Ensured signed consent was in client's record. Introduced self, explained what procedure was to be done and why. Performed hand hygiene, following infection control measures, and verified client's identity. Provided privacy. Provided safety for client. Assisted client to sitting or lying position of comfort.			
2. Prepared infusion equipment.  a. Ensured IV catheter was appropriate size to administer blood (#18 to #20 gauge preferred).  b. Ensured that blood filter inside drip chamber was suitable for blood components to be transfused. Attached blood tubing to blood filter, if necessary.			

<ul style="list-style-type: none"> <li>c. Applied clean gloves.</li> <li>d. Closed all clamps on Y-set.</li> <li>e. Inserted piercing pin into saline solution.</li> <li>f. Hung container on IV pole about 1 m (39 in.) above venipuncture site..</li> </ul>			
<p>3. Primed the tubing.</p> <ul style="list-style-type: none"> <li>a. Opened upper clamp on normal saline tubing and squeezed drip chamber until it covers the filter and one-third of the drip chamber above filter.</li> <li>b. Tapped filter chamber to expel any residual air in filter.</li> <li>c. Opened main flow rate clamp and primed tubing with saline.</li> <li>d. Closed both clamps.</li> </ul>			
<p>4. Started saline solution.</p> <ul style="list-style-type: none"> <li>a. If IV solution incompatible with blood was infusing, stopped the infusion and discarded solution and tubing according to agency policy.</li> <li>b. Attached blood tubing primed with normal saline to intravenous center.</li> <li>c. Opened saline and main flow rate clamps and adjusted flow rate. Used only main flow rate clamp to adjust rate.</li> <li>d. Allowed a small amount of solution to infuse to make sure there were no problems with flow or with venipuncture site.</li> </ul>			
<p>5. Obtained correct blood component for client.</p> <ul style="list-style-type: none"> <li>a. Checked the order with the requisition.</li> <li>b. Checked requisition form and blood bag label with a laboratory technician or according to agency policy. Specifically, checked client's name, identification number, ABO blood type and Rh group, blood donor number, and expiration date of blood. Observed blood for abnormal color, clumping, gas bubbles, and extraneous material. Returned outdated or abnormal blood to blood bank.</li> <li>c. An RN and one other nurse checked the blood or component against the physician's written order, compared laboratory</li> </ul>			

<p>blood record with two client identifiers, the number on blood bag label, ABO blood type and Rh group on blood bag label, verified as acceptable the expiration date and time of the donor unit, and recorded the interpretation of compatibility testing.</p> <p>d. Notified charge nurse and blood bank if information did not match exactly. Did not administer blood until discrepancies were corrected or clarified.</p> <p>e. Signed appropriate form with other nurse according to agency policy.</p> <p>f. Made sure RBCs were left at room temperature for no more than 30 minutes before starting transfusion.</p>			
<p>6. Prepared blood bag:</p> <p>a. Exposed port on blood bag by pulling back tabs.</p> <p>b. Inserted remaining Y-set spike into blood bag.</p> <p>c. Suspended blood bag.</p>			
<p>7. Established blood transfusion.</p> <p>a. Vital signs taken just before beginning transfusion.</p> <p>b. Closed upper clamp below IV saline solution container.</p> <p>c. Opened upper clamp below blood bag.</p> <p>d. Readjusted flow rate with main clamp.</p> <p>e. Removed and discarded gloves. Performed hand hygiene.</p>			
<p>8. Observed client closely for first 15 minutes.</p> <p>a. Ran blood slowly for first 15 minutes at 5mL/min.</p> <p>b. Noted adverse reactions such as chilling, nausea, vomiting, skin rash, or tachycardia.</p> <p>c. Reminded client to call nurse immediately in any unusual symptoms were felt.</p> <p>d. Reported any reactions immediately to nurse in charge and took appropriate nursing action.</p>			
<p>9. Documented relevant data.</p>			
<p>10. Monitored the client.</p>			

<ul style="list-style-type: none"> <li>a. Assessed client and recorded vital signs 15 minutes after beginning infusion and at least every 30 minutes thereafter</li> <li>b. If the client had a reaction and the blood was discontinued, sent the blood bag to the laboratory for investigation of the blood.</li> </ul>			
<p>11. Terminated the transfusion.</p> <ul style="list-style-type: none"> <li>a. Applied clean gloves.</li> <li>b. Clamped blood tubing and removed needle if no transfusion was to follow. If another transfusion was to follow, clamped blood tubing and opened saline infusion arm.</li> <li>c. If primary IV was to be continued, flushed maintenance line with saline solution. Disconnected blood tubing system and reestablished intravenous infusion using new tubing. Adjusted drip to desired rate.</li> <li>d. Assessed vital signs.</li> </ul>			
<p>12. Followed agency protocol for appropriate disposition of used supplies.</p> <ul style="list-style-type: none"> <li>a. Discarded administration set according to agency practice.</li> <li>b. Disposed of blood bags to blood bank with completed requisition.</li> <li>c. Removed and discarded gloves. Performed hand hygiene.</li> </ul>			
<p>13. Documented all relevant information in client's record.</p>			

**SKILL 6.20: Performing Urinary Ostomy Care**

Procedure	Performed		Comments
	Yes	No	
<p>1. Gathered equipment. Introduced self and verified client's identity. Provided privacy, explained procedure and how results would be used. Performed hand hygiene and observed other appropriate infection control procedures. Provided comfort and safety for client.</p>			
<p>2. Assisted the client to a comfortable sitting or lying position in bed or a sitting or standing position in the bathroom.</p>			
<p>3. Emptied and removed the ostomy appliance.</p>			

<ul style="list-style-type: none"> <li>a. Applied clean gloves.</li> <li>b. Emptied pouch through bottom opening into a bedpan or graduated cylinder.</li> <li>c. Peeled bag off slowly while holding client's skin taut.</li> <li>d. Placed tissues, gauze pads over stoma; changed as needed.</li> </ul>			
<p>4. Cleaned and dried the peristomal skin and stoma.</p> <ul style="list-style-type: none"> <li>a. Used warm water, mild soap, and gauze, or washcloth and towel to clean skin and stoma. Checked agency practice on use of soap.</li> <li>b. Dried area thoroughly by patting with towel s.</li> </ul>			
<p>5. Assessed the stoma and peristomal skin.</p> <ul style="list-style-type: none"> <li>a. Inspected stoma for color, size, shape, and bleeding.</li> <li>b. Inspected peristomal skin for redness, ulceration, or irritation.</li> </ul>			
<p>6. Prepared and applied the new pouch.</p> <ul style="list-style-type: none"> <li>a. Used guide to measure size of stoma.</li> <li>b. On backing of skin barrier, traced a circle the same size as the stomal opening.</li> <li>c. Cut out traced stoma pattern to make opening in skin barrier.</li> <li>d. Removed backing to expose sticky adhesive side of ostomy appliance.</li> <li>e. Applied peristomal skin barrier to faceplate or around stoma.</li> <li>f. Centered faceplate over stoma and gently pressed onto client's skin, smoothing any wrinkles or bubbles. Held in place for about 30 seconds.</li> <li>g. Removed air from the pouch.</li> <li>h. Closed pouch by turning up bottom a few times, fanfolding its end lengthwise, and secured it with a tail closure clamp.</li> <li>i. Discarded all used supplies in appropriate receptacles.</li> <li>j. Removed and discarded gloves. Performed hand hygiene.</li> </ul>			
<p>7. Documented procedure, client's response, and assessment</p>			

data in client's record.			
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<b>SKILL 6.27: Applying a Fecal Ostomy Pouch</b>			
<b>Procedure</b>	<b>Performed</b>		<b>Comments</b>
	<b>Yes</b>	<b>No</b>	
1. Gathered equipment. Introduced self and verified client's identity. Provided privacy, explained procedure and how results would be used. Performed hand hygiene and donned clean gloves. Provided comfort and safety for client and self, raising bed to working height.			
2. Placed bath blanket over client. Placed absorbent pad or towels under client.			
3. Observed placement of stoma.			
4. Emptied old pouch into graduated container, bedpan, or toilet.			
5. Removed old pouch by pushing against skin while pulling backing from skin and discarded in plastic bag. Saved tail closure on bottom of pouch.			
6. Measured output, if ordered.			
7. Cleaned skin and stoma gently with warm water and soft cloth.			
8. Dried skin well with soft cloth. Kept tissues available if stoma functioned while pouch was off.			
9. Observed skin and stoma for changes in size, ulceration, and color (stoma should be a moist, pink, or beefy red). Notified physician if stoma black, blue, or purple.			
10. Measured stoma at the base with measuring guide.			
11. Traced measured pattern on pouch.			
12. Cut pouch to pattern, making sure opening was large enough (at least 1/8 in.) to encircle stoma without pushing on edges.			
13. If using a two-piece pouch, snapped the wafer and pouched together.			
14. Removed paper from skin barrier on pouch and saved it.			
15. Applied a ring of skin barrier pasted to opening on pouch.			
16. Applied stoma adhesive powder to denuded skin only.			
17. Removed paper from outer ring.			
18. Centered and applied pouch to clean and dry skin. Smoothed			

edges of adhesive to skin.			
19. Closed and secured end of pouch with tail closure.			
20. Removed soiled pouch and tissues from bedside. Returned bed to lowest height.			
21. Removed and discarded gloves and performed hand hygiene.			
22. Positioned client for comfort.			
23. Put away supplies and reordered as necessary.			
24. Documented procedure, client's response, and assessment data in client's record.			

### SKILL 8.13: Caring for a Client with HIV or AIDS

Procedure	Performed		Comments
	Yes	No	
1. Gathered equipment. Introduced self and verified client's identity. Provided privacy, explained procedure and how results would be used. Provided comfort and safety for client.			
2. Performed hand hygiene before and after client care and after disposing of soiled materials.			
3. Donned disposable gloves for any procedure.			
4. Donned disposable gown or apron to protect clothing from soilage.			
5. Put on mask and protective eyewear if splattering was anticipated (e.g., suctioning, wound irrigations).			
6. Collected specimens in appropriate containers. Placed in plastic sealable biohazard bags.			
7. Used extraordinary care to avoid puncture wounds with needles and other sharp objects.  a. If puncture occurred, bled wound and washed with soap and water.  b. Notified supervisor immediately, and filled out incident report.			
8. Transported all specimens in an impermeable container, keeping the container separate from nurse's bag and supplies.			
9. Cleaned spills of blood and body fluids with 10% bleach solution			

(one part liquid chlorine bleach to nine parts water) or other agency approved cleanser.			
10. Washed eating utensils (dishes and silverware) in hot soapy water. Water was hot enough to need gloves to tolerate the temperature.			
11. Stored linens and laundry soiled with body fluids in a plastic bag and then washed separately with very hot water. Used a detergent and a 10% bleach solution. (Nonchlorine bleaches such as Clorox II are acceptable for colored clothing.)			
12. Disposed of gown or apron in plastic bag after completing care.			
13. Took off gloves by peeling them down and turning them inside out so that contaminated side was on the inside. Placed in plastic bag.			
14. Performed hand hygiene.			
15. Took off mask and goggles if used.			
16. Performed hand hygiene. Documented care, assessment data, and client's response.			

## Week 5

### OBJECTIVES:

Assess patients with high acuity acute and chronic alterations in cellular regulation.

Analyze collected data as it pertains to high acuity acute and chronic alterations in cellular regulation.

Utilize collected data to formulate a plan of care as it pertains to high acuity acute and chronic alterations in cellular regulation.

Implement the plan of care in high acuity acute and chronic alterations in cellular regulation.

Evaluate goals and therapeutic outcomes in high acuity acute and chronic alterations in cellular regulation.

### HESI RN Group Case Study:

Community Health: Hospice

### Mini Math Review:

### Lab Skills:

Demonstrate the ability to perform a therapeutic back massage.

Demonstrate the ability to provide end of life care.

**Associated prior NRS 125 Skills:**

SKILL 18.7: Changing a Dressing for a Venous Ulcer

SKILL 15.9: Changing a Dry Sterile Dressing

SKILL 18.8: Maintaining Closed Wound Drainage (Jackson–Pratt Drain)

SKILL 18.3: Cleaning a Sutured Wound and Changing a Dressing on a Wound with a Drain

<b>SKILL 4.4: Providing a Back Massage</b>			
<b>Procedure</b>	<b>Performed</b>		<b>Comments</b>
	<b>Yes</b>	<b>No</b>	
1. Gathered supplies. Introduced self, explained what procedure was to be done and why. Performed hand hygiene, following infection control measures, and verified client's identity. Provided privacy. Provided comfort and safety for client and self by adjusting bed to comfortable working height for the nurse.			
2. Assessed client's skin before beginning back rub. Determined if special lotion was to be used and client's ability to be in a prone or side-lying position.			
3. Draped bed clothes for warmth, and exposed back from shoulders to inferior sacral area.			
4. Placed lotion on hands and rubbed hands together to warm lotion or warmed lotion by holding bottle under warm water.			
5. Used palms to provide smooth, circular strokes beginning in the sacral area, moving hands up the center of the back, and then over both scapulae.			
6. Massaged in a circular motion over the scapulae and down the sides of the back. Massaged over the right and left iliac crests.			
7. Continued massaging the back in an orderly pattern using a variety of strokes and appropriate pressure. Applied firm pressure without breaking contact with client's skin.			
8. Patted skin dry from excess lotion with a towel.			
9. Covered client with gown and bedcovers. Assisted client to position of choice. Returned bed to lowest height.			
10. Performed hand hygiene.			
11. Documented procedure and assessment data in client's record.			

**SKILL 4.16: Meeting the Physiological Needs of the Client Who Is Dying**

Procedure	Performed		Comments
	Yes	No	
1. Gathered appropriate equipment. Introduced self and explained procedure. Identified client. Provided privacy. Performed hand hygiene and donned gloves. Provided comfort and safety for client.			
2. Performed bathing/hygiene. <ul style="list-style-type: none"> <li>a. Baths and linen changed as needed if diaphoretic, incontinent, or for odor control.</li> <li>b. Mouth care given as needed to remove secretions.</li> <li>c. Moisturizing creams and lotions applied for dry skin.</li> <li>d. Skin areas cleaned around wounds or other areas as needed.</li> </ul>			
3. Provided pain control. <ul style="list-style-type: none"> <li>a. Administered medications as ordered to maintain quality of life and comfort.</li> <li>b. Pain relief was provided to the client.</li> <li>c. Measures implemented to treat opioid-induced constipation.</li> </ul>			
4. Provided respiratory support. <ul style="list-style-type: none"> <li>a. Client placed in Fowler's position if conscious to support airway clearance or lateral position if unconscious.</li> <li>b. Oral suctioning performed as needed.</li> <li>c. Nasal oxygen applied as ordered for hypoxic clients.</li> <li>d. Respiratory medications administered as ordered.</li> </ul>			
5. Assisted with movement. <ul style="list-style-type: none"> <li>a. Assisted client out of bed at intervals as able.</li> <li>b. Changed client's position regularly and supported client with pillows, blanket rolls, or towels.</li> <li>c. Elevated client's legs when sitting up.</li> <li>d. Implemented pressure ulcer prevention measures.</li> </ul>			
6. Provided nutrition and hydration as indicated. <ul style="list-style-type: none"> <li>a. Administered antiemetics as ordered.</li> <li>b. Encouraged favorite foods as tolerated.</li> </ul>			

<ul style="list-style-type: none"> <li>c. Supported family members accepting their loved one is not eating or drinking sufficiently.</li> <li>d. Followed state and agency policies concerning removing feeding tubes.</li> <li>e. Taught family about dehydration and alterations in electrolytes at the end of life.</li> </ul>			
<ul style="list-style-type: none"> <li>7. Assisted with elimination. <ul style="list-style-type: none"> <li>a. Provided dietary fiber, stool softeners, or laxatives for constipation as ordered.</li> <li>b. Performed meticulous skin care for incontinence.</li> <li>c. Provided toileting items and call bell within easy reach.</li> <li>d. Changed linen as often as needed.</li> <li>e. Performed urinary catheterization as needed with physician's order.</li> <li>f. Kept room clean and odor free as possible.</li> </ul> </li> </ul>			
<ul style="list-style-type: none"> <li>8. Remained aware of sensory changes. <ul style="list-style-type: none"> <li>a. Checked client's preference for a light or dark room.</li> <li>b. Spoke clearly without whispering.</li> <li>c. Provided appropriate pressure of touch.</li> <li>d. Provided gown, clothing, and bedding as client preferred.</li> <li>e. Facilitated client interactions with others as desired.</li> <li>f. Provided medications for sensory alterations as ordered.</li> </ul> </li> </ul>			
<ul style="list-style-type: none"> <li>9. Encouraged family members to participate in physical care of the dying client as much as they wished and were able to do, read to the client, and held the client's hands.</li> </ul>			
<ul style="list-style-type: none"> <li>10. Modified routine care as appropriate based on the dying client.</li> </ul>			
<ul style="list-style-type: none"> <li>11. Removed and discarded gloves when interventions completed. Performed hand hygiene.</li> </ul>			
<ul style="list-style-type: none"> <li>12. Documented procedures, care interventions, and client's responses in client's record.</li> </ul>			

**Week 5**  
**10 Minute Math Review**

The doctor has ordered 2,000 units of Heparin SC every 8 hours. You have available a 5 mL vial labeled 10,000 units per mL.

How many mL's will you administer?

1. Calculate the drip rate for 2 liters of IV fluids to be given over 5 hours via an infusion set which delivers 10 drops/mL?

How many mL's per hour?

2. A diabetic patient is one day post-op. The patient is NPO and is receiving IV fluids. The patient's 7am glucoscan showed a blood sugar of 322.  
Medication orders include:

NPH Insulin 22 units SQ qam at 7a,

Compazine 7.5mg IM q4hours prn nausea (available medication: Compazine 20mg/2ml),

Heparin 7500 units SQ q12hours (available med: heparin 5000 units/ml),

Regular Insulin correction/sliding scale per Glucoscan q6hours:

2 units for a glucoscan of 200-250

4 units for a glucoscan of 251-300

6 units for a glucoscan of 300-325

Call doctor for glucoscan above 325

- A. How many mL's of each these medications will you give?
- B. How will you prepare and draw up the NPH insulin and the Regular Insulin in one syringe?
- C. How many units of Regular Insulin will you give?
- D. How many total units will be given of insulin?

## Week 6

### OBJECTIVES:

Assess patients with high acuity acute and chronic alterations in digestion and elimination.

Analyze collected data as it pertains to high acuity acute and chronic alterations in digestion and elimination.

Utilize collected data to formulate a plan of care as it pertains to high acuity acute and chronic alterations in digestion and elimination.

Implement the plan of care in high acuity acute and chronic alterations in digestion and elimination.

Evaluate goals and therapeutic outcomes in high acuity acute and chronic alterations in digestion and elimination.

### HESI RN Group Case Study:

Med\Surg Health: Hepatitis

### Mini Math Review:

### Lab Skills:

Demonstrate the ability to place a nasogastric tube.

**NG Tube Insertion Video:** <https://www.youtube.com/watch?v=vVEYfRmrCvQ>



### Associated prior NRS 125 Skills:

SKILL 12.5: Flushing/Maintaining a Nasogastric Tube

SKILL 12.6: Performing Gastric Lavage

SKILL 12.7: Removing a Nasogastric Tube

**SKILL 12.4: Inserting a Nasogastric Tube**

Procedure	Performed		Comments
	Yes	No	
<p>1. Checked physician's order and gathered equipment and supplies. Introduced self, explained what procedure was to be done and why. Performed hand hygiene, following infection control measures, and verified client's identity. Provided privacy. Provided comfort and safety for client and self, including raising bed to appropriate height for procedure and raising bed to high-Fowler's position if client condition allowed. Placed a towel or disposable pad across client's chest.</p>			
<p>2. Assessed the client's nares.</p> <p>a. Applied clean gloves.</p> <p>b. Asked client to hyperextend head and using a flashlight, observed intactness of tissues of the nostrils, including any irritations or abrasions.</p> <p>c. Examined nares for obstructions or deformities and asked client to breathe through one nostril while occluding the other.</p> <p>d. Selected nostril that had greater airflow.</p>			
<p>3. Prepared the tube.</p> <p><i>Small-bowel tube:</i> Ensured stylet or guidewire was secured in position.</p> <p><i>Large-bore tube:</i> Placed the tip of the tube in tube in water or lubricant.</p>			
<p>4. Determined how far to insert the tube.</p> <p>a. Used tube to mark off distance from tip of client's nose to tip of earlobe, then from tip of earlobe to tip of xiphoid.</p> <p>b. Marked length with adhesive tape if tube did not have markings.</p>			
<p>5. Inserted the tube.</p> <p>a. Lubricated tip of tube well with water-soluble lubricant or water to ease insertion.</p> <p>b. Inserted tube with its natural curve toward client into selected nostril. Asked client to hyperextend neck and gently advanced tube toward nasopharynx.</p> <p>c. Directed tube along floor of nostril and toward ear on that</p>			

<p>side.</p> <p>d. If tube met resistance, withdrew it, relubricated it, and inserted it into other nostril.</p> <p>e. Once tube reached oropharynx, client felt tube in throat and may have gagged or retched. Asked client to tilt head forward and encouraged client to drink and swallow.</p> <p>f. If client gagged, stopped passing tube momentarily. Had client rest, take a few breaths, and take sips of water to calm gag reflex.</p> <p>g. Passed tube 5–10 cm (2–4 in.) with each swallow until indicated length was inserted.</p>			
<p>6. Ascertained correct placement of the tube.</p> <p>a. Aspirated stomach contents and checked pH.</p> <p>b. Reviewed if confirmation was done by x-ray</p> <p>c. Secondary method: Placed stethoscope over client’s epigastrium and injected 5 to 20 mL of air into tube while listening for whooshing sound.</p> <p>d. If signs indicated placement was incorrect, removed the tube and began again.</p>			
<p>7. Secured the tube by taping it to the bridge of the client’s nose or by using an NG tube holder dressing to the bridge of the nose.</p>			
<p>8. Once correct position was determined, attached tube to suction source or feeding apparatus as ordered, or clamped end of tubing.</p>			
<p>9. Secured the tubing to the client’s gown.</p>			
<p>10. Removed and discarded gloves. Performed hand hygiene. Returned bed to lowest position.</p>			
<p>11. Documented procedure, confirmation of correct placement, type of suction if used, type and size of tube inserted, color and amount of gastric contents obtained, and client’s response.</p>			
<p>12. Established plan for daily NG tube care.</p>			
<p>13. If suction was applied, maintained NG patency &amp; suction tubing. Kept accurate records of drainage amount &amp; characteristics.</p>			



## Week 6

### 10 Minute Math Review

1. The order reads clindamycin hydrochloride (Cleocin) 300 mg IV every 6 hours. On hand you have Cleocin 0.6 g per 4 mL.  
What will you draw up for 1 dose?
2. The physician orders 1000mL of D5/W IV at 125 mL per hour. The IV tubing is calibrated for a drop factor of 10 gtt/mL.  
Calculate the IV flow rate in gtt/ min.
3. Order: Hydromorphone hydrochloride (Dilaudid) 4 mg IV Q 4 hr prn for pain.  
Supply: Dilaudid 10 mg/mL  
How much would give?
4. Order reads 250 mL D5W to run over the next 2 hours by infusion pump.  
What will you set the infusion pump at?
5. Order: tolbutamide (Orinase) 250 mg po twice a day  
Supply: 0.5g tablets  
How much will you give?

## Week 7

### **OBJECTIVES:**

Assess patients with high acuity acute and chronic alterations in metabolism.  
Analyze collected data as it pertains to high acuity acute and chronic alterations in metabolism.  
Utilize collected data to formulate a plan of care as it pertains to high acuity acute and chronic alterations in metabolism.  
Implement the plan of care in high acuity acute and chronic alterations in metabolism.

### **HESI RN Group Case Study:**

Med/Surg: Thyroid Disorders

### **Mini Math Review:**

#### **Lab Skills:**

Demonstrate the ability to assess the feet of diabetic patients and provide appropriate foot care.  
Demonstrate the ability to correctly mix and administer insulin via subcutaneous injection with an insulin syringe.  
Demonstrate the ability to administer insulin via the use of an insulin pen.  
Demonstrate the ability to provide proper care to a patient with an amputation/stump.

#### **Associated prior NRS 125 Skills:**

SKILL 2.23: Mixing Medications Using One Syringe

## Week 7

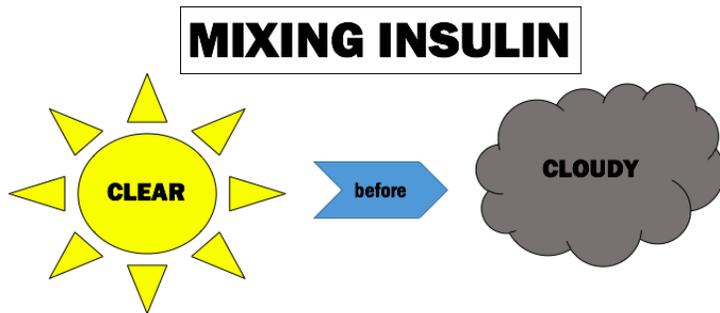
### **10 Minute Math Review**

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What will you draw up for 1 dose?
2. The physician orders 1000mL of D5/W IV at 125 mL per hour. The IV tubing is calibrated for a drop factor of 10 gtt/mL.  
Calculate the IV flow rate in gtt/ min.
3. Order: Hydromorphone hydrochloride (Dilaudid) 4 mg IV Q 4 hr prn for pain.  
Supply: Dilaudid 10 mg/mL  
How much would give?

4. Order reads 250 mL D5W to run over the next 2 hours by infusion pump.  
What will you set the infusion pump at?
  
5. Order: tolbutamide (Orinase) 250 mg po twice a day  
Supply: 0.5g tablets  
How much will you give?



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<b>SKILL 10.6: Preparing Insulin Injections</b>			
<b>Procedure</b>	<b>Performed</b>		<b>Comments</b>
	<b>Yes</b>	<b>No</b>	
1. Checked physician's order and gathered equipment and supplies. Introduced self, explained what procedure was to be done and			

why. Performed hand hygiene, following infection control measures, and verified client's identity. Provided privacy. Provided comfort and safety for client.			
<b><i>One Insulin Solution</i></b>			
2. Obtained client's blood glucose level before preparation to determine appropriate administration of insulin.			
3. Turned intermediate or long-acting (cloudy) insulin vial top-to-bottom 8 to 10 times.			
4. Wiped top of insulin bottle with antimicrobial swab.			
5. Removed needle guard and placed on tray.			
6. Pulled plunger of syringe down to desired amount of medication. Injected amount of air into air space, not into insulin solution.			
7. Withdrew ordered amount of insulin into syringe.			
8. Followed rights of medication administration for safety including: Validation of MAR, insulin bottle, and syringe with prepared medication with another nurse for accuracy.			
9. Removed needle from vial and expelled air from syringe.			
10. Replaced needle guard.			
11. Took medication to client's room.			
12. Followed steps for administration of medications by subcutaneous injection.			
13. Performed hand hygiene.			
14. Documented the medication administration, assessment data, and client's response.			
<b><i>Two Insulin Solutions</i></b>			
1. Checked medication orders.			
2. Performed hand hygiene.			
3. Followed steps for combining medications in one syringe using two vials.			
4. Turned cloudy intermediate insulin <b>Bottle A</b> top to bottom 8 to 10 times.			
5. Wiped top of both insulin bottles with alcohol.			
6. Took needle guard off and placed on tray.			

7. Pulled plunger of syringe down to desired total units of insulin.			
8. Inserted needle and injected prescribed amount of air into <b>Bottle A</b> (cloudy) insulin.			
9. Withdrew needle.			
10. Pulled plunger of syringe down to prescribed units of clear insulin.			
11. Injected air into insulin inverted <b>Bottle B</b> and withdrew medication.			
12. Double checked preparations with another nurse.			
13. Withdrew needle from bottle and expelled all air bubbles.			
14. Inverted <b>Bottle A</b> and inserted needle. Took care not to inject any rapid or short-acting (clear) insulin into intermediate-acting (cloudy) insulin bottle. This could be avoided by holding steady pressure on plunger when inserting needle into bottle.			
15. Pulled back on plunger to obtain exact prescribed amount of intermediate or long-acting insulin. The total insulin dose now included both the clear insulin, previously drawn up into syringe, and the intermediate cloudy insulin just drawn up.			
16. Withdrew needle from bottle and replaced needle guard.			
17. Followed protocol for administration of medications by subcutaneous injections.			
18. Performed hand hygiene.			
19. Documented the medication administration, assessment data, and client's response.			
<b>Variation: Using an Insulin Pen</b>			
1. Removed pen cap and inserted insulin cartridge if indicated.			
2. Turned pen up and down at least 10 times.			
3. Removed needle cap and attached sterile needle immediately before injecting.			
4. Primed insulin pen by pulling dose knob out in direction of arrow until a "0" appeared in the dose window.			
5. Dialed 2 units, then pushed plunger and repeated until drop of insulin appeared at tip of needle.			
6. Dialed required number of insulin units to be injected.			

7. Swabbed injection site.			
8. Pinched up skin, inserted needle, and released skin before injection.			
9. Pressed pen/device “push button” completely and kept depressed, counting to 10 seconds before removing needle from skin			
10. Did not massage the area.			
11. Removed needle from pen/device and disposed in sharps container.			
12. Replaced pen/device cap and stored according to directions.			
13. Performed hand hygiene.			
14. Documented the medication administration, assessment data, and client’s response.			
<b>Variation: Using an Insulin Pump</b>			
1. Informed client of advantages of using Continuous Subcutaneous Insulin Infusion (CSII) with an insulin pump. CSII consist of a battery-powered pump with insulin reservoir, infusion catheter, and microcomputer that allowed programming to deliver basal and bolus doses according to physician orders.			
2. Assessed client selection criteria. <ul style="list-style-type: none"> <li>a. Requires conscientious client or child committed to wear pump 24 hours per day and perform multiple daily blood glucose monitoring.</li> <li>b. Requires motivated client or child to accept greater levels of responsibility for self-care and problem solving with CSII.</li> </ul>			
3. Referred to certified diabetes educator for education and training on how to operate insulin pump.			
4. Instructed client in self-management skills for episodes of acute complications of diabetes.			
5. Instructed client on cleaning and maintenance of pump and how to order additional supplies.			
6. Performed hand hygiene.			
7. Documented the teaching, assessment data, and client’s response.			
8. Provided resources for client: community insulin pump support groups, educational literature, Internet information provided			

online by manufacturer.



**Video on molding a stump:** <https://www.youtube.com/watch?v=VSbtZlj7uZc>

**SKILL 18.20: Shrinking/Molding a Client's Stump**

Procedure	Performed		Comments
	Yes	No	
1. Checked physician's orders. Gathered equipment and supplies. Introduced self, explained what procedure was to be done and why. Performed hand hygiene following infection control measures and verified client's identity. Provided privacy. Provided comfort and safety for client and self, including raising bed to appropriate height for procedure.			
2. Washed stump with soap and water and allowed to dry for at least 10 minutes before bandaging. Did not use lotions, powders, or alcohol.			
3. Inspected and encouraged client to assess stump for circulatory			

status, pressure areas, wound healing, and edema.			
4. Explained that purpose of wrap is to form a conical AKA stump to prepare for prosthesis use.			
5. Explained that wrap is to be worn at all times except during bathing or when wearing a prosthesis.			
6. Started by placing bandage end's outer surface on distal stump.			
7. Wrapped bandage medially and diagonally around stump. Had client assist by holding turns. Stretched bandages to two-thirds of the limit of the elastic.			
8. Continued to wrap smoothly up the stump with medially directed spirals or figure eight turns (not circular). Progressed up the stump and well into groin area.			
9. Finished bandaging with a "spica" turn over and around the client's pelvis, then back down to stump.			
10. Secured the bandage with tape or ( <i>cautiously</i> ) with safety pins. Did not use bandage clips.			
11. Reapplied elastic bandage every 4–6 hours or when loose.			
12. If client had a stump "shrinker sheath," rolled down and stretched the sheath using plastic ring. Fitted onto stump end and applied, making sure there were no wrinkles.			
13. Taught client home care of residual limb and prosthesis (washing; assessing for redness, pressure points, irritation, swelling, skin breakdown; socket, stump, socks, liners, mechanical parts, etc.).			
14. Returned bed to lowest height. Performed hand hygiene.			
15. Documented care, teaching, and client's response.			

## Week 8

### **OBJECTIVES:**

Assess patients with high acuity acute and chronic conditions across the lifespan related to mental health.

Analyze collected data of patients as it pertains to high acuity acute and chronic conditions across the lifespan related to mental health.

Utilize collected data to formulate a plan of care for patients with high acuity acute and chronic conditions across the lifespan related to mental health.

Implement the plan of care for patients with high acuity acute and chronic conditions across the lifespan related to mental health.

Evaluate goals and therapeutic outcomes for patients with high acuity acute and chronic conditions across the lifespan related to mental health.

### **HESI RN Group Case Study:**

Psychiatric/Mental Health: Alzheimer's Disease

### **Lab Skills:**

**Demonstrate self-defense practices to safely get out of a patient grab or choke situation.**

Demonstrate the ability to apply a mummy immobilizer restraint.

Demonstrate the ability to apply wrist and ankle restraints.

Demonstrate the ability to apply a torso/belt restraint.

Demonstrate the ability to manage patients in restraints.



**SKILL 17.10: Applying a Mummy Immobilizer**

Procedure	Performed		Comments
	Yes	No	
1. Checked physician's order and gathered equipment and supplies. Introduced self, explained to parents and child what procedure was to be done and why. Performed hand hygiene following infection control measures and verified client's identity. Provided privacy. Provided comfort and safety for client and self, including raising bed to appropriate height for procedure.			
<i>Infant</i>			

2. Placed blanket on secure surface and folded down one corner of blanket until tip reached middle of blanket.			
3. Placed infant in a diagonal position with his or her neck on the folded edge of blanket.			
4. Brought one side of blanket over infant's arm and trunk, and tucked it under other arm and around back.			
5. Folded second side over infant and tucked it snugly around body.			
6. Tucked bottom part of blanket up onto infant's abdomen.			
7. Used restraint only until procedure completed.			
<i>Toddler and Older Child</i>			
2. Put the blanket (or sheet) on the bed or examination table. Folded down one corner until it reached the middle of the blanket.			
3. Placed the child on the blanket, positioned so that there is sufficient material to wrap the knees and lower legs.			
4. Brought one side of the blanket over the arm, body, and legs, and tucked it under the other arm and around the back and legs.			
5. Brought the other side of the blanket up and around the body, and tuck underneath the back and legs.			
6. When procedure was completed, loosened infant or child from wrapped blanket. Returned bed to lowest height. Performed hand hygiene.			
7. <i>For all children:</i> Documented procedure, assessment data, client's response, and all other relevant data.			

**SKILL 17.11: Applying a Wrist or Ankle Restraint**

Procedure	Performed		Comments
	Yes	No	
1. Attempted all other methods of client protection or less restrictive measures before applying restraints.			

2. Checked physician's order for wrist or ankle soft restraint. (If necessary, placed restraint on client, then phoned physician [or other appropriate provider, per facility policy] for orders within 1 hour of application of restraint.) Gathered appropriate size soft restraints. Introduced self, explained what procedure was to be done and why. Performed hand hygiene following infection control measures and verified client's identity. Provided privacy. Provided comfort and safety for client and self, including raising bed to appropriate height for procedure.			
3. Padded bony prominences on wrist or ankle if needed.			
4. Applied padded section of restraint over wrist or ankle; ensured that restraint would not interfere with IVs or tubes.			
5. Pulled the tie of restraint through slit in wrist portion or through buckle and ensured restraint was not too tight.			
6. Slipped two fingers under restraint to ensure not so tight that it constricts blood flow.			
7. Attached other end of restraint under moveable portion of bed frame by using a half-bow knot.			
8. Released restraint every 2 hours to check limbs for circulation and skin condition, provided range of motion, changed position, and met client's physical needs.			
9. Returned bed to lowest height. Performed hand hygiene.			
10. Documented use of wrist or ankle restraints in nurses' notes, assessment data, and client's response. Identified all less restrictive actions tried before restraints.			
11. Monitored client every 15 minutes.			

**SKILL 17.12: Applying a Torso/Belt Restraint**

Procedure	Performed		Comments
	Yes	No	
1. Attempted all other methods of client protection or less restrictive measures before applying safety belt restraint.			
2. Checked physician's order (If necessary, placed restraint on client, then phoned physician [or other appropriate provider, per facility policy] for orders within 1 hour of application of			

restraint.). Gathered equipment and supplies. Introduced self, explained what procedure was to be done and why. Performed hand hygiene following infection control measures and verified client's identity. Provided privacy. Provided comfort and safety for client and self, including raising bed to appropriate height for procedure.			
3. Applied torso restraint as follows: <ul style="list-style-type: none"> <li>a. Slipped waist belt through flat buckle, adjusting to client's size.</li> <li>b. Snapped hinged plate shut by hooking plain end of key over crossbar and lifting upward.</li> <li>c. Attached side belts to bed frame in similar manner.</li> <li>d. Released restraint by hooking green end of key over crossbar from below and pulling downward.</li> </ul>			
4. Returned bed to lowest height. Performed hand hygiene.			
5. Documented use of safety belt restraint in client's record every 15 minutes, including time, rationale, client monitoring, client response, care given, and rationale for discontinuing restraint. Identified all less restrictive actions tried before restraint.			

<b>SKILL 17.13: Managing Clients in Restraints</b>			
<b>Procedure</b>	<b>Performed</b>		<b>Comments</b>
	<b>Yes</b>	<b>No</b>	
1. Attempted all other methods of client protection or less restrictive measures before applying restraints.			
2. Checked physician's order (if necessary, placed restraint on client, then phoned physician [or other appropriate provider, per facility policy] for orders within 1 hour of application of restraint). Gathered equipment and supplies. Introduced self, explained what procedure was to be done and why. Performed hand hygiene following infection control measures and verified client's identity. Provided privacy. Provided comfort and safety for client and self, including raising bed to appropriate height for			

procedure. Initial assessment completed.			
3. Sought client's cooperation with restraint procedure, if possible.			
4. Applied restraints according to manufacturer's directions.			
5. Monitored and assessed the client every 15 minutes or according to facility policy.			
6. Released restraint at least every 2 hours or sooner and provided: <ul style="list-style-type: none"> <li>a. Toileting.</li> <li>b. Fluids and food.</li> <li>c. Hygiene care such as brushing teeth or washing face and hands.</li> <li>d. Check of circulation and skin care.</li> <li>e. Check for body alignment.</li> <li>f. Range-of-motion to all joints, particularly those in restraints.</li> </ul>			
7. Avoided application of force on long bone joints and padded bony prominences when applying or repositioning a restraint.			
8. Took vital signs every 8 hours unless indicated more frequently.			
9. Bathed client every 24 hours or more often as needed.			
10. Did not interrupt the client's sleep unless indicated by his/her medical condition.			
11. Ensured that a new order renewing restraint orders was written and the physician (or other licensed independent practitioner, per facility policy) completed a medical assessment every 24 hours.			
12. Obtained a physician's order and discontinued restraints as soon as it was clinically indicated.			
13. Returned bed to lowest height. Performed hand hygiene.			
14. Documented all assessments and client's response in client's record.			

## Week 8

### OBJECTIVES:

Assess patients with high acuity acute and chronic alterations in mobility.

Analyze collected data as it pertains to high acuity and chronic alterations in mobility.

Utilize collected data to formulate a plan of care as it pertains to high acuity acute and chronic alterations in mobility.

Implement the plan of care in high acuity acute and chronic alterations in mobility.

Evaluate goals and therapeutic outcomes in high acuity acute and chronic alterations in mobility.

### HESI RN Group Case Study:

Med/Surg: Parkinson's Disease

### Mini Math Review:

## Week 8

### 10 Minute Math Review

1. A doctor orders 200 mg of Rocephin to be taken by a 15.4 lb infant every 8 hours. The medication label shows that 75-150 mg/kg per day is the appropriate dosage range. On Hand: 400 mg/2mL Vial.

Is this doctor's order within the desired range? Yes \_\_\_\_ No \_\_\_\_

Calculate the dose.

2. Heparin 8,000 units subcutaneous every 8 hours.

Supply: A vial of heparin sodium injection 10,000 units/mL

3. The patient is to receive 1800 ml of D5/W over 24 hours. You have to manually regulate the drip rate. The tubing you have is 15gtts./ml. How many drops/ min will you give?

4. The pt. has an order for levetiracetam oral solution 3 g daily. The pt. has a bottle of levetiracetam oral solution 100 mg/mL. How many mL will you administer to the pt.?

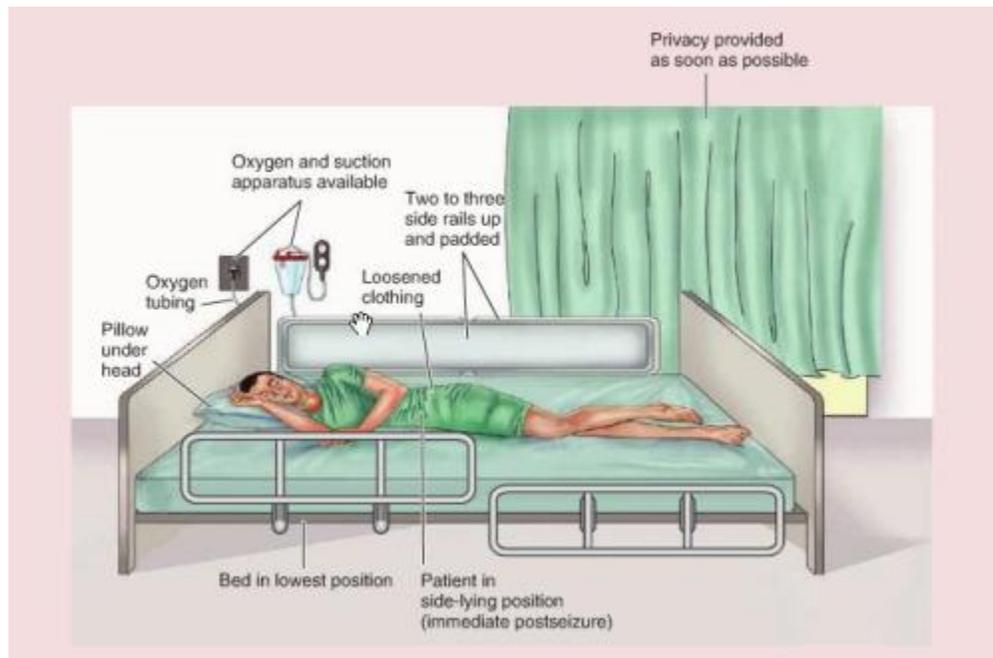
5. The Physician orders IV morphine sulfate 2-5 mg / hr. for pain management. The pharmacy sends an IV of 250 mg of morphine sulfate in 500 mL D5W. What rate will you set on the IV pump to give 3 mg/ hr.?

**Lab Skills:**

Demonstrate the ability to perform a basic bedside swallow evaluation.

Demonstrate the ability to provide proper liquid consistencies to patients with dysphagia.

Demonstrate the ability to care for a patient with seizure precautions.



**Associated prior NRS 125 Skills:**

SKILL 11.14: Assisting a Client to Use Crutches



### SKILL 9.4: Implementing Seizure Precautions

Procedure	Performed		Comments
	Yes	No	
1. Checked physician's order and gathered equipment and supplies. Introduced self, explained what procedure was to be done and why. Provided privacy. Provided comfort and safety for client. Performed hand hygiene, following infection control measures, and verified client's identity.			
2. Placed suction equipment and catheters on bedside stand and ensured they were functional.			
3. Padded side rails. Secured blankets or other linens around the head, foot, and side rails of the bed.			
4. Placed client in side-lying position, with pillow at head of bed and side rails in raised position, if seizure activity anticipated.			
5. Placed bed in lowest position.			
<b>Variation: Managing Seizure Activity</b>			

1. If a seizure occurred, provided privacy, ensured bed was in low position and side rails were raised.			
2. Maintained client in side-lying position with head flexed slightly forward. <ul style="list-style-type: none"> <li>a. Remained with the client and called for assistance.</li> <li>b. Did not restrain client. Did not insert anything into client's mouth.</li> <li>c. If the client was not in bed, assisted client to the floor and protected the head in lap or on a pillow. Loosened any clothing around neck and chest.</li> <li>d. Moved items in environment to ensure client did not experience injury.</li> <li>e. Timed the seizure duration.</li> <li>f. Observed progression of seizure, noting sequence and type of limb involvement. Observed skin color. Checked pulse and respirations when seizure allowed.</li> <li>g. Donned gloves and used equipment to suction the oral airway if the client vomited or had excessive oral secretions.</li> <li>h. Applied oxygen via mask or nasal cannula.</li> <li>i. Administered ordered anticonvulsant medications.</li> </ul>			
3. When the seizure subsided and client was again alert, assisted client to a comfortable position. Reoriented. Explained what happened. Reassured client. Provided hygiene as necessary. Allowed the client to verbalize feelings about the seizure.			
4. Removed and discarded gloves, if used. Performed hand hygiene.			
5. Remained with client after seizure to ensure uneventful postictal period.			
6. Documented seizure activity and notified physician of seizure.			

# Week 10

## **OBJECTIVES:**

Assess patients with high acuity acute and chronic alterations in sensory perception.

Analyze collected data as it pertains to high acuity acute and chronic alterations in sensory perception.

Utilize collected data to formulate a plan of care as it pertains to high acuity acute and chronic alterations in sensory perception.

Implement the plan of care in high acuity acute and chronic alterations in sensory perception.

Evaluate goals and therapeutic outcomes in high acuity acute and chronic alterations in sensory perception.

## **HESI RN Group Case Study:**

Fundamentals: Sensory Function

## **Mini Math Review**

### **Lab Skills:**

Demonstrate the ability to assess visual acuity.

Demonstrate the ability to provide contact lens care.

Demonstrate the ability to administer eye drops and ointments.

Demonstrate the ability to assess hearing.

Demonstrate the ability to provide hearing aid care.

Demonstrate the ability to administer ear drops.

### **Associated prior NRS 125 Skills:**

N/A

## **Week 10**

### **10 Minute Math Review**

1. Morphine sulfate (Roxinal) oral solution 30 mg p.o. every 4 hours prn for pain.

Supply on hand: Roxinal oral solution 20 mg per 5 mL

How much would you give?

2. Patient is on a heparin drip with 10,000 U heparin in 500mL bag to infuse at 900 U/hr.

What will you set the flow rate on the pump at?

3. Epoetin Alfa (Epogen) 75 units per kg subcutaneously to an adult weighing 140 lbs.  
The label reads Epogen 2,000 U /mL.  
Calculate the dose

4. The physician orders granisetron (granisol) 2,000 mcg IVP 30 mins. Prior to chemotherapy.  
Pharmacy sends a multi dose vial containing 4mg/4mL.  
How many mLs will you give?

**SKILL 1.19: Assessing Visual Acuity**

Procedure	Performed		Comments
	Yes	No	
1. Gathered appropriate chart for child. Introduced self, explained procedure to parent and child client and how the results will be Utilize collectedd. Provided privacy. Performed hand hygiene. Provided comfort and safety for client.			
2. Placed eye chart at child’s eye level, and ensure it is well-lit.			
3. Placed child’s heels at 20-foot mark (or 10-foot mark if using that chart).			
4. Assessed each eye separately, and then both eyes together. <ul style="list-style-type: none"> <li>a. If child wears glasses, checked vision with and without glasses.</li> <li>b. If child wears contact lenses, left them in and noted that results are with contacts.</li> </ul>			
5. Covered one of the child’s eyes while the other eye was tested. Used a different cover for each child.			
6. Observed for squinting, leaning forward, blinking, tearing.			
7. Documented findings including the last line child could read correctly.			
8. Referred child to a pediatrician or other healthcare provider for any abnormal vision results.			
<b>Variation: Snellen Letter Chart</b>			
1. Used the Snellen Letter Chart at a distance of 20 feet for client to read letters on given lines.			
2. Used appropriate Snellen Letter Chart for a distance of 10 feet for client to read letters on given lines.			
<b>Variation: HOTV, Snellen E, or Picture Chart</b>			
1. Used appropriate chart for distance of 20 feet and 10 feet: <ul style="list-style-type: none"> <li>a. HOTV chart, used so client could identify the letters H, O, T, and V, or point to the letters on the chart.</li> <li>b. Snellen E chart, used so client could show which direction the letter ‘E’ is turned.</li> <li>c. Picture chart, used so client could identify simple pictures or point to them.</li> </ul>			

1. Screening chart was placed at client's eye level.			
2. Eyes assessed separately and then together. If client wore eye glasses, eyes assessed with and without eye glasses. If contacts were worn, eyes assessed with and without contacts in place.			
3. Observed for squinting, excessive blinking, tearing, or moving the head forward during test.			
4. Documented assessment data including the last line the child could read correctly.			
5. Referred client to a pediatrician or other healthcare provider if any abnormalities assessed.			

**SKILL 2.14: Removing and Cleaning Contact Lenses**

Procedure	Performed		Comments
	Yes	No	
1. Gathered towel, contact lens container, commercially prepared solutions for cleaning and disinfecting, enzymatic agent, and clean gloves. Introduced self, identified client, explained procedure. Provided privacy. Performed hand hygiene and donned gloves. Provided comfort and safety for client.			
2. Placed client in semi-Fowler's position, and placed towel under client's chin.			
3. Placed tip of forefinger across lower lid below its margin.			
4. Placed tip of forefinger of other hand on upper lid above its margin.			
5. Spread eyelids apart as wide as possible.			
6. Soft lenses: Located outer edges of soft lens. Placed thumb and forefinger directly on soft lens. Gently removed soft lens from surface of eyeball by squeezing lens between thumb and fingertip.			
7. Rigid lenses: Removed by placing thumb on lower lid and index finger on upper lid, pressing gently against eyeball to release suction, and catching lens.			

8. Released eyelids.			
9. Placed lens in palm of hand; deposited disposable lenses in trash.			
10. Placed 2–3 drops of cleaning solution on lens.			
11. Cleaned lens thoroughly by rubbing between fingertip and palm of hand for at least 20–30 seconds.			
12. Rinsed lens thoroughly with sterile saline solution or rinsing solution.			
13. Placed lens in disinfecting solution according to physician directions. Time varies from hours to one full day.			
14. Rinsed lens thoroughly with rinsing solution.			
15. Repeated procedure on second lens.			
16. Used enzyme tablet or solution according to physician orders.			
17. Cleaned lenses container daily and left open to dry. Replaced as directed by physician.			
18. Removed gloves if worn, and performed hand hygiene.			
19. Documented assessment findings in client’s record.			

**SKILL 2.27: Administering Ophthalmic Medications**

Procedure	Performed		Comments
	Yes	No	
1. Checked medication orders. Gathered MAR, medicine, clean gloves, sterile eye pad if required, sterile absorbent sponges, and for an irrigation, towel, basin, dry sterile absorbent sponges, and irrigating solution and tubing or irrigating syringe. Removed appropriate medication from medication drawer, shelf, or refrigerator. Checked MAR with medication label to verify correct medication and expiration date. Signed out controlled medicines following agency policy.			
2. Checked the medication label three times for safety: <ul style="list-style-type: none"> <li>a. When it was taken from medication drawer</li> <li>b. Compared it to the MAR</li> </ul>			

c. Compared it to the MAR in client's room or when ready to leave medication preparation area			
3. Prepared correct amount of medication without contaminating it.			
4. Introduced self and verified client's identity using two identifiers. Provided privacy, explained procedure and how results would be used. Performed hand hygiene. Checked MAR and client allergy status. Determined if specific assessment was indicated before administering medication (e.g., vital signs) and assess client.			
5. Assisted client to comfortable position.			
6. Applied gloves and cleaned eyelid and eyelashes using sterile cotton balls moistened with sterile irrigating solution or sterile normal saline, wiping from inner canthus to outer canthus.			
7. Checked ophthalmic preparation for name, strength, and number of drops if liquid was used.			
8. Instructed client to look up to ceiling. Gave client a dry sterile absorbent sponge.			
9. Exposed lower conjunctival sac by placing thumb or fingers of nondominant hand on client's cheekbone just below the eye and gently drawing down the skin on the cheek.			
10. Held medication in dominant hand and placed hand on client's forehead to stabilize hand. Approached eye from side and instilled correct number of drops onto outer third of lower conjunctival sac. Or held tube above lower conjunctival sac and squeezed 2 cm of ointment from tube into lower conjunctival sac from inner canthus outward.			
11. For liquid medications, pressed firmly or had client press firmly on the nasolacrimal duct for at least 30 seconds.			
12. Cleaned and dried eyelids as needed. Wiped eyelids gently from the inner to the outer canthus to collect excess medication.			
13. Removed and discarded gloves. Performed hand hygiene.			
14. Applied an eye pad as needed and secured it with paper eye tape.			
15. Assessed client's response immediately after instillation or irrigation.			
16. Documented medication on MAR and in client's record, including assessment findings, if indicated.			

17. Continued to assess client for desired drug action and possible side effects or adverse reactions.			
<b>Variation: Eye Irrigation</b>			
1. Placed absorbent pads under head, neck, and shoulders. Placed emesis basin next to eye to catch drainage.			
2. Exposed lower conjunctival sac.			
3. Filled and held eye irrigator about 2.5 cm above the eye. Irrigated the eye and directed solution onto lower conjunctival sac and from inner canthus to outer canthus.			
4. Irrigated until solution leaving eye is clear or until all solution has been used. Instructed client to close and move eye periodically.			

## SKILL 1.20: Assessing the Ears and Hearing

Procedure	Performed		Comments
	Yes	No	
1. Gathered otoscope with various sizes of ear specula and tuning fork as appropriate. Introduced self and identified client. Provided privacy. Explained procedure to parents and child client and how the results will be used. Performed hand hygiene. Provided comfort and safety for client.			
2. Inquired if the client has any history of the following: <ol style="list-style-type: none"> <li>a. Family history of hearing problems or loss</li> <li>b. Presence of ear problems or pain</li> <li>c. Medication history (especially if there are complaints of tinnitus)</li> <li>d. Hearing difficulty</li> <li>e. Use of a corrective hearing device</li> </ol>			
3. Positioned client in a sitting position.			
4. Inspected auricles for characteristics and position. Palpated them for texture, elasticity, and areas of tenderness.			
5. Inspected external ear canals for cerumen, skin lesions, pus, and blood.			
6. Inspected tympanic membranes using an otoscope for color and gloss.			
7. Performed gross hearing acuity tests to determine any deficits in hearing. Used a tuning fork to perform Weber's test, to assess bone conduction.			
8. Performed hand hygiene.			
9. Documented assessment data in client's record.			
<b>Variation: Positioning a Child for an Otoscopic Examination</b>			
1. Discussed parent's role (if parent is present) during procedure.			
2. Verified that the person positioning and holding the client understands how this is done safely and effectively.			
3. For supine position, the child's arms and body were positioned and held, including stabilizing the client's head.			
4. Held the otoscope in the hand closest to the child's face while the other hand pulled the pinna toward the back of the head and either up or down.			
5. For sitting position, the child was positioned on the person's lap with his or her legs held firmly between the assistant's legs. The child's arms were wrapped around the assistant's waist.			

6. The child's head was held firmly against the chest with one arm while the other arm held the arms and upper chest.			
<b>Variation: Assessing Hearing Acuity in Children</b>			
1. Used an audiometer. Gathered audiometer and earphones and checked to assure both earphones were working correctly. Provided a quiet private environment. Performed hand hygiene. Provided comfort and safety for client.			
2. Explained procedure in age-appropriate language. Allowed child to examine earphones and practice responding. Cleaned earphones between children.			
3. Positioned child with back to the machine, facing away from the tester.			
4. Placed headset on child, adjust for proper fit. Note for right and left indicators.			
5. Followed directions for using audiometer. Delivered tones (500, 1000, 2000, 4000 Hz) at increasing level of loudness. Watched for child to indicate hearing them.			
6. If findings were abnormal, arranged for child to be retested in 2 weeks. If findings were still abnormal, referred child for further evaluation.			
7. Documented results of the hearing test.			
8. Used a tympanometer. Gathered a tympanometer and disposable earpiece. Encouraged child to hold still during test. Engage assistance if needed.			
9. Gently inserted earpiece with the probe into the auditory canal until it was sealed and airtight.			
10. Turned on tympanometer according to manufacturer's instructions and emitted tone.			
11. Repeated procedure in other ear.			
12. Documented results of this test including a printout in the child's chart.			

**SKILL 2.15: Removing, Cleaning, and Inserting a Hearing Aid**

Procedure	Performed		Comments
	Yes	No	
1. Gathered client's hearing aid, towels or damp cloth, new battery (if needed), pipe cleaner or toothpick as needed, and clean gloves. Introduced self and verified client's identity. Provided privacy and explained procedure. Performed hand hygiene and donned gloves as appropriate. Provided comfort and safety for client.			
2. Removed hearing aid by rotating it slightly forward and pulling it outward.			
3. Cleaned earmold by wiping it with a damp cloth and removing debris with a pipe cleaner or toothpick.			
4. Re-inserted hearing aid by lining up the parts of the earmold with the corresponding parts of the client's ear. Rotated the earmold slightly forward, and inserted the ear canal portion. Gently pressed the earmold into the ear while rotating it backward for snug fit.			
5. Corrected problems associated with improper functioning: <ul style="list-style-type: none"> <li>a. Ensured volume is turned high enough.</li> <li>b. Ensured the earmold opening is not clogged.</li> <li>c. Checked the battery.</li> <li>d. Ensured ear canal is not blocked with wax.</li> <li>e. Turned volume down for a whistling sound or squeal.</li> <li>f. Ensured that the earmold is properly attached to the device.</li> </ul>			
6. Documented assessment findings in the client's record.			

**SKILL 2.28: Administering Otic Medications**

Procedure	Performed		Comments
	Yes	No	
1. Checked medication orders. Gathered MAR, sterile cotton-tipped			

applicator, clean gloves, medication with dropper, cotton fluff, and for irrigation add towel, basin, irrigating solution, and bulb syringe. Removed appropriate medication from medication drawer, shelf, or refrigerator. Checked MAR with medication label to verify correct medication and expiration date. Signed out controlled medicines following agency policy.			
2. Checked the medication label three times for safety: a. When it was taken from medication drawer  b. Compared it to the MAR  c. Compared it to the MAR in client's room or when ready to leave medication preparation area			
3. Prepared correct amount of medication without contaminating it.			
4. Introduced self and verified client's identity with two identifiers. Provided privacy, explained procedure and how results would be used. Performed hand hygiene. Checked MAR and client allergy status.			
5. Determined if specific assessment was indicated before administering medication (e.g., vital signs) and assessed client.			
6. Assisted client to a comfortable position, usually lying with the ear being treated uppermost.			
7. Applied gloves if infection suspected. Used cotton-tipped applicators and solution to clean the pinna and meatus of ear canal.			
8. Warmed medication container in hand or placed in warm water for short time. Partially filled ear dropper with medication.			
9. Straightened auditory canal and instilled correct number of drops along side of ear canal.			
10. Pressed gently but firmly a few times on tragus of ear. Asked client to remain in side-lying position for about 5 minutes.			
11. Inserted small piece of cotton fluff loosely at meatus of auditory canal for 15 to 20 minutes.			
<b>Variation: Ear Irrigation</b>			
1. Explained client may experience feeling of fullness, warmth, and occasionally, discomfort when fluid comes in contact with tympanic membrane.			
2. Assisted client to sitting or lying position with head tilted toward affected ear.			
3. Placed moisture-resistant towel around client's shoulder under ear to be irrigated and placed basin under ear to be irrigated. Filled syringe with solution. <i>Or, hung up irrigating container and ran solution through tubing and nozzle.</i>			

4. Straightened ear canal and inserted tip of syringe into auditory meatus and directed solution gently upward against top of canal.			
5. Continued instilling fluid until all solution was used or canal was clean.			
6. Assisted client to side-lying position on affected side and placed cotton fluff in auditory meatus to absorb excess fluid.			
7. Assessed the client's response, amount of discharge, appearance of canal, and discomfort immediately after instillation. Inspected cotton ball for any drainage.			
8. Discarded gloves if worn and performed hand hygiene.			
9. Documented medication on MAR and in client's record, including assessment findings, if indicated.			
10. Continued to assess client for desired drug action and possible side effects or adverse reactions.			

## Week 11

### OBJECTIVES:

Assess patients with high acuity acute and chronic conditions across the lifespan related to mental health.

Analyze collected data of patients as it pertains to high acuity acute and chronic conditions across the lifespan related to mental health.

Utilize collected data to formulate a plan of care for patients with high acuity acute and chronic conditions across the lifespan related to mental health.

Implement the plan of care for patients with high acuity acute and chronic conditions across the lifespan related to mental health.

Evaluate goals and therapeutic outcomes for patients with high acuity acute and chronic conditions across the lifespan related to mental health.

### Lab Skills:

Demonstrate the ability to teach controlled breathing techniques to a patient.

Demonstrate the ability to teach muscle relaxation techniques to a patient.

Demonstrate the ability to teach guided imagery techniques to a patient.

Demonstrate the ability to provide therapeutic communication to a patient.

## Therapeutic Communication- Case Scenarios

Case #1- The patient was admitted 2 days ago with a diagnosis of cancer. She was informed by her doctor that a course of radiation and chemotherapy was her best option. She became very upset and frightened about the proposed treatment and stated that she wasn't sure if she would go through with it. The nurse approaches her to discuss how she is feeling today.

Nurse: "How are you doing today, Miss Smith. I was wondering how you were feeling about undergoing radiation and chemotherapy?"

Patient: "I don't know. I'm not as scared as I was when I got here, but I have a lot of questions about it."

Nurse: "It sounds like you have given it some thought. I'm sure Dr. Jones could talk with you and answer some of your questions. Would you like to do that?"

Patient: "I guess so. What do you think?"

***Think of a few ways the nurse could respond.***

Case #2- An elderly patient is sitting in bed taking a nap. A tray of uneaten food is on the bedside table. The nurse comes into the room.

***Think of a few ideas of what the nurse could say to start a therapeutic conversation with this patient.***

Nurse: "....."

Patient: "Oh, don't bother with me. I don't have much time left in this world. And I don't have much to live for anyway."

Nurse: ***Think of a few therapeutic responses.***

## **Therapeutic Communication Techniques**

To *encourage* the expression of feelings and ideas

**Active Listening**– Being attentive to what the client is saying, verbally and non-verbally. Sit facing the client, open posture, lean toward the client, eye contact, and relax.

**Sharing Observations**– Making observations by commenting on how the other person looks, sounds, or acts. Example:” you look tired” or “I haven’t seen you eating anything today”.

**Sharing Empathy**– The ability to understand and accept another person’s reality, to accurately perceive feelings, and to communicate understanding. Example “It must be very frustrating to know what you want and not be able to do it”.

**Sharing Hope**– Communicating a “sense of possibility” to others. Encouragement when appropriate and positive feedback. Example “I believe you will find a way to face your situation, because I have seen your courage in the past”.

**Sharing Humor**– Contributes to feelings of togetherness, closeness and friendliness. Promotes positive communication in the following ways; prevention, perception, perspective.

**Sharing Feelings**– Nurses can help clients express emotions by making observations, acknowledging feelings, and encouraging communication, giving permission to express “negative” feelings and modeling healthy anger.

**Using Touch**– Most potent form of communication. Comfort touch such as holding a hand, is especially important for vulnerable clients who are experiencing severe illness.

**Silence**– Time for the nurse and client to observe one another, sort out feelings, think of how to say things, and consider what has been verbally communicated. The nurse should allow the client to break the silence.

**Providing Information**– Relevant information is important to make decisions, experience less anxiety, and feel safe and secure. Example “Susie is getting an echocardiogram right now which is a test that uses painless sound waves to create a moving picture of her heart structures and valves and should tell us what is causing her murmur”.

**Clarifying**– To check whether understanding is accurate, or to better understand, the nurse restates an unclear or ambiguous message to clarify the sender’s meaning. “I’m not sure I understand what you mean by ‘sicker than usual’, what is different now?”

**Focusing**– Taking notice of a single idea expressed or even a single word. An example is “On a scale of 0 to 10 tell me the level of the pain you are experiencing in your great toe right now.”

**Paraphrasing**– Restating another’s message more briefly using one’s own words. It consists of repeating in fewer and fresher words the essential ideas of the client. For example the client says “I can’t focus. My mind keeps wandering.” The student nurse says, “You’re having difficulty concentrating?”

**Asking Relevant Questions**– To seek information needed for decision making. Asking only one question at a time and fully exploring one topic before moving to another area. Open-ended questions allows for taking the conversational lead and introducing pertinent information about a topic. For example “What is your biggest problem at the moment?” or “How has your pain affected your life at home?”

**Summarizing**– Pulls together information for documentation. Gives a client a sense you understand. It is a concise review of key aspects of an interaction. Summarizing brings a sense of closure. Example “It is my understanding that your arm pain is a level 1 since you’ve taken a Vicodin one hour ago. Taking your pain medication before physical therapy seems to help you complete the activities the doctor wants you to do for your rehabilitation. Is this correct?” Client responds “Yes It really helps to take the medicine before I do my physical therapy because it helps reduce the pain in my arm.”

**Self-Disclosure**– Subjectively true personal experiences about the self, are intentionally revealed to another person for the purpose of emphasizing both the similarities and the differences of experiences. These exchanges are offered as an expression of genuineness and honesty by the nurse and disclosures should be relevant and appropriate. They are used sparingly so the client is the focus of the interaction: “That happened to me once, too. It was devastating, and I had to face some things about myself that I didn’t like. I went to counseling and it really helped.....what are your thoughts about seeing a counselor?”

**Confrontation**– Helping the client become more aware of inconsistencies in his or her feelings, attitudes, beliefs, and behaviors. Only to be used after trust has been established, & should be done gently, with sensitivity: “You say you’ve already decided what to do, yet you’re still talking a lot about your options.”

## Non-therapeutic Communication Techniques

“Blocks” to communication of feelings and ideas

**Asking personal questions** – Asking personal questions that are not relevant to the situation, is not professional or appropriate. Don’t ask questions just to satisfy your curiosity. “Why aren’t you married to Mary?” is not appropriate. What might be asked is “How would you describe your relationship to Mary.”

**Giving personal opinions**– Giving personal opinions, takes away decision-making for the client. Remember the problem and the solution belongs to the patient and not the nurse. “If I were you I’d put your father in a nursing home” can be reframed to say, “Let’s talk about what options are available to your father.”

**Changing the subject**– “Let’s not talk about your insurance problems it’s time for your walk” Changing the subject when someone is trying to communicate with you is rude and shows a lack of empathy. It ends to block further communication, and seems to say that you don’t really care about what they are sharing. “After your walk let’s talk some more about what’s going on with your insurance company.”

**Automatic responses**– “Administration doesn’t care about the staff,” or “Older adults are always confused.” These are generalizations and stereotypes that reflect poor nursing judgment and threaten nurse-client or team relationships.

**False Reassurance**– “Don’t worry, everything will be all right.” When a client is seriously ill or distressed, the nurse may be tempted to offer hope to the client with statements such as “you’ll be fine.” Or “there’s nothing to worry about.” When a patient is reaching for understanding these phrases that are not based on fact or based on reality can do more harm than good. The nurse may be trying to be kind and think he/she is helping, but these comments tend to block conversation and discourage further expressions of feelings. A better response would be “It must be difficult not to know what the surgeon will find. What can I do to help?”

**Sympathy**– Sympathy focuses on the nurse’s feelings rather than the client’s. Saying “I’m so sorry about your amputation, it must be terrible to lose a leg.” This shows concern but more sorrow and pity than trying to understand how the client feels. Sympathy is a subjective look at another person’s world that prevents a clear perspective of the issues confronting that person. A more empathetic approach would be “The loss of your leg is a major change, how do you think this will affect your life?”

**Asking for Explanations**– “Why are you so upset?” A nurse may be tempted to ask the other person to explain why the person believes, feels or is acting in a certain way. Clients frequently interpret why questions as accusations. “Why” questions can cause resentment, insecurity and mistrust. It’s best to phrase a question to avoid using the word “why”. “You seem upset. What’s on your mind?”

**Approval or Disapproval**–“You shouldn’t even think about assisted suicide, it’s just not right.” Nurses must not impose their own attitudes, values, beliefs, and moral standards on others, while in the professional helping role. Judgmental responses by the nurse often contain terms such as should, ought, good, bad, right or wrong. Agreeing or disagreeing sends the subtle message that nurses have the right to make value judgments about the client’s decisions. Approving implies that the behavior being praised is the only acceptable one. Disapproving implies that the client must meet the nurse’s expectations or standards. Instead the nurse should help clients explore their own beliefs and decisions. The nursing response “I’m surprised you are considering assisted suicide. Tell me more about it…” gives the client a chance to express ideas or feelings without fear of being judged.

**Defensive Responses**– “No one here would intentionally lie to you.” When clients express criticism, nurses should listen to what they are saying. Listening does not imply agreement. To discover reasons for the client’s anger or dissatisfaction, the nurse must listen uncritically. By avoiding defensiveness the nurse can defuse anger and uncover deeper concerns: “You believe people have been dishonest with you. It must be hard to trust anyone.”

**Passive or Aggressive Responses**– “Things are bad and there is nothing you can do about it.” Or “Being is sick is bad and it’s all your fault.” Passive responses serve to avoid conflict or sidestep issues. They reflect feelings of sadness, depression, anxiety, powerlessness, and hopelessness. Aggressive responses provoke confrontation at the other person’s expense. They reflect feelings of anger, frustration, resentment and stress. Assertive communication is a far more professional approach for the nurse to take.

**Arguing**– “How can you say you didn’t sleep a wink when I heard you snoring all night long!!” Challenging or arguing again perceptions denies that they are real and valid to the other person. They imply that the other person is lying, misinformed, or uneducated. The skillful nurse can provide information or present reality in a way that avoids argument: “You feel like you didn’t get any rest at all last night, even though I thought you slept well since I heard you snoring.”

### SKILL 4.2: Teaching Controlled Breathing

Procedure	Performed		Comments
	Yes	No	
1. Gathered equipment and supplies. Introduced self, explained what procedure was to be done and why. Performed hand hygiene, following infection control measures, and verified client's identity. Provided privacy, comfort and safety for client.			
2. Instructed client to sit so that the back was well supported, with spine straight but not rigid.			
3. Had client place feet flat on floor and place hands on legs.			
4. If client was lying down, had him or her place hands at side.			
5. Suggested client find a comfortable position, closed eyes, and took a deep, slow breath through nostrils.			
6. Continued giving the client the following instructions: <ul style="list-style-type: none"> <li>a. Extend your abdominal muscles</li> <li>b. Hold your breath for the count of four. Then very slowly release the air through slightly parted lips, making a whoosh sound.</li> <li>c. When you think that all the air is out, hold your stomach in to push out even more air.</li> <li>d. Repeat this breathing pattern several times so that your body relaxes.</li> <li>e. Breathe in through your nostrils to the count of four – 1-2-3-4. Hold it – 1-2-3-4 – and slowly expel the breath all the way out, slowly releasing the air through your mouth.</li> <li>f. As the air goes out, feel all of the tension drain out with it.</li> <li>g. Now double the count, and breathe in slowly, filling your lungs all the way to the top to the count of eight – 1-2-3-4-5-6-7-8 (count for the client). Hold it to the count of four – 1-2-3-4 – and then release the breath –5-6-7-8.</li> <li>h. Again breathe in slowly, to the count of 10 (count for the client). Hold the breath to the count of eight (count for the client), and slowly release the air through your mouth to the count of ten (count for the client). Pause.</li> <li>i. Continue with your regular breathing pattern, letting your lungs breathe for you.</li> </ul>			
7. Stopped the process by having the client open his or her eyes.			
8. Documented teaching and client response in client's record.			

### SKILL 4.3: Teaching Progressive Muscle Relaxation

Procedure	Performed		Comments
	Yes	No	
1. Gathered appropriate equipment. Introduced self and verified client's identity. Explained procedure to client and discussed how results will be used. Performed hand hygiene and observed other appropriate infection control procedures. Provided client privacy. Provided comfort and safety for client.			
2. Prepared the client: <ul style="list-style-type: none"> <li>a. Told the client how muscle relaxation works.</li> <li>b. Provided a rationale for the procedure.</li> <li>c. Asked the client to identify the stressors operating in client's life and reactions to these stressors.</li> <li>d. Demonstrated the method of tensing and relaxing muscle groups of muscles.</li> <li>e. Assisted client to a comfortable position. Ensured that all body parts are supported and joints slightly flexed with no strain or pull on muscles.</li> </ul>			
3. If music was used, selected music that was instrumental, calming, neutral, and unfamiliar to the client. Ensured all body parts were supported and the joints slightly flexed with no strain or pull on the muscles.			
4. Encouraged client to begin slow, deep diaphragmatic or abdominal breathing to rest the mind and begin relaxing the body. Inhaling through the nose and exhaling through the mouth			
5. Instructed the client to tense and then relax each group of muscles starting from the head and moving down the body. Encouraged client to breathe slowly and deeply during entire procedure speaking in a calm voice.			
6. Asked the client to state whether any tension remains after all muscle groups have been tensed and relaxed, and encouraged client to release any remaining tension.			
7. Terminated the relaxation exercise slowly by counting from 1 to 3 and suggested that client will feel calm and alert.			

a. Asked the client to move the body slowly: first the hands and feet, then arms and legs, and finally the head and neck.			
8. Reminded client that the technique could be used any time the client needs to release tension or wants to feel more relaxed.			
8. Documented teaching and client response in client's record.			

### SKILL 4.5: Assisting with Guided Imagery

Procedure	Performed		Comments
	Yes	No	
1. Introduced self, and explained what procedure was to be done and why. Performed hand hygiene, following infection control measures, and verified client's identity. Provided privacy. Provided comfort and safety for client and self.			
2. Assisted client to a comfortable position, e.g. reclining position, and asked client to close his or her eyes.			
3. Implemented actions to induce relaxation: <ul style="list-style-type: none"> <li>a. Spoke clearly in a calming and neutral tone of voice.</li> <li>b. Asked client to take slow, deep breaths and relax all muscles.</li> <li>c. Guided the client through relaxation breathing and then through muscle reaction. Guided the client toward a most beautiful or peaceful place.</li> <li>d. Assisted client to do some work (e.g., stress management or pain relief).</li> </ul>			
4. Took the client out of the image by suggesting that it was time for the client to leave this beautiful and safe place. Suggested that the client could return at any time. <ul style="list-style-type: none"> <li>a. Slowly counted from 1 to 3 and suggested that the client should return to the here and now.</li> <li>b. Remained until client was alert.</li> </ul>			
5. Asked the client to describe the physical and emotional feelings elicited by the imagery session.			
6. Encouraged the client to practice the imagery technique.			
7. Documented response to exercise in client's record.			

## **Week 12**

### **OBJECTIVES:**

Assess patients with high acuity acute and chronic conditions across the lifespan related to mental health.

Analyze collected data of patients as it pertains to high acuity acute and chronic conditions across the lifespan related to mental health.

Utilize collected data to formulate a plan of care for patients with high acuity acute and chronic conditions across the lifespan related to mental health.

Implement the plan of care for patients with high acuity acute and chronic conditions across the lifespan related to mental health.

Evaluate goals and therapeutic outcomes for patients with high acuity acute and chronic conditions across the lifespan related to mental health.

### **HESI RN Group Case Study:**

Psychiatric/Mental Health: Alcoholism

### **Lab Skills:**

Demonstrate the ability to assess for abuse (Review).

Demonstrate the ability to assess for alcoholism and treat withdrawal using a CIWA Scale.

Demonstrate the ability to use bed and chair exit safety monitoring devices.

### **Associated prior NRS 125 Skills:**

SKILL 17.3: Assessing for Abuse

Live Person Simulation Scenario  
Psychiatric and Mental Health Nursing  
(Sandra)

I. Scenario Title:

Assessment Interview & Medication Administration for a Client with Clinical Depression & Alcohol Abuse

II. Type of Scenario: Live Actor or Standardized Patient

III. Materials Required:

This is a client interview and medication administration simulation experience. Materials needed are:

- Client interview space, or patient room (standard nursing lab room) with hand-washing facilities
- Intake Forms or client's chart, with History of Present Illness (HPI) & reason for admission
- Client's paper or computer-based MAR (Appendix B)
- VS assessment tools or machine
- Adapted CIWA Assessment Tool (Appendix A)
- Simulated medications listed on MAR (see Appendix B)
- Scissors or hemostats or something sharp in the room within client's reach

IV. Objectives of the Simulation Experience:

This simulation is appropriate for undergraduate psychiatric mental and behavioral health students. It should be placed after students have had theoretical introduction to clinical depression, SI assessment and treatment of acute alcohol withdrawal substitution therapy.

Students should:

1. Demonstrate effective therapeutic communication strategies to facilitate the nurseclient relationship with clients suffering from clinical depression and substance abuse.
2. Demonstrate effective suicidal ideation assessment.
3. Demonstrate effective assessment of physical parameters associated with alcohol withdrawal and use of CIWA tool for appropriate treatment, client education, and initiation of substitution therapy
4. Demonstrate ability to understand and administer both ordered and PRN medications presented on a MAR.
5. Demonstrate effective client education pertaining to SSRI antidepressant medication use.
6. Demonstrate effective client education regarding antipsychotic medication use.

V. Background for Scenario:

- Patient Description:

49 Y O single Caucasian male with multiple past PMH hospitalizations, admitted through ED, secondary to increasing depression with suicidal ideation (SI), and alcohol abuse. Patient lives alone, has no daytime structure. Highest level of education is high school. Past social history indicates possible sexual abuse. Patient currently denies SI but has had past attempts using knives; details regarding these attempts are unclear. Patient denies any legal history of violent/criminal behaviors.

- Admitting Assessment Data & Mental Status Examination (MSE):

Patient appears older than stated age of 49. He is heavy set with fair grooming. Mild psychomotor retardation noted. Maintains eye contact, though at times is staring intently and seems preoccupied. Concentration is poor. Mood is reported as depressed and anxious. Affect is odd, anxious and constricted in range. Speech halting at times. Thought process significant for thought blocking. Denies any visual or auditory hallucinations. No delusions elicited. He currently denies suicidal ideation or homicidal ideation. Judgment and insight are fair. □ History of Present Illness (HPI):

This is one of multiple hospitalizations for this man who has a diagnosis of schizoaffective disorder. The patient has a history of alcohol dependence and this intensified after his friend recently died. Also, the patient's father died last year on the patient's birthday, of prostate cancer. The patient himself was diagnosed with lymphoma in 2010, and underwent biopsy of axillary lymph nodes in 2010; resolved but he states this is contributory to his increasing depression and SI. He admits to increased drinking of "about 6 beers a day and some vodka". He reports having blackouts. He denies any change in weight or appetite. He reports his concentration is poor, sleep is decreased. He reports his mood as depressed and he says he feels overwhelmed. The client self-admitted to the ED because of feeling unsafe, but upon admission to the unit he denies SI. He also denies symptoms of psychosis, although he appears preoccupied and guarded during the interview. He appears to have some thought blocking, but when questioned, reports he is "trying to concentrate". No history of withdrawal seizures or DTs. Patient has been admitted for substance abuse numerous times, at several locations.

#### VI. Scenario Description:

- Room set-up: Traditional PMH interview room, with vital sign assessment tools, and some sort of sharp object within client's reach.
- Student instructions: Considering the client's intake information, your nursing assessment, and the client's MAR, perform the client's evening medication pass. You will be observed for your therapeutic communication competency, your physical and mental health assessment skills, and your medication administration competency.

The student will simulate an evening medication pass with the patient using the client presenting information and attached MAR, physically assessing the client, interview the client using therapeutic communication skills, and then medicate the client based on physical & mental assessment of the client. Students may have access to Drug Reference textbooks or

PDA's for drug information.

- Actor instructions: The actor (Fred, the client) should appear very depressed, with minimal eye contact, and behave as specified in the client description and admission MSE. At a point when the student uses poor therapeutic communication skills (or during SI assessment), the actor should express frustration and threaten to harm self, by grabbing the sharp object in the room. The

student should use therapeutic communication skills to de-escalate the patient, and then suggest appropriate PRN medication along with scheduled medication administration, according to MAR (Appendix B).

VII. Student Objectives:

Students must perform the following during the scenario:

1. Introduce self, verify client identity, explain procedure of medication administration and physical assessment process to client (purpose of visit)
2. Perform hand-hygiene
3. Perform brief mental status assessment for client orientation
4. Assess potential for withdrawal using CIWA tool
5. Confirm intake information, asking client additional open-ended questions pertaining to his HPI and past presentations
6. Assess for SI in patient using therapeutic communication skills:
  - Assess ideation
  - Assess plan
  - Assess means to carry out plan
7. Educate client:
  - Alcohol use & abuse: signs and symptoms of alcohol withdrawal (elevated VS, tremors, nausea/vomiting, DTs, diaphoresis, seizures)
  - substitution therapy using benzodiazepines (side effects, physical assessment indicators of withdrawal)
  - supportive medications given for alcohol withdrawal and reasons for administration (thiamine, folic acid, magnesium oxide, Wernicke Korsakoff's encephalitis)
  - All other inpatient medication orders on MAR
8. Demonstrate safety practices associated with medication administration (5 rights, patient identification, hand hygiene, VS assessment)

VIII. Scenario Evaluation:

Evaluation of the student's performance on the simulation should include the following criteria:

<b>ACTION:</b>	<b>OBSERVED:</b>
Appropriate introduction & client identification, including explanation of client assessment & medication administration process	
Hand hygiene performed	
Brief mental status assessment for client reality assessment & orientation	

Assess potential for acute withdrawal using CIWA tool: assesses VS and other parameters on CIWA tool	
Educates client about risks associated with acute withdrawal	
Medicates client using substitution therapy PRN protocol	
Use therapeutic communication to assess client's mood, affect, thought processes, communication patterns	
Use therapeutic communication to assess SI in client: intent, plan, and ability to carry out plan	
Ensures client safety by using therapeutic communication skills to de-escalate patient when patient becomes agitated	
Administers ordered and PRN medications as needed according to MAR using five rights	
Assesses client for pain	
Re-assesses client following medication administration for VS reduction and CNS stabilization	

IX. Scenario Debriefing:

Topics to cover during debriefing:

- Student & Instructor:
  1. How would you evaluate your nursing skills and competency in this scenario?
  2. What would you have done differently?
  3. What was your biggest challenge/obstacle?
- Student Group & Instructor:
  1. How was the SI assessment handled? What would you change?
  2. Was missing from the client education? If so, what?
  3. What nursing interventions would need to occur as follow-up care for this client?
  4. What on-going assessments would be appropriate for this client following this interview & medication administration?

X. Suggested Revisions to Scenario:

Options for variations during scenario include:

MAR alterations:

- Add insulin-dependent DM to Axis III; include need for BS assessment to address

CIWA findings of increased BP & decreased LOC. o Change day on MAR the student is doing the assessment & medication administration from day 1 to day 3.

- o Change MAR to have no standardized PRNs available to initiate substitution therapy; SN must call provider & use SBAR to get meds ordered.
- Patient Alterations: o Client has a seizure during interview. o Client refuses his medications.

#### XI. Associated Tools for the Scenario:

1. Appendix A: CIWA Tool
2. Appendix B: Fred. E Medication Administration Record

#### XII. References:

1. Townsend, M. C. (2012). Psychiatric mental health nursing: Concepts of care in evidence based practice (7th Ed.). Philadelphia, PA: F. A. Davis Company.
2. Sullivan, J. T., Sykora, K., Schneiderman, J., Naranjo, C. A., & Sellers, E. M. (1989). Assessment of alcohol withdrawal: The revised Clinical Withdrawal Assessment for Alcohol scale (CIWA-Ar). British Journal of Addiction, 84. 1353-1357.

<b>Category:</b>					<b>Score (check one):</b>			
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**APPENDIX A: CIWA TOOL**

<b>Pulse:</b>	<80				0				
	81-100				1				
	101-110				2				
	111-120				3				
	121-130				4				
	131-140				5				
	141-150				6				
	>150				7				
<b>Sweating:</b>	none				0				
	palms moist, barely perceptible				1				
	beads of sweat on forehead				4				
	drenched				7				
<b>Tremor (hand):</b>									
	none				0				
	not visible but can be felt in fingertip				1				
	moderate with patient's arm extended				4				
	severe				7				
<b>Anxiety:</b>	none				0				
	mild				1				
	moderate with patient's arm extended				4				
	sever (panic state)				7				
<b>Tactile, auditory, or visual disturbances:</b>									
	none				0				
	present but minimal				1				
	frequent				4				
	continuous hallucinations				7				
<b>Agitation:</b>	none				0				
	somewhat				1				
	fidgety & restless				4				
	pacing, or constantly thrashing about				7				
<b>Nausea &amp;/or vomiting:</b>									
	none				0				
	mild nausea, no vomiting				1				
	some nausea with vomiting or dry heaves				4				

	constant nausea with vomiting/dry heaves				7				
<b>Headache:</b>									
	none				0				
	mild				1				
	moderate with patient's arm extended				4				
	severe				7				
<b>TOTAL SCORE: Clients scoring less than 10 do not usually require medication for withdrawal.</b>									

Appendix A:

The revised Clinical Withdrawal Assessment for Alcohol scale (CIWA-Ar)

Adapted from: Sullivan, J. T., Sykora, K., Schneiderman, J., Naranjo, C. A., & Sellers, E. M. (1989). Assessment of alcohol withdrawal: The revised Clinical Withdrawal Assessment for Alcohol scale (CIWA-Ar). *British Journal of Addiction*, 84. 1353-1357

## Appendix B:

### Fred E. Medication Administration Record

<b>Client: Fred E.</b>						
<b>Date of Birth: 03/07/1964</b>						
<b>Admission Date:</b> <b>10/09/2013</b>						
<b>Allergies: NKDA</b>						
<b>Ordered Medications:</b>	<b><u>Start:</u></b>	<b><u>Stop:</u></b>	<b><u>Time:</u></b>	9/9/13	9/10/13	9/11/13
Risperidone (Risperdal)	9/09/13		900			
3mg PO BID			2100			
Fluoxetine (Prozac)	9/09/13		2100			
60mg PO daily @ HS						
Thiamine (Vitamin B1)	9/09/13		900			
100mg PO BID			2100			
Magnesium oxide	9/09/13		900			
400mg PO BID			2100			
Folic acid (Folvite)	9/09/13		900			
1mg PO daily						
Divalproex sodium (Depakote)	9/09/13		0600			
500mg PO QAM						
Divalproex sodium (Depakote)	9/11/13		2100			
1000mg PO QHS						
<b>PRN medications:</b>						
Chlordiazepoxide (Librium)	9/09/13	9/10/13	0600			
50mg PO TID per taper protocol			1300			
PRN: alcohol withdrawal, day 1			2100			

Chlordiazepoxide (Librium)	9/10/13	9/11/13	0600			
25mg PO TIB per taper protocol			1300			
PRN: alcohol withdrawal, day 2			2100			
Lorazepam (Ativan) PRN	9/09/13	9/14/13				
1mg PO Q 3 hours, for s/s of withdrawal						
Metoclopramide (Reglan) PRN	9/09/13					
10mg PO TID, for nausea/vomiting						
Trimethobenzamide (Tigan) PRN	9/09/13					
200mg IM Q6 hours, for nausea/vomiting						
Trazedone (Desyrel) PRN	9/09/13	9/11/13				
50mg PO QHS for insomnia						

## CAGE Questionnaire

- Have you ever felt you should **C**ut down on your drinking?
- Have people **A**nnoyed you by criticizing your drinking?
- Have you ever felt bad or **G**uilty about your drinking?
- Have you ever had a drink first thing in the morning to steady your nerves or to get rid of a hangover (**E**ye opener)?

**Scoring:**

Item responses on the CAGE are scored 0 or 1, with a higher score an indication of alcohol problems. A total score of 2 or greater is considered clinically significant.

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Developed by Dr. John Ewing, founding Director of the Bowles Center for Alcohol Studies, University of North Carolina at Cahpel Hill, CAGE is an internationally used assessment instrument for identifying

alcoholics. It is particularly popular with primary care givers. CAGE has been translated into several languages.

The CAGE questions can be used in the clinical setting using informal phrasing. It has been demonstrated that they are most effective when used as part of a general health history and should NOT be preceded by questions about how much or how frequently the patient drinks (see “Alcoholism: The Keys to the CAGE” by DL Steinweg and H Worth; American Journal of Medicine 94: 520-523, May 1993.

The exact wording that can be used in research studies can be found in: JA Ewing “Detecting Alcoholism: The CAGE Questionnaire” JAMA 252: 1905-1907, 1984. Researchers and clinicians who are publishing studies using the CAGE Questionnaire should cite the above reference. No other permission is necessary unless it is used in any profit-making endeavor in which case this Center would require to negotiate a payment.

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*Source: Dr. John Ewing, founding Director of the Bowles Center for Alcohol Studies, University of North Carolina at Chapel Hill*

<b>I General Assessment</b>	Very Good	Good	Poor	Very Poor	Unable to Assess
1. Clothing					
2. Hygiene					
3. Nutrition					
4. Skin integrity					
5. Additional Comments:					
<b>II Possible Abuse Indicators</b>	No Evidence	Possible Evidence	Probable Evidence	Definite Evidence	Unable to Assess
6. Bruising					
7. Lacerations					
8. Fractures					
9. Various stages of healing of any bruises or fractures					
10. Evidence of sexual abuse					
11. Statement by elder re: abuse					
12. Additional Comments:					
<b>III Possible Neglect Indicators</b>	No Evidence	Possible Evidence	Probable Evidence	Definite Evidence	Unable to Assess
13. Contractures					
14. Decubiti					
15. Dehydration					
16. Diarrhea					
17. Depression					
18. Impaction					
19. Malnutrition					
20. Urine burns					
21. Poor hygiene					
22. Failure to respond to warning of obvious disease					
23. Inappropriate medications (under/over)					
24. Repetitive hospital admissions due to probable failure of health care surveillance					
25. Statement by elder re: neglect					
26. Additional Comments:					
<b>IV Possible Exploitation Indicators</b>	No Evidence	Possible Evidence	Probable Evidence	Definite Evidence	Unable to Assess
27. Misuse of money					
28. Evidence of financial exploitation					
29. Reports of demands for goods in exchange for services					
30. Inability to account for money/property					
31. Statement by elder re: exploitation					
32. Additional Comments:					

<b>V Possible Abandonment Indicators</b>	No Evidence	Possible Evidence	Probable Evidence	Definite Evidence	Unable to Assess
33. Evidence that a caretaker has withdrawn care precipitously without alternate arrangements					
34. Evidence that elder is left alone in an unsafe environment for extended periods of time without adequate support					
35. Statement by elder re: abandonment					
36. Additional Comments:					
<b>VII Summary</b>	No Evidence	Possible Evidence	Probable Evidence	Definite Evidence	Unable to Assess
37. Evidence of abuse					
38. Evidence of neglect					
39. Evidence of exploitation					
40. Evidence of abandonment					
41. Additional Comments:					

**VIII Comments and Follow-up**

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**SKILL 17.3: Assessing for Abuse**

Procedure	Performed		Comments
	Yes	No	
1. Introduced self, explained what was to be done and why. Performed hand hygiene following infection control measures and verified client's identity. Provided privacy. Provided comfort and safety for client and self.			
2. Assessed client for indications of neglect: failure to provide adequate food, clothing, medical assistance, or assistance with ADLs. Checked body for signs of cleanliness. Determined if emotional abuse was present. Asked about threats, intimidation, or isolation.			
3. Identified if financial abuse has occurred, such as misuse of finances or property.			
4. Assessed for signs of physical abuse: signs of restraining; hitting, biting, burning; black and blue marks on trunk, abdomen, buttocks, upper thighs; scars, and abrasions. Bilateral bruises or parallel injuries may indicate forceful restraining; shaking may cause parallel injuries of upper arms. Sexual abuse may cause edema, bruising, or tearing in the genital or anal area. Accidental injuries affect knees, back of hands, forehead, and elbows.			
5. Assessed for signs of malnourishment or dehydration.			
6. Checked skin for pressure ulcers.			
7. Assessed for signs of sprains, dislocations, or fractures from pulling or pushing the client.			
8. Asked about visits to the hospital ED. Asked why client sought medical care, how much time elapsed between injury and visit to ED.			
9. Assessed for signs of emotional abuse. Observed if client was fearful of strangers, became quiet when caregiver entered room, refused to answer if caregiver was present or craved attention and socialization.			
10. Documented assessment data, client's response, and all other relevant data.			

**SKILL 17.14: Using a Bed or Chair Exit Safety Monitoring Device**

Procedure	Performed		Comments
	Yes	No	
1. Gathered equipment and supplies. Introduced self, explained what procedure was to be done and why. Performed hand hygiene following infection control measures and verified client's identity. Provided privacy. Provided comfort and safety for client and self, including raising bed to appropriate height for procedure. Explained the device to client and family.			
2. Tested the battery device and alarm sound.			
3. Applied the sensor pad or leg band. <ul style="list-style-type: none"> <li>a. Placed leg band according to manufacturer's recommendation. Placed client's leg in a straight horizontal position.</li> <li>b. For bed or chair device, sensor was placed under buttocks area.</li> <li>c. For bed or chair device, time delay was set to 1 to 12 seconds.</li> <li>d. Connected sensor pad to control unit and nurse call system.</li> </ul>			
4. Instructed the client to call the nurse when wanting or needing to get up. <ul style="list-style-type: none"> <li>a. Deactivated alarm when assisting client to get up.</li> <li>b. Assisted client back into bed or chair and reattached alarm device.</li> </ul>			
5. Ensured client safety with additional safety precautions. <ul style="list-style-type: none"> <li>a. Placed call light within client reach, lifted side rails per agency policy, and lowered bed to lowest position.</li> <li>b. Placed ambulation monitoring stickers on client's door, chart, and other relevant locations.</li> </ul>			
6. Performed hand hygiene.			

7. Documented type and placement of alarm, client's response, assessment data, and client instructions.			
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## Week 13

**OBJECTIVES:**

Assess patients with high acuity acute and chronic conditions across the lifespan related to mental health.

Analyze collected data of patients as it pertains to high acuity acute and chronic conditions across the lifespan related to mental health.

Utilize collected data to formulate a plan of care for patients with high acuity acute and chronic conditions across the lifespan related to mental health.

Implement the plan of care for patients with high acuity acute and chronic conditions across the lifespan related to mental health.

Evaluate goals and therapeutic outcomes for patients with high acuity acute and chronic conditions across the lifespan related to mental health.

**HESI RN Group Case Study:**

Psychiatric/Mental Health: Attention Deficit Hyperactivity Disorder

**Lab Skills:**

Demonstrate an ability to screen for age birth to 36 months developmental delays.

Demonstrate to ability to perform an M chat Screen for autism.

Demonstrate the ability to address sensory needs of the autistic patient.

Demonstrate the ability to incorporate principles of applied behaviors analysis (ABA) therapy into the care of the autistic patient.

Demonstrate the ability to teach social skills to autistic patient.

**Associated prior NRS 125 Skills:**

SKILL 1.5: Measuring the Newborn's Head, Chest, and Abdomen

# MCHAT CHILD 1

*Child 1 is named Jodi Smith. Jodi is 18 months old and was adopted by her parents at 9 months old from Russia due to their inability to have their own children. Jodi's mother is very active with her and participates in a variety of mommy and me classes with her daughter. She is beginning to get concerned that Jodi has seemingly not "bonded" with her and shows little interest or affection. She also noticed that Jodi seems "in her own world" and does not appear "happy" like many of the other children that she sees. Jodi is also noted to be nonverbal at this time. Please evaluate Jodi using the MCHAT screener tool below to see if further intervention or assessment is warranted.*

The Modified Checklist for Autism in Toddlers-Revised (M-CHAT-R™) is a scientifically validated tool for screening children between 16 and 30 months of age that assesses risk for autism spectrum disorder (ASD). The original version, the MCHAT, was developed by neuropsychologists Diana Robins and Deborah Fein and clinical psychologist Marianne Barton. The revision, which improves specificity, was released in December 2013 and has been updated here. The American Academy of Pediatrics (AAP) recommends that all children receive autism screening at 18 and 24 months of age, and the M-CHAT-R is one of the AAP's recommended tools.

The M-CHAT-R's primary goal is to detect as many cases of ASD as possible. However, no screening tool is perfect. To improve the accuracy of the tool, the authors developed a structured M-CHAT-R Follow-up Interview™.

Even with the follow-up questions, a significant number of children whose results show risk for ASD will not meet the diagnostic criteria on a more comprehensive evaluation by a specialist. Nonetheless, these children are at risk for a range of developmental disorders and delays and should receive further evaluation. A child should likewise be referred for further evaluation any time a parent or professional has persistent concerns about autism, even if the child does not show ASD risk on the M-CHAT-R. If you and/or your physician feel that further screening is needed, you can request a free developmental assessment through your state department of health's early intervention system

Initial Screening for Autism

M-CHAT-RTM

Please answer these questions about your child. Keep in mind how your child usually behaves. If you have seen your child do the behavior a few times, but he or she does not usually do it, then please answer no. Please circle yes or no for every question. Thank you very much.

1. If you point at something across the room, does your child look at it? No

(FOR EXAMPLE, if you point at a toy or an animal, does your child look at the toy or animal?)

2. Have you ever wondered if your child might be deaf? Yes
3. Does your child play pretend or make-believe? (FOR EXAMPLE, pretend to drink from an empty cup, pretend to talk on a phone, or pretend to feed a doll or stuffed animal?) No
4. Does your child like climbing on things? (FOR EXAMPLE, furniture, playground equipment, or stairs) Yes
5. Does your child make unusual finger movements near his or her eyes? (FOR EXAMPLE, does your child wiggle his or her fingers close to his or her eyes?) Yes
6. Does your child point with one finger to ask for something or to get help? (FOR EXAMPLE, pointing to a snack or toy that is out of reach) No
7. Does your child point with one finger to show you something interesting? (FOR EXAMPLE, pointing to an airplane in the sky or a big truck in the road) No
8. Is your child interested in other children? (FOR EXAMPLE, does your child watch other children, smile at them, or go to them?) No
9. Does your child show you things by bringing them to you or holding them up for you to see – not to get help, but just to share? (FOR EXAMPLE, showing you a flower, a stuffed animal, or a toy truck) No
10. Does your child respond when you call his or her name? (FOR EXAMPLE, does he or she look up, talk or babble, or stop what he or she is doing when you call his or her name?) No
11. When you smile at your child, does he or she smile back at you? No
12. Does your child get upset by everyday noises? (FOR EXAMPLE, does your child scream or cry to noise such as a vacuum cleaner or loud music?) Yes
13. Does your child walk? Yes
14. Does your child look you in the eye when you are talking to him or her, playing with him or her, or dressing him or her? No
15. Does your child try to copy what you do? (FOR EXAMPLE, wave bye-bye, clap, or make a funny noise when you do) No

16. If you turn your head to look at something, does your child look around to see what you are looking at? No
17. Does your child try to get you to watch him or her? (FOR EXAMPLE, does your child look at you for praise, or say “look” or “watch me”?) No
18. Does your child understand when you tell him or her to do something? No  
(FOR EXAMPLE, if you don’t point, can your child understand “put the book on the chair” or “bring me the blanket”?)
19. If something new happens, does your child look at your face to see how you feel about it? No  
(FOR EXAMPLE, if he or she hears a strange or funny noise, or sees a new toy, will he or she look at your face?)
20. Does your child like movement activities? Yes  
(FOR EXAMPLE, being swung or bounced on your knee)
- (M-CHAT-R/F; Robins, Fein, & Barton, 2009)

#### M-CHAT Scoring

For all items except 2, 5, and 12, the response “NO” indicates ASD risk; for items 2, 5, and 12, “YES” indicates ASD risk. The following algorithm maximizes psychometric properties of the M-CHAT-R:

**LOW-RISK:** Total Score is 0-2; if child is younger than 24 months, screen again after second birthday. No further action required unless surveillance indicates risk for ASD.

**MEDIUM-RISK:** Total Score is 3-7; Administer the Follow-Up (second stage of M-CHAT-R/F) to get additional information about at-risk responses. If M-CHAT-R/F score remains at 2 or higher, the child has screened positive. Action required: refer child for diagnostic evaluation and eligibility evaluation for early intervention. If score on Follow-Up is 0-1, child has screened negative. No further action required unless surveillance indicates risk for ASD. Child should be rescreened at future well-child visits.

**HIGH-RISK:** Total Score is 8-20; It is acceptable to bypass the Follow-Up and refer immediately for diagnostic evaluation and eligibility evaluation for early intervention.

# MCHAT Child 2

*Child 2 is named Rasheeda Jones. Rasheeda is a 24 month old African American female child who is brought in for evaluation by her mother. Rasheeda's mother is a single parent and worries that her child is more active than the average toddler. She has a cousin who just had their daughter diagnosed with autism and ADHD and she is worried that her daughter may have the same thing. Please use the following tool below to screen Rasheeda to see if additional screenings or interventions are warranted.*

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The M-CHAT-R's primary goal is to detect as many cases of ASD as possible. However, no screening tool is perfect. To improve the accuracy of the tool, the authors developed a structured M-CHAT-R Follow-up Interview™.

Even with the follow-up questions, a significant number of children whose results show risk for ASD will not meet the diagnostic criteria on a more comprehensive evaluation by a specialist. Nonetheless, these children are at risk for a range of developmental disorders and delays and should receive further evaluation. A child should likewise be referred for further evaluation any time a parent or professional has persistent concerns about autism, even if the child does not show ASD risk on the M-CHAT-R. If you and/or your physician feel that further screening is needed, you can request a free developmental assessment through your state department of health's early intervention system

## Initial Screening for Autism

### M-CHAT-RTM

Please answer these questions about your child. Keep in mind how your child usually behaves. If you have seen your child do the behavior a few times, but he or she does not usually do it, then please answer no. Please circle yes or no for every question. Thank you very much.

1. If you point at something across the room, does your child look at it? Yes  
(FOR EXAMPLE, if you point at a toy or an animal, does your child look at the toy or animal?)
2. Have you ever wondered if your child might be deaf? No
3. Does your child play pretend or make-believe? (FOR EXAMPLE, pretend to drink Yes  
from an empty cup, pretend to talk on a phone, or pretend to feed a doll or stuffed animal?)

4. Does your child like climbing on things? (FOR EXAMPLE, furniture, playground equipment, or stairs) Yes
5. Does your child make unusual finger movements near his or her eyes? (FOR EXAMPLE, does your child wiggle his or her fingers close to his or her eyes?) No
6. Does your child point with one finger to ask for something or to get help? (FOR EXAMPLE, pointing to a snack or toy that is out of reach) Yes
7. Does your child point with one finger to show you something interesting? (FOR EXAMPLE, pointing to an airplane in the sky or a big truck in the road) Yes
8. Is your child interested in other children? (FOR EXAMPLE, does your child watch other children, smile at them, or go to them?) Yes
9. Does your child show you things by bringing them to you or holding them up for you to see – not to get help, but just to share? (FOR EXAMPLE, showing you a flower, a stuffed animal, or a toy truck) Yes
10. Does your child respond when you call his or her name? (FOR EXAMPLE, does he or she look up, talk or babble, or stop what he or she is doing when you call his or her name?) Yes
11. When you smile at your child, does he or she smile back at you? Yes
12. Does your child get upset by everyday noises? (FOR EXAMPLE, does your child scream or cry to noise such as a vacuum cleaner or loud music?) No
13. Does your child walk? Yes
14. Does your child look you in the eye when you are talking to him or her, playing with him or her, or dressing him or her? Yes
15. Does your child try to copy what you do? (FOR EXAMPLE, wave bye-bye, clap, or make a funny noise when you do) Yes
16. If you turn your head to look at something, does your child look around to see what you are looking at? Yes
17. Does your child try to get you to watch him or her? (FOR EXAMPLE, does your child

look at you for praise, or say “look” or “watch me”?)

18. Does your child understand when you tell him or her to do something? No

(FOR EXAMPLE, if you don't point, can your child understand “put the book on the chair” or “bring me the blanket”?)

19. If something new happens, does your child look at your face to see how you feel about it? No

(FOR EXAMPLE, if he or she hears a strange or funny noise, or sees a new toy, will he or she look at your face?)

20. Does your child like movement activities? Yes

(FOR EXAMPLE, being swung or bounced on your knee)

(M-CHAT-R/F; Robins, Fein, & Barton, 2009)

### **M-CHAT Scoring**

For all items except 2, 5, and 12, the response “NO” indicates ASD risk; for items 2, 5, and 12, “YES” indicates ASD risk. The following algorithm maximizes psychometric properties of the M-CHAT-R:

**LOW-RISK:** Total Score is 0-2; if child is younger than 24 months, screen again after second birthday. No further action required unless surveillance indicates risk for ASD.

**MEDIUM-RISK:** Total Score is 3-7; Administer the Follow-Up (second stage of M-CHAT-R/F) to get additional information about at-risk responses. If M-CHAT-R/F score remains at 2 or higher, the child has screened positive. Action required: refer child for diagnostic evaluation and eligibility evaluation for early intervention. If score on Follow-Up is 0-1, child has screened negative. No further action required unless surveillance indicates risk for ASD. Child should be rescreened at future well-child visits.

**HIGH-RISK:** Total Score is 8-20; It is acceptable to bypass the Follow-Up and refer immediately for diagnostic evaluation and eligibility evaluation for early intervention.

# MCHAT Child 3

*Child 3 is named Jennifer Smith. Jennifer is a 30 month old Caucasian female child who is brought in for evaluation by her grandmother who is her primary guardian as Jennifer's mother's rights were terminated due to extensive drug use during pregnancy. Jennifer's grandmother is worried that she may have something wrong with her due to all the drug exposure in utero. Jennifer has just begun preschool and is having difficulty keeping up and following the routines like the other children. Please use the following tool below to screen Jennifer to see if additional screenings or interventions are warranted.*

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## Initial Screening for Autism

### M-CHAT-RTM

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1. If you point at something across the room, does your child look at it? No

(FOR EXAMPLE, if you point at a toy or an animal, does your child look at the toy or animal?)

2. Have you ever wondered if your child might be deaf? No

3. Does your child play pretend or make-believe? (FOR EXAMPLE, pretend to drink from an empty cup, pretend to talk on a phone, or pretend to feed a doll or stuffed animal?) Yes
4. Does your child like climbing on things? (FOR EXAMPLE, furniture, playground equipment, or stairs) Yes
5. Does your child make unusual finger movements near his or her eyes? (FOR EXAMPLE, does your child wiggle his or her fingers close to his or her eyes?) No
6. Does your child point with one finger to ask for something or to get help? (FOR EXAMPLE, pointing to a snack or toy that is out of reach) Yes
7. Does your child point with one finger to show you something interesting? (FOR EXAMPLE, pointing to an airplane in the sky or a big truck in the road) No
8. Is your child interested in other children? (FOR EXAMPLE, does your child watch other children, smile at them, or go to them?) No
9. Does your child show you things by bringing them to you or holding them up for you to see – not to get help, but just to share? (FOR EXAMPLE, showing you a flower, a stuffed animal, or a toy truck) No
10. Does your child respond when you call his or her name? (FOR EXAMPLE, does he or she look up, talk or babble, or stop what he or she is doing when you call his or her name?) Yes
11. When you smile at your child, does he or she smile back at you? No
12. Does your child get upset by everyday noises? (FOR EXAMPLE, does your child scream or cry to noise such as a vacuum cleaner or loud music?) Yes
13. Does your child walk? Yes
14. Does your child look you in the eye when you are talking to him or her, playing with him or her, or dressing him or her? Yes
15. Does your child try to copy what you do? (FOR EXAMPLE, wave bye-bye, clap, or make a funny noise when you do) No
16. If you turn your head to look at something, does your child look around to see what you

No

are looking at?

17. Does your child try to get you to watch him or her? (FOR EXAMPLE, does your child look at you for praise, or say “look” or “watch me”?) No

18. Does your child understand when you tell him or her to do something? Yes  
(FOR EXAMPLE, if you don’t point, can your child understand “put the book on the chair” or “bring me the blanket”?)

19. If something new happens, does your child look at your face to see how you feel about it? Yes  
(FOR EXAMPLE, if he or she hears a strange or funny noise, or sees a new toy, will he or she look at your face?)

20. Does your child like movement activities? Yes  
(FOR EXAMPLE, being swung or bounced on your knee)

(M-CHAT-R/F; Robins, Fein, & Barton, 2009)

### **M-CHAT Scoring**

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**HIGH-RISK:** Total Score is 8-20; It is acceptable to bypass the Follow-Up and refer immediately for diagnostic evaluation and eligibility evaluation for early intervention.



## **Week 14**

### **OBJECTIVES:**

Assess patients with high acuity acute and chronic conditions across the lifespan related to mental health.

Analyze collected data of patients as it pertains to high acuity acute and chronic conditions across the lifespan related to mental health.

Utilize collected data to formulate a plan of care for patients with high acuity acute and chronic conditions across the lifespan related to mental health.

Implement the plan of care for patients with high acuity acute and chronic conditions across the lifespan related to mental health.

Evaluate goals and therapeutic outcomes for patients with high acuity acute and chronic conditions across the lifespan related to mental health.

Movie Night! You will be shown a movie that helps illustrate a real life patient's experience with mental illness.

## **Week 15**

### **OBJECTIVES:**

**Open lab for skills review and sign off.**

**NRS 225 Skill/Concept-Enhancement Activity Checklist**

Concept	Skill	Date of Lab/ Observer Initials	Check off Methods			Evaluation (Pass/Fail)  Comments
			D	E	O	
<i>Oxygenation</i>	Interpret arterial blood gasses					
	Measure peak expiratory flow rate					
	Perform chest physiotherapy					
	Endotracheal tube care					
	Tracheostomy care					
	Manage chest tube drainage					
<i>Perfusion</i>						
	Perform a focused cardiac assessment					
	Identify & classify heart murmurs					
	Apply ECG leads					
	Record 12 lead EKG					

KEY: **D**=Demonstrate, **E**=Explain, **O**=Observe

<i>Cellular</i>						
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<b><i>Regulation</i></b>						
	Blood transfusion administration					
	Perform ostomy care					
	Manage central lines					
	Use & maintain venous access devices					
	Perform therapeutic back massage					
	Provide end of life care					
<b><i>Metabolism</i></b>						
	Diabetic foot care/assessment					
	Mix and administer insulin with insulin syringe					
	Administer insulin via insulin pen					
	Amputation/stump care					
	NG tube placement					
<b><i>Mobility</i></b>						
	Bedside swallow evaluation					
	Seizure precaution					
<b><i>Sensory Perception</i></b>						
	Assess visual acuity					

	Contact lens care					
	Eye drop and ointment administration					
	Assess hearing					
	Provide hearing aid care					
	Ear drop administration					
<b><i>Mental Health</i></b>						
	Care of the autistic patient					
	Verbal De-escalation					
	Guided imagery					
	Back massage					
	Controlled breathing					
	Muscle relaxation					
	Restraints					
	Personal Alarms/Bed Alarms					
	Suicide Precautions					